

John Owens Building, University of Manchester
Proposed Access Improvements (Door Automation)

Design and Access Statement incorporating
Summary Statement of Significance
May 2013

buttressfulleralsopwilliams · architects

CONTENTS

Introduction

History and Context

Significance

Proposals

Appendix: Listing Description

buttressfulleralsopwilliams · architects
31-33 Princess Street, Manchester, M2 4BF · telephone +44 (0)161 236 3303
Fax +44 (0)161 236 3603 · website: www.bfaw.co.uk · email: contact@bfaw.co.uk

INTRODUCTION

This report follows the principles established in the English Heritage Publication 'Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment' (2008) as well as reference to the Planning Policy Statement 5.

Buttress Fuller Alsop Williams Architects have been commissioned by the University of Manchester to put forward proposals for improved access provisions for ambulant disabled persons and wheelchair users.

This application relates to one of several buildings on the University Campus which are all in close proximity to one another. As such, the proposals have followed a series of detailed considerations on both an individual building basis and also holistically in a site-wide manner (where appropriate). Therefore, for the purpose of this application the proposals detailed relate only to the John Owens Building, although it may be beneficial for the local authority to consider the related applications in conjunction with this one.

buttressfulleralsopwilliams · architects
31-33 Princess Street, Manchester, M2 4BF · telephone +44 (0)161 236 3303
Fax +44 (0)161 236 3603 · website: www.bfaw.co.uk · email: contact@bfaw.co.uk

HISTORY AND CONTEXT

The University of Manchester began life as Owens College in 1851. It was named after John Owens, a Manchester textiles merchant who bequeathed a sum of money in his will for the formation of an educational institution (on the condition that students or teachers were not required to pass any religious tests in order to study or teach there). The original site for the college was in the city centre but in 1873 the institution was relocated to the current Oxford Road site.

The University appointed Alfred Waterhouse to produce proposals for the new site which would eventually form the current Quadrangle and his west range (now known as the John Owens Building) began in 1870. Waterhouse designed all of the other buildings (the Beyer, Whitworth and Christie Buildings and the Manchester Museum) in the Quadrangle although the complex was completed by his son Paul in the early 1900s. The architectural style is referred to in the Pevsner Architectural Guide as 'modern Gothic' and is described as a 'convincing whole in style form and massing'.

The John Owens Building is the largest of the Quadrangle buildings and runs along its western side. It is largely unaltered from its original design. Its exterior consists of ashlar sandstone with dressings of the same material, with steep pitched tiled roofs. The elevations on either side are punctuated by gables incorporating lancet windows, with a fleche to the roof of the main projecting block. Internally the building has impressive halls and corridors with terrazzo and encaustic tiling to the floor and oak joinery. There are two distinctive sweeping stone staircases that mirror each other and incorporate marble columns and stained glass windows.

The Quadrangle has a combined listing of Grade II* although it is made up of several separate and distinct buildings (both in physical terms and in architectural identity). It is one of the most impressive Victorian architectural ensembles in the city of Manchester. The John Owens Building is still the principal building on the University campus with central administration and the offices of the institution's most senior staff being located here.

In 2004, the Victoria University of Manchester merged with the University of Manchester Institute of Science and Technology (UMIST) after decades working alongside each other to become one of the largest higher education institutions in the United Kingdom.

buttressfulleralsopwilliams · architects
31-33 Princess Street, Manchester, M2 4BF · telephone +44 (0)161 236 3303
Fax +44 (0)161 236 3603 · website: www.bfaw.co.uk · email: contact@bfaw.co.uk

SIGNIFICANCE

Below, the John Owens Building is measured using the principles established in the English Heritage publication, 'Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment' (2008). It should be noted that the overall significance of the building cannot be calculated by simply adding the constituent elements listed below – often buildings are considered of greater value than the sum of their parts. Therefore, the individual values are assessed based on English Heritage's criteria and an overall summary statement will be compiled based on these considerations.

Evidential Value

There is a considerable amount of historic fabric still extant in the John Owens Building, which facilitates the interpretation of its original design. The exterior is predominantly as it was originally designed and the stonework can be described as being in good condition, as is the historic fenestration. Despite some alterations internally it is still possible to read the historical development of the building. Indeed, the principal spaces retain a considerable amount of historic material such as the decorative flooring and marble columns to the staircases. Overall, the building's evidential value can be considered as **High**.

