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HERITAGE STATEMENT

WYTHENSHAW BUS GARAGE, CARDINAL

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ARCHITECTURE + HERITAGE

AMAZON HOUSE • BRAZIL STREET
MANCHESTER • M1 3PW

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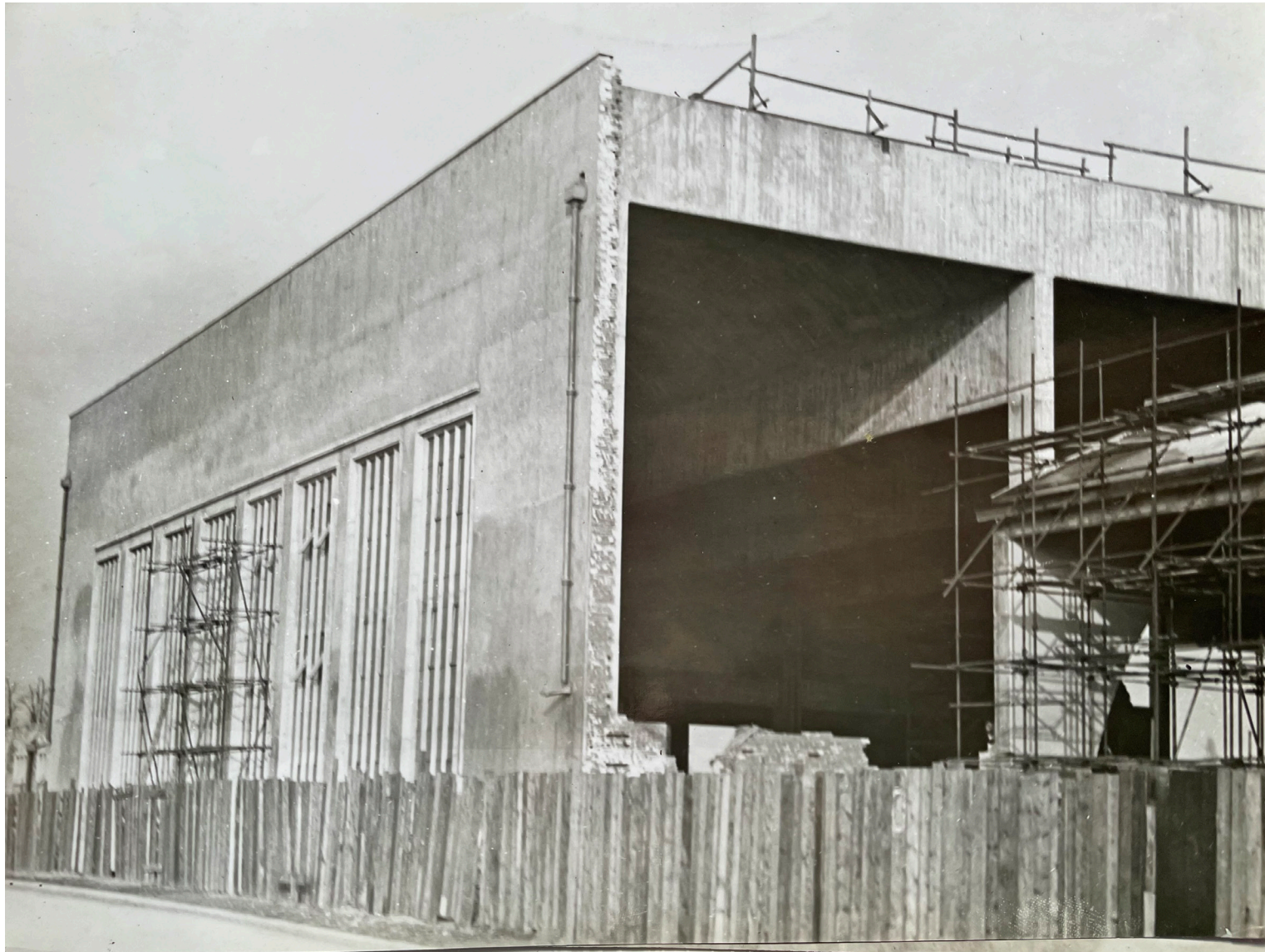


Image: Photograph of site.

