HERITAGE IMPACT STATEMENT

Samuel Alexander Building, University of Manchester, Oxford Road, Manchester, M13 9PL

1.0 Introduction

1.1 This statement forms part of a planning application to install roof top plant comprising of an air handling unit and four air conditioning compressors to the 1960 / 70s extensions to Samual Aleander