Historical: Illustrative Value

The John Owens Building is a good example of the Victorian Gothic common in the works of Alfred Waterhouse, and its treatment in terms of massing, form and materials in addition to the grandeur of its design set it apart as a significant institutional building. The architectural style of Waterhouse is synonymous with the nineteenth century development of Manchester into one of the country's prominent cities and the grand detailing of the stonework signifies the generous budgets that were present on this type of building at the time. The predominantly unaltered character of the Quadrangle provides an insight into the development of higher education institutions and how Manchester was involved in the civic university movement. This also provides an interesting historic juxtaposition alongside the ongoing development of the wider campus that proliferated in the late twentieth century.

buttressfulleralsopwilliams · architects
31-33 Princess Street, Manchester, M2 4BF · telephone +44 (0)161 236 3303
Fax +44 (0)161 236 3603 · website: www.bfaw.co.uk · email: contact@bfaw.co.uk

Historical: Associative Value

The University of Manchester has long been considered as an internationally respected higher education institution, with important innovations such as the development of the first computer and the research of Ernest Rutherford who would become the first person to split the atom. The status of the John Owens Building as the centrepiece and first building on the campus site enhances its historic value within this context. In addition, Alfred Waterhouse is arguably Victorian Manchester's most celebrated architect due to his distinctive designs on prominent civic buildings such as the Town Hall and Minshull Street Crown Court. That he designed the John Owens Building lends considerable weight to its significance among the historic architectural development of Manchester. The building's overall historic value can be considered as **High.**

Aesthetic Value

The University Quadrangle (of which the John Owens Building is a prominent element) is one of the most distinctive and attractive architectural ensembles in Manchester and is among the finest groups of Victorian buildings in the city. The Quadrangle adopts a collegiate character influenced by more historic university campuses around the country and the buildings have both individual and group aesthetic merits. As pointed out in the Pevsner guide, this impression is diluted by the presence of parked cars. However, the use of high quality materials and the grandeur of the massing and detailing illustrate that the John Owens Building and the others within the Quadrangle were designed as prestigious institutional buildings. The overall aesthetic value of the John Owens Building is **Medium/High.**

Communal: Symbolic Value

Through the prominence of the Manchester Museum tower and the Waterhouse facades to Oxford Road, the Quadrangle has a distinct presence on one of the busiest arterial routes in the city. This presence is symbolic of the establishment of university education in Manchester, the achievements of which are a source of pride to the city. As the first building to be completed and arguably the most important within the Quadrangle, the John Owens Building perhaps has the strongest claim to symbolising the history of Manchester's higher education.

buttressfulleralsopwilliams · architects
31-33 Princess Street, Manchester, M2 4BF · telephone +44 (0)161 236 3303
Fax +44 (0)161 236 3603 · website: www.bfaw.co.uk · email: contact@bfaw.co.uk

Communal: Social Value

University buildings are generally considered to be of high social value due to the role they play in modern society. Universities offer the highest form of academic education which is generally associated with many of the most highly regarded professions. They are also traditionally seen as symbols of achievement and innovation. Although the John Owens Building is not generally accessible or visible to the wider public, its status as the historic nucleus of the University campus should allow it to be considered as intrinsically linked to its social value. The overall communal value of the John Owens Building is **High.**

Summary of Significance

While the John Owens Building is an important historic building in its own right, it also draws a degree of heritage significance from its presence within the University Quadrangle. Indeed, it could be argued that the building, due to its age and historic function as the centre of the University, is the most important within the Quadrangle. It could be argued that aesthetically there are finer Victorian (and indeed Waterhouse) buildings in Manchester than the John Owens. However, in terms of evidential value and the other more intangible aspects such as communal and historical values, the building is highly significant on a city-wide level.

Significance of John Owens Building Doors

The three corridors and particularly the two main staircases are among the most important spaces within the building. This significance is derived from the surviving historical elements such as the terrazzo flooring, stone stair features and historic joinery. The door configurations (which differ on each level) contribute to this significance as they are undoubtedly well constructed and appropriately detailed within their context. However, it can be seen on inspection of the building that the partitions housing the doorsets are not original (historic joinery detailing and patterned floor designs are truncated by the plastered partitions), and therefore the doors themselves, while historic, are not contemporary with the building.