1.0 INTRODUCTION

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INTRODUCTION

This Heritage Statement was produced by Atelier MB in August 2024 to accompany a Listed Building Consent application for the rear section of Wythenshawe Bus Garage. Its author is Laura Jessup, MA History and Theory of Architecture, PGCert Conservation of the Historic Environment. The proposals relate to the rear section of the garage only, which has been in separate ownership to the front section for some time.



Image: Photograph of site, North East elevation.

2.0 LOCATION

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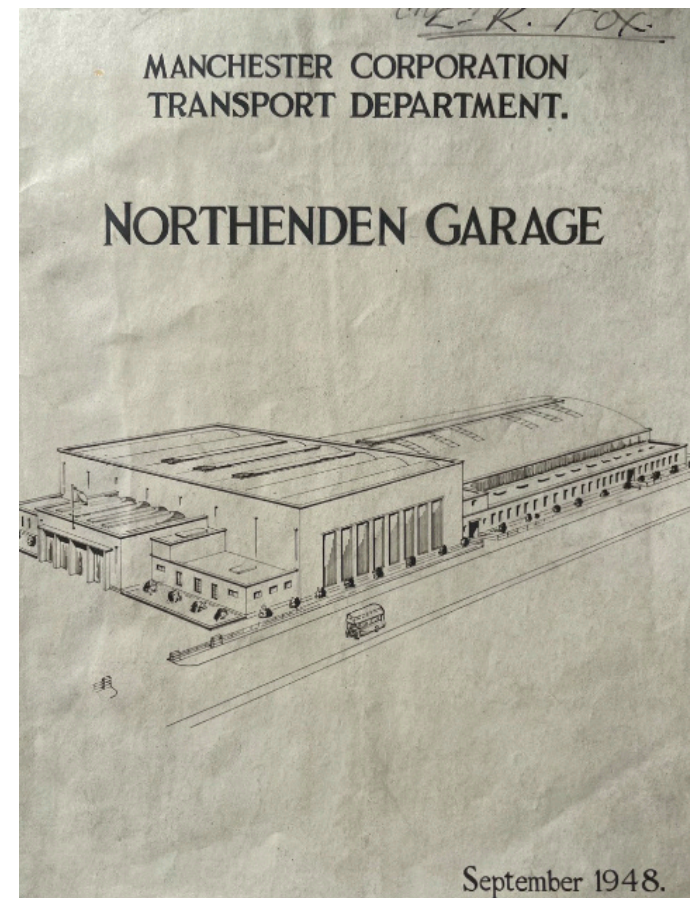


Image:1948 drawing of site.

The site is on Harling Road and sits within the Sharston Industrial Area, to the east of Wythenshawe, which is itself to the south of Manchester city centre. The industrial area is roughly bounded by the Ring Road, Princess Parkway and the M56.

The whole property comprises two parts- the front main bus depot area (in separate ownership) and the rear Repairs Hall to the northern end- subject of this report. The main garage building is not part of this application.

The construction of the Repair Hall is rendered brick with the roof being a series of seven shell cylinder forms with rigid end frames and beams. To the far end are a further set of four smaller cylinder roofs and flat roofed wings to either side. To the main Repair Hall elevations are a series of eight window openings with concrete lintels and surrounds.

These have each been infilled with metal cladding.

Wythenshawe bus depot, originally known as Northenden Bus Garage, is a Grade II* listed building. An extract from the Historic England listing description is included here.