This does dilute the significance of the doors themselves within the context of the corridors. However, it is noted that they are an essential layer in the historical development of the building and that they do have historic merit in their own right. For this reason the proposals put forward

buttressfulleralsopwilliams · architects
31-33 Princess Street, Manchester, M2 4BF · telephone +44 (0)161 236 3303
Fax +44 (0)161 236 3603 · website: www.bfaw.co.uk · email: contact@bfaw.co.uk

have been carefully considered in order to mitigate any impact on the historic and architectural character of the listed building.



buttressfulleralsopwilliams · architects
31-33 Princess Street, Manchester, M2 4BF · telephone +44 (0)161 236 3303
Fax +44 (0)161 236 3603 · website: www.bfaw.co.uk · email: contact@bfaw.co.uk

PROPOSALS

Door Automation

Under legislation set out in the Equality Act 2010, the University of Manchester are obliged to adopt an approach of 'reasonable adjustment' in order to make their facilities more accessible to all building users. This legislation also extends to listed buildings, although these are protected under the Town and Country Planning Act 1990.

As listed buildings are protected on a statutory level, it is not possible to alter an entire building to be more accessible without significantly impacting on its character. Therefore in cases where there are individual rooms which are effectively interchangeable (such as offices), a managed approach is acceptable, whereby employees with disabilities would be located in rooms that are accessible to them, and other users moved elsewhere. The challenge is where there are areas used by a wide range of users, such as meeting rooms, student services facilities etc. It is not possible to simply relocate these spaces so a level of intervention is sometimes required.

It is proposed to introduce automation to the existing doors on the principal corridors to the Basement, Ground and First Floors. This is in response to the requirements of the Equality Act and as one of the busiest buildings in the University campus (housing student services, registration processes and principal directorate facilities) it is likely that the John Owens Building will be used fairly regularly by both students and staff with impairments.

The glazed timber doors are historic (albeit not original to the building) and have relatively heavy and narrow leaves, which would present difficulty for a disabled user to negotiate unaided. This is deemed by the Equality Act to be discriminatory unless the University can demonstrate that they have carried out reasonable adjustment to remove/reduce obstacles to disabled users.

The preferred option is to automate the doors via push pad operation. This is following a review of various options detailed below.

buttressfulleralsopwilliams · architects
31-33 Princess Street, Manchester, M2 4BF · telephone +44 (0)161 236 3303
Fax +44 (0)161 236 3603 · website: www.bfaw.co.uk · email: contact@bfaw.co.uk

Do Nothing/Minimum

This is also effectively a 'management approach' whereby the doors are opened by other users to help those with disabilities. In heritage terms this approach would be most preferable given the lack of any impact on the listed building. However, this would do nothing to demonstrate that the University has made reasonable adjustments to aid disabled users. In addition, should nobody be around to assist a disabled user, they are not able to access various parts of the building independently.

Replacement of Doors/Adjustment of Leaf Sizes

The existing double doorsets comprise leaves which are of such a width that both must be opened to allow ease of access for wheelchair users. This is not conducive to independent access. It is possible to replace the doors with some which are less heavy and are wider. This would allow a wheelchair user or ambulant disabled person to open a single door leaf, rather than having to open two at the same time. This solution would allow a disabled user to negotiate the building independently as desired in the Equality Act. However the physical and visual impact on the corridors would be unacceptable with this option. The corridors have a reasonable degree of symmetry both longitudinally and also how the staircases are arranged along them. Introducing assymetrical (1.5 leaf) doorsets would visually impact on the historic design. Introducing a compliant, symmetrical design would mean widening the doorset, which would result in the loss of historic timber framing.

Floor Mounted Détente Hold Opens

This approach would involve the installation of magnetic plates to the doors which would be held in place by a floor-mounted electromagnetic unit. Visually, this approach would have little impact. This would be a hard-wired installation which would necessitate the disturbance of the existing mosaic and terrazzo flooring in specific locations. While this is arguably reversible, the existing flooring is relatively ornate with very fine joints between mosaic panels. Indeed, it would not be possible to repair the terrazzo to be a perfect match with the existing. While this approach allows the building to be more accessible, there are practical and environmental issues associated with it. Holding the doors open creates a 'wind tunnel' effect which makes the building colder than usual in winter time and results in a significant increase in energy use. Given the lack of management staff in the building, this could potentially result in a decision being made by

buttressfulleralsopwilliams · architects
31-33 Princess Street, Manchester, M2 4BF · telephone +44 (0)161 236 3303
Fax +44 (0)161 236 3603 · website: www.bfaw.co.uk · email: contact@bfaw.co.uk

individual users to manually deactivate the hold opens – this effectively reverts the doors back to the 'Do Minimum' option. This method also provides automatic deactivation in the event of a fire alarm being sounded (even in the event of a drill). Following on from this there is a requirement for someone to open all of the doors and activate the magnetic détente. This is again open to human error which puts the doors back to the 'Do Minimum' position.

Head Mounted Door Closers with Integral Electromagnetic Hold Opens

This approach works in largely the same principle as the floor mounted hold opens, except the difference is in the mounting of the units. The head mounted closers are a replacement for the existing closers, with an electromagnetic unit incorporated. As such this replaces the existing unit in the same place and works to hold the doors open without physically impacting on the floor as above. However there are additional elements added as part of the installation, such as the cable provision to power the units, and the deactivation switches which would need to be mounted on the timber frame. This is also an undesirable option due to the practical and environmental reasons associated with floor mounted hold opens.

Full Door Automation

In order to combat the issues described above, it is proposed to fully automate the existing doors. This is for the following reasons:

- Allows doors to be negotiated unaided by disabled users.
- Allows existing timber doors to be retained in situ.
- The doors are in a default 'closed' position and therefore energy use of the building is unaffected.
- User error cannot revert the doors back to being non-compliant with the Equality Act.
- Can be programmed to 'fail safe' in the event of a fire.
- Is a readily reversible option.

The automation equipment proposed is a slimline unit which is activated by remote push pads. This is in order to minimise the visual and physical impact of the intervention which may also be mitigated by decorating the equipment in a dark brown colour to reflect the existing joinery. Details are included on the application drawings to illustrate this.

buttressfulleralsopwilliams · architects
31-33 Princess Street, Manchester, M2 4BF · telephone +44 (0)161 236 3303
Fax +44 (0)161 236 3603 · website: www.bfaw.co.uk · email: contact@bfaw.co.uk

There is also an option that has been investigated which was to automate the doors via motion sensors. However this would require the automation to have a fire alarm interface to ensure the doors are closed in the event of an alarm, thus preventing accidental activation of the opening sensors. This would require the installation of additional cables and interface points, which would introduce a level of visual clutter in addition to the invasive drilling and fixing of cable runs.

A wireless remote push pad would have some visual impact; however this is arguably less than that of a series of cables and interface points (it is also more readily reversible). This method would also not require an interface with the fire alarm as the doors will not open unless a user operates them.

In considering the visual impact of the proposals, it is intended to mount the automation equipment on to the side of the doors which face away from the historic stair cores. These are arguably the two most significant spaces in the building and it is intended to minimise the impact on them as much as possible.

Summary

By definition, the proposed works will improve access within the John Owens Building and will not have any detrimental effect in this regard. There is a legal requirement through the Equality Act 2010 for those with disabilities to have independent access to services and provisions, which includes alterations to the built environment to allow the maximum possible unassisted access for those persons. Due to the significance of the building and the amount of historic fabric that remains in situ, there have been constraints to the level of access improvements that can be implemented through physical alterations. For example, should the Equality Act or Building Regulations Approved Document M be followed to the letter, there is the potential for the permanent loss of historic fabric and the risk of compromising the special architectural character that provides the building with its high level of significance. An approach of reasonable adjustment has been adopted in order to strike a balance and enable the John Owens Building to continue to function as an inclusive public building while conserving as much of its historic fabric and architectural character as possible. The proposals included in the application allow for considerable enhancements to accessibility but at the same time have very little (or no) negative impact on the architectural and historic character of the John Owens Building.

buttressfulleralsopwilliams · architects
31-33 Princess Street, Manchester, M2 4BF · telephone +44 (0)161 236 3303
Fax +44 (0)161 236 3603 · website: www.bfaw.co.uk · email: contact@bfaw.co.uk

APPENDIX – LISTING DESCRIPTION

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

Name: VICTORIA UNIVERSITY OF MANCHESTER INCLUDING CHRISTIE LIBRARY, WHITWORTH HALL
List entry Number: 1271428

Location: VICTORIA UNIVERSITY OF MANCHESTER INCLUDING CHRISTIE LIBRARY, WHITWORTH HALL, OXFORD ROAD

The building may lie within the boundary of more than one authority.
District: Manchester
District Type: Metropolitan Authority
National Park: Not applicable to this List entry.