3.0 DESCRIPTION

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SJ88NW 698-1/11/11150 13-JUL-01

BRADNOR ROAD Wythenshawe (Northeast side)

Wythenshawe Bus Depot, II*

Former bus garage, now warehousing. 1939-42

by Manchester City Architect's Department, Chief

Architect G Noel Hill; concrete structure devised by

Messrs Chisarc and Shell D Ltd, consulting engineer H

G Cousins. Reinforced concrete arched construction,

with shell concrete barrel vaults incorporating central

top lights of individual square prisms. The concrete

arches in the garage have a span of 165 feet, a rise

of approximately 42 feet, and are 42 feet apart;

the thickness of the roof shell is 23/4 inches thick.

Repair hall and washing bays to rear, now in separate

occupation, are of rendered brick, with repair hall roof

formed of seven longitudinal shell cylinders of 22'6"

radius incorporating roof lights, with rigid end frames

and deep edge beams, the central bay with expansion

joints. Long strip glazing in side walls of main garage,

with folding doors to front.

The garage with accommodation for one hundred double-decker buses was planned to serve as a depot for the Manchester Corporation bus services to the Wythenshawe Housing Estate, but it was taken over by the Ministry of Aircraft Production immediately on completion in 1942 for the production of A V Roe's Lancaster aircraft. It is one of the first reinforced concrete shell roof structures to be built in England. Chisarc and Shell D Ltd were the British patentees, but as the system was both innovatory and German they found few clients in the late 1930s. It is a smaller, but earlier and more daring shell roof than that at

Bournemouth, and anticipates the better-known bus garage at Stockwell, LB Lambeth (II*). The late 1930s and early 1950s saw the building of very many bus garages as tram services gave way to buses, and shell construction was a very cheap way of achieving broad, uninterrupted spans. The general equations for shell domes and cylindrical shell roofs were first published in England in 1930, and again in August 1935. However, this was the pioneering example of the means of construction, and was widely influential in the years after the war when steel, timber and bricks were in short supply.

Sources The Builder, 15 September 1939, p.437 Official Architecture, August 1939, pp.774-5 The Builder, 19 July 1946, pp.62-3 Architect and Building News, 26 July 1946, pp.54-5 Architects' Journal, 5 September 1946, pp.176-8 Concrete and Constructional Engineering, September 194

Listing NGR: SJ8303889374

4.0 HISTORY

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Image: Photograph of the roof at the rear of the Bus Garage, during original construction. From Manchester Bus Museum Archive.

AREA

Historically the name of Wythenshawe was applied to Wythenshawe Hall, owned by the Tatton family. In the 1920s, the name was given to a large parcel of land in the area which was to become a 'garden suburb' of Manchester, inspired by Letchworth Garden City. Its aim was to house thousands of Manchester residents in improved conditions with planned 'green' neighbourhood units surrounding the historic Wythenshawe Hall and Park. It was, at one stage, one of the largest council housing estates in Europe and linked to the city centre, 8 miles away, via the 'parkway' vehicle route which was intended to preserve the open layout. Wythenshawe is divided into 9 districts: Baguley, Benchill, Moss Nook, Newall Green, Northenden, Pell Hall, Sharston, Northern Moor and Woodhouse Park.

Development continued and housing density was increased, particularly post-World War II when blocks of flats were introduced. The shopping centre (Civic Centre) was eventually completed in the 1960s, followed by a leisure and culture centre in the early 1970s.

Sharston industrial area sits to the north of the M56, bounded by the outer ring road. Following boundary changes, Sharston now encompasses a large amount of residential development to the eastern side of Wythenshawe.

BUILDING

Approval to construct Northenden Motorbus Garage in Wythenshawe was given at the end of 1937 and construction began in early 1939. However, with the outbreak of war, the garage remained partially built, completed only after its transfer of use in 1942 to A.V. Roe and Co. for the making of Lancaster bombers. A portion of the front of the building was retained for buses with a garage workshop, mess room and offices. In 1946, the building was handed back to the corporation and work continued to finish the offices and workshops.

Designed by the Manchester City Architects Department under G. Noel Hill, the building was originally to house 100 double decker buses. In reality, it held a significantly greater number and served as a main depot for services running throughout this part of South Manchester.

An extract from Building and Engineer, dated February 1947, details the building in its historic form. 'In the main garage section of the building, a single barrel vault, of large radius, spans as a continuous beam over a series of arches set at relatively close centres. The washing room and repair hall are planned as a wing set at right angles to the main building, which gives a t-shaped effect to the whole structure. Messrs. Chisarc and Shell D Ltd. were responsible for reinforced concrete design on the Chisarc System.....

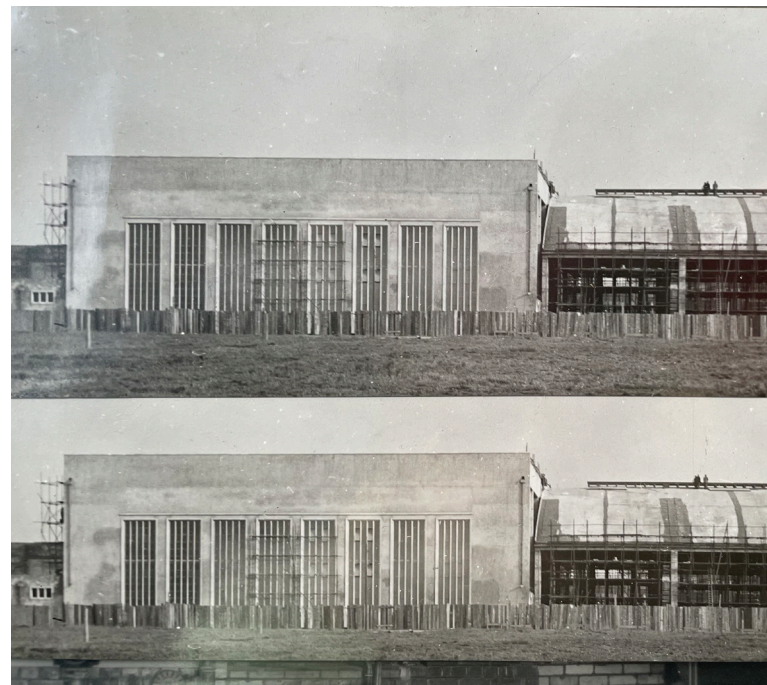


Image: Exterior of Wythenshawe Bus Garage during construction. From Manchester Transport Museum Archive.



Image: Interior of Wythenshawe Bus Garage in the 1950s. From Manchester Transport Museum Archive.

The general heating of the garage is by the Plenum system and special low level extractor plant has been installed to remove the heavier than air fumes generated by engine exhaust. A further innovation is to be found in the inspection pits, which are lined with glazed tiles and fitted with special lighting designed to illuminate the engine and the chassis of the vehicle without dazzling the mechanics. Provision was also made for staff dining, social and rest rooms, a milk bar and executive offices.'

The main garage roof is an unsupported single span of concrete shell, and the effect is only appreciated from the interior, where arches at 12 metre intervals have a reach of over 50 metres. The shell is a fine concrete barrel, of a maximum of 3.25 inches. Within the roof are rows of large roof lights designed to provide natural lighting.

The depot is widely acknowledged as a pioneering building of its type and an exemplar for many concrete shell structures to follow, including the Grade II* listed Stockwell Bus Garage (1952). Unlike the traditional use of metal or timber supports and brick construction, the design followed the new European influence for using concrete to cover massive areas, creating bespoke and large interior spaces, with the lack of supporting columns enabling large buses to move freely around the space.

Behind the main garage, but interconnected, is the repair hall which was a large central space with vehicle bays, pits and sunken workshops to either side and various sub rooms to the rear (fitters, sheet metal workers, body makers, oil store, general store and wc). Entry and egress to the back was through 4 openings. This far end was later sectioned off to contain large hoists and a drive in wash facility for the buses. When deregulation was brought in towards the end of the twentieth century, services were split between a number of private companies, each with their own garage or parking facilities and the vast depot at Sharston became obsolete, no longer required. Now owned by Airport Parking and Hotels, the main front space is used as long-stay car storage by passengers using Manchester Airport. The (now separated) repair hall is in use by freight company, Cardinal. Internally this portion of the space has high racking for storage.