Grade: II*
Date first listed: 18-Dec-1963
Date of most recent amendment: Not applicable to this List entry.

List entry Description
SJ8496 OXFORD ROAD, Chorlton-On-Medlock 698-1/21/614 (West side) 18/12/63 Victoria University of Manchester including Christie Library, Whitworth Hall

GV II*

University. West range begun 1870, east range 1883-7 and north range 1888, all by Alfred Waterhouse; with Whitworth Hall added to south end of east range c.1895-1902 by Paul Waterhouse. Sandstone ashlar, red tiled roofs with fishscale bands. Large and irregular plan round a courtyard which is open at the south-west corner. Gothic style. The WEST RANGE (Main Building), the first on the site, in domestic scale and style, of 2 storeys plus basements and attics, has a projected gabled wing in the centre flanked by large canted entrance bays which have gabled porches with moulded 2-centred doorways and large 2-centred arched windows of 3 stepped lancet lights rising into steep gables, and tall coupled arched windows in the flanks (some with stepped sills); the central wing has a canted 2-storey bay at the gable end with a niche at ground floor containing a carved shield, a large 5-light window at 1st floor and a tiled hipped roof, a clockface in the apex of the gable, side walls with gables, and a fleche on the roof. The outer wings differ in plan and elevation; all parts have various mullioned, arched and arcaded windows, and small gabled dormers and tall stone chimneys. The EAST RANGE (the main facade to Oxford Street) is monumental in scale and style, asymmetrical, with a very large rectangular

buttressfulleralsopwilliams · architects
31-33 Princess Street, Manchester, M2 4BF · telephone +44 (0)161 236 3303
Fax +44 (0)161 236 3603 · website: www.bfaw.co.uk · email: contact@bfaw.co.uk

tower at the south end, a 2-storeyed entrance archway to the left of this and a tall 4-storey 7-bay range to the right. The entrance archway has a wide 2-centred moulded arch, and above this a stepped triple lancet in a gable flanked by pinnacles. The tower, with pilastered corners and an octagonal stair-turret at the north-east corner, has a very large 2-centred arched doorway with splayed reveal including foliated niches, 4 orders of moulding, and hoodmould with apex carried up to form a pedestal to a 1st-floor niche with a statue; arcaded windows on 6 stages (successively 5, 5, 3, 3, 5 and 5 lights), all different and those at the top stage with a colonnaded screen; and a steep saddle-back roof with banded cladding of lead and tiles. In the angle with the main range to the right is a tall 2-bay canted staircase which has buttresses, tall 2-light windows with geometrical tracery, and an arcaded parapet. The main range itself, 4 storeys diminishing in height and 7 bays with buttresses square at ground floor and chamfered above, terminating in pinnacles, has arcaded windows filling each bay, those at ground floor segmental-headed with transoms and arched lights, those at 1st and 2nd floors with shafts and 3 square-headed lights and those at 3rd floor with 4 arched lights; and a corbel table and blind arcaded parapet to each bay. WHITWORTH HALL (to the left of the entrance archway), of 2 unequal storeys and 8 bays plus a corner tower at the south end, has buttresses, coupled segmental-headed windows at ground floor, bands of blind arcading between floors, and tall 2-light transomed windows with cinquefoil lights at 1st floor; an elaborate 2-storey gabled porch to the 1st bay with pinnacles, blind-arcading in the gable and open arcading linking the gable to the pinnacles on either side, and a 2-centred doorway moulded in 3 orders; and a 3-stage corner tower with a tiered segmental oriel, corner pinnacles, octagonal belfry and short spire, all in elaborate Gothic style. Various other portions in similar style. Interior not inspected.

Listing NGR: SJ8457496590

buttressfulleralsopwilliams · architects
31-33 Princess Street, Manchester, M2 4BF · telephone +44 (0)161 236 3303
Fax +44 (0)161 236 3603 · website: www.bfaw.co.uk · email: contact@bfaw.co.uk