5.0 SIGNIFICANCE

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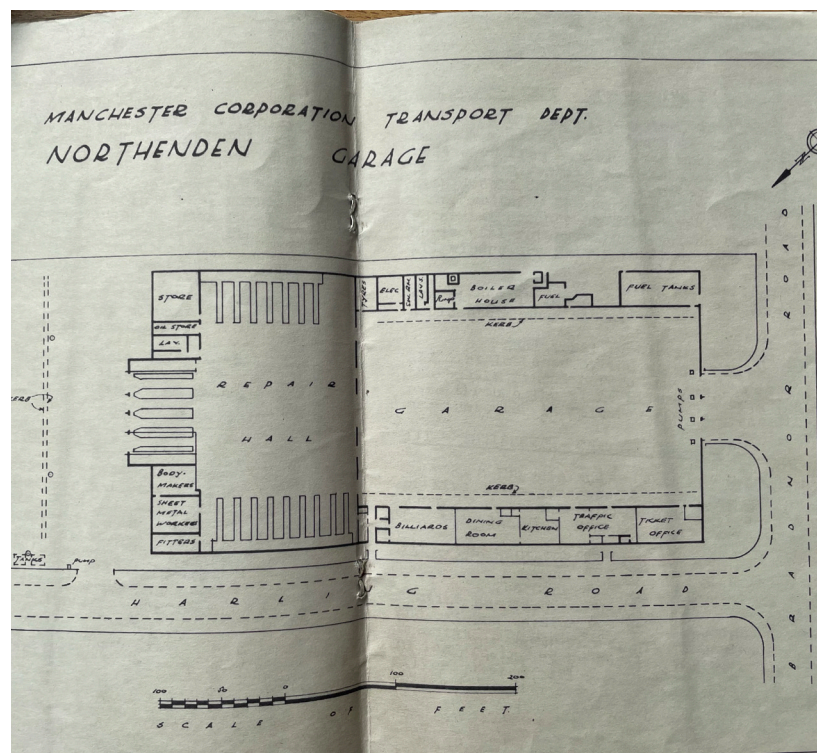


Image: Original plan of Bus Garage.

The significance of the bus depot at Sharston is almost entirely due to its impressive concrete single-span roof and the cathedral like qualities of the internal space. At the time of its construction, the 165-foot roof span made it the largest of its type in the country. A contemporary pamphlet from the Greater Manchester Transport Museum archives states that, 'The garage is the only one of its kind in the world, the prototype, the Zehlendorf Garage in Berlin, having been destroyed in the war.' This rarity value, and the high-quality pioneering engineering give the bus depot a very high level of heritage significance, reflected in its Grade II* listed status. The space has undergone alteration and ad hoc repairs in places. The original single-storey side wings have mostly been demolished – those to the Harling Road side were completely removed and only a small portion on the opposite side remains. Internally, the bus parking, or garage area, is much in its original form as a large, open-plan space, though fuel pumps are no longer in situ to the entrance. The rear section is now separated and the opening that linked the two sections is bricked up. The changes and loss of original fabric has had a detrimental impact upon significance, but much of the main structure remains unaltered. Historic England use four principles to determine significance, which form the basis of the following assessment.

Evidential value: the potential of a place to yield evidence about past human activity.

Despite alteration and loss of wings, the building as a whole remains as physical evidence of past activity which was central to everyday life in the early part of the 20th century. The ability to understand its original purpose has been diminished by the loss of some original fabric, internal features and by the deteriorating condition of some areas, but much of the main structure remains in its historic form, giving the site a medium-high evidential value. The Repair Hall is an important component part of the whole building though the blocking of windows is a detrimental change and the loss of render and decay to concrete window surrounds is also detracting from the significance.

Historical value: the ways in which past people, events and aspects of life can be connected through a place to the present. This can also be an associative value. The existing building evidences a particular aspect of social organisation (public transport). Alongside its connections to World War II aircraft production, it is a direct link to the period in which buses were the main form of transport for thousands of Mancunians, and a demonstration of the scale of operations, investment, and importance placed on public transport. It is a rare surviving pioneer example of concrete engineering and architectural design, giving it national, albeit widely unknown, significance. These factors give it a high historical value.

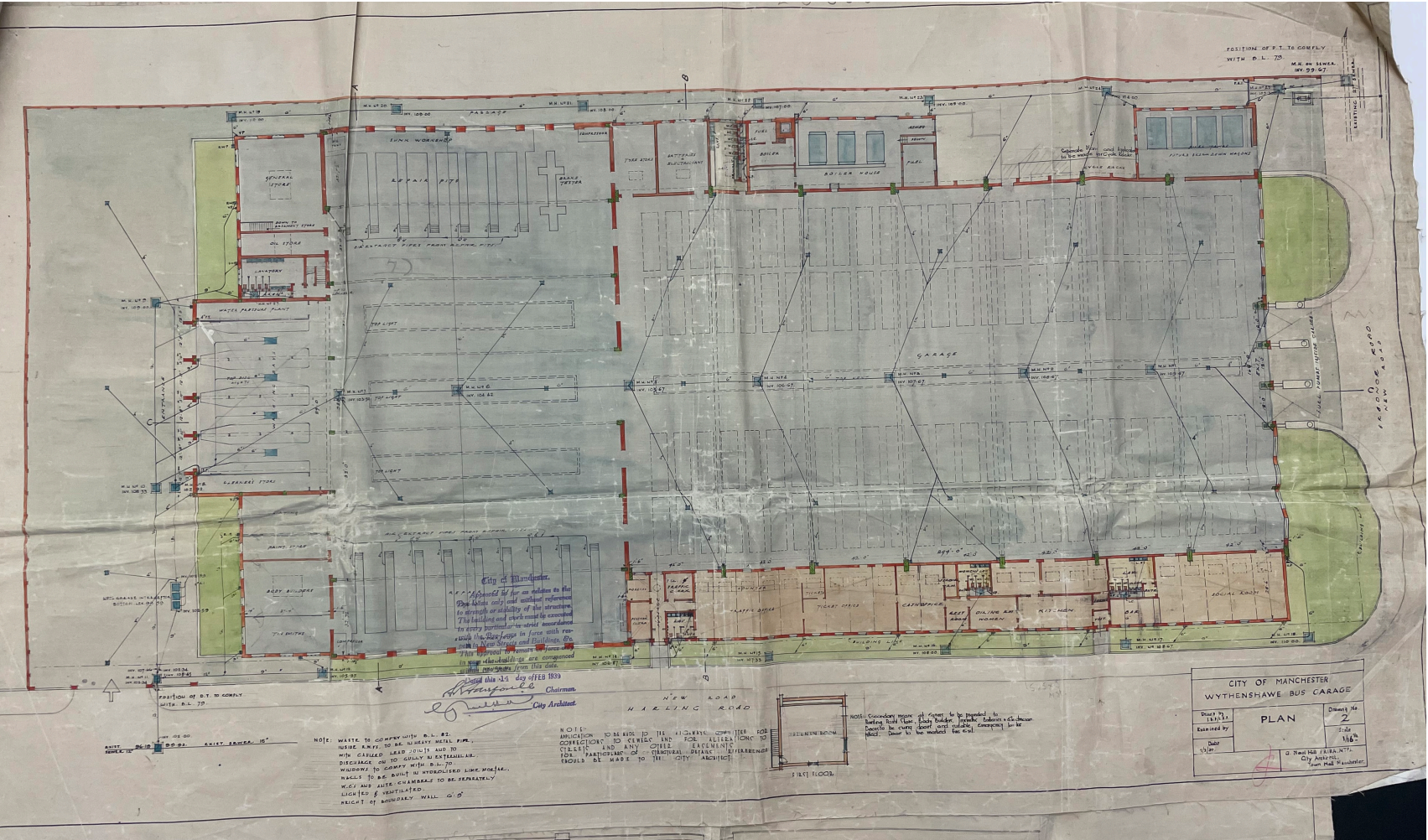


Image: Original plan of Bus Garage.

Aesthetic value: the ways in which people draw sensory and intellectual stimulation from a place. The huge volume of the space, contrasting with the apparent lightness of the roof structure give the garage a strong design quality, both as a daring feat of engineering and as an example of high-quality public architecture from the World War II period. The main hall, covered with its thin concrete shell roof has a unique character. Whilst externally, its elevations appear to be relatively ordinary, internally it has a rare and high aesthetic value. The repair hall also has aesthetic value with its continued use of brick and concrete as materials and the two parts, whilst now divided internally, are of aesthetic significance.

Communal value: the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory. The site will have strong associative memories for those hundreds of transport workers who were employed there as well as for the local population who remember its time as a busy bus depot, running public transport services. Its role in the national war effort reinforces its social significance. It has a medium-high level of communal value.



Image: Existing windows, with later added metal, Harling Road elevation.

Elements of significant fabric, Repair Hall

The concrete vaulted roof in the repair hall though not as large as the bus depot section is nonetheless a significant feature of the building and an important contributor to its individual architectural character.

The cylinder roofs are of high significance- and although not as unique as that to the front portion, the design is stylistically complementary to the larger space and is of heritage significance.

The north-west elevation of the Repair Hall with eight window openings in original surrounds is an important part of the architectural composition and has evidential value. The blocking of the windows is detracting from significance, as is the deteriorating condition of the concrete and wider render/paint. Cills to the large windows have been covered over with metal and this is obscuring the original concrete beneath.

The recent structural report (March 2024) states the external elevation window heads and surrounds are a cast stone finish with an aggregate core. These are considered to be of importance to the significance of the elevations, but are in a deteriorating condition, at risk of further loss.



Image: External elevation to Harling Road

Internally the lintels are found to be solid concrete, with a cavity between the exterior and interior lintels and no projecting decorative surrounds. As original historic fabric and part of the original design these have significance.

The setting of the building in the industrial context of Sharston contributes somewhat to the significance and the building is a fine example of early-mid 20th century development. Wide roads and limited height/ large footprint buildings and buildings set back from site edges are characteristic of the area. This open setting allows the building to be seen, though the real aesthetic value is internal. The adjacent warehouse site contributes little to the setting, with the part demolished structure being of limited heritage value. The building's location in the wider context of the Wythenshawe estate development is also significant, reflecting the expanding population of the time and the prevalence of bus transport.



Image: Example of historic fabric in poor condition, surrounding window opening.

6.0 PROPOSALS + IMPACT

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Image: North East elevation.

Proposals are a direct response to areas of deteriorating fabric on the internal and external elevations. See accompanying drawings for details.

Proposal: Careful removal of defective cast stone facing to window surrounds and replacement based on moulds of existing, fixed to concrete lintel with stainless steel dowels.

Impact on significance: Moderate, positive. Replacing cast stone in the same profile as existing will rid the building of deteriorating fabric and retain the design intent of the original. The removal of the stone will also allow for closer inspection of potential concrete repairs.

Proposal: Concrete repair to lintel to structural engineer's specification.

Impact on significance: The extent of repairs remains uncertain until opening up.

Repair of defective original fabric is considered to be of benefit to the listed building and its long term protection.

Proposal: Lifting of copings at parapet level and installation of DPC. Reinstatement of copings and grout.

Impact on significance: Minor, positive. The DPC is a thin layer, unlikely to be discernible from ground level. It will offer protection against water ingress, whilst retaining aesthetic and architectural values.

Proposal: Sampling of render to ascertain mix and make up. Careful removal of existing render and respraying with new (lime) render finish to Harling Road and North East elevations. Application of breathable paint finish to colour agreed with Conservation Officer.

Impact upon significance: Moderate, positive. Removal of the failing render will enhance the external elevations. Replacing with a breathable new render and breathable paint finish will help prevent issues with moisture retention and associated damage. Aesthetic and evidential values will benefit from a return to the original finish.

Proposal: Removal and replacement of defective rainwater goods with cast iron versions.

Impact upon significance: Minor, positive. Renewal will lower the risk of damage from water ingress, whilst maintaining aesthetic and evidential values.

Proposal: Replacement grout between concrete cornice sections.

Impact upon significance: Minor, positive, represents an improvement to the building's condition.

Proposal: Edging bead fitted at junction with existing render.

Impact upon significance: Neutral.

7.0 PLANNING CONTEXT

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The main heritage planning consideration affecting this site is its Grade II* listed status.

The legislation concerning built heritage is contained within Planning (Listed Buildings and Conservation Areas) Act 1990. Government Policy is set out within the National Planning Policy Framework (NPPF, updated 2023). Local planning policy is set by Manchester City Council.

Statutory legislation states that special regard should be given to 'the desirability of preserving the building or its setting or any feature of special architectural or historic interest which it possesses.' Clause 66. Planning (Listed Building and Conservation Areas) Act, 1990.

The NPPF recognises that sympathetic changes to heritage assets are necessary to ensure their viable ongoing use, but that alterations must be justified and their impact upon significance assessed. This report meets the requirements of NPPF, paragraph 200, 'In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting'.

Paragraph 203 states, 'In determining applications, local planning authorities should take account of:

- a) the desirability of sustaining and enhancing the significance of heritage assets and putting them to uses consistent with their conservation;
- b) the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
- c) the desirability of new development making a positive contribution to local character and distinctiveness.'

The high significance of this building will be retained and enhanced through ongoing improvement. Works are considered compatible with historic fabric and the repair and renewal of key elevational features retain the heritage values and offer long term protection to the building, retaining and maintaining the asset for the future.

Paragraph 205 states, 'When considering the impact of proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation.'

Proposals have been designed to repair and renew historic features and fabric. The primary aim of the application is the conservation of the asset and its significance.

Paragraph 208 states, 'Where a development

proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including, where appropriate, securing its optimum viable use.'

Proposals are considered appropriate and sensitive. They represent an enhancement to the deteriorating existing fabric and are not considered to exert any degree of harm upon the listed building.

Sustainability is a key overarching aim of NPPF and this application is a positive response to that, seeking to re-use existing fabric and to make sensitive repair.

Local Manchester City Council policy follows the principles established in the NPPF and is contained within the Local Development Framework Core Strategy, 2012. Of particular relevance is CC9, which states that development should preserve or enhance listed assets.

Places for Everyone is Greater Manchester's joint development plan. Policy JP-P2 relates to heritage and states that particular consideration will be given to ensuring 'the significance of key elements of the historic environment which contribute to Greater Manchester's distinct identity and sense of place are

protected from harm' and that positive management and integration of heritage should be informed by 'delivering positive benefits that sustain and enhance the historic environment as well as contributing to the economic vitality, accessibility and environmental quality of a place.'

The proposals are considered to accord with local and national policy.

8.0 CONCLUSION

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The proposals contained within this application are intended to address areas of failing fabric to the external elevations. The repair strategy is to remove damaged areas and replace with like for like. New profiles will be matched to existing and retain the aesthetic and architectural qualities of the asset.

The proposals are not considered to be harmful and are a positive response to national and local policy. They will enhance and protect the Grade II* listed building in to the future.



Image: North East elevation.

OLD PLACES • NEW STORIES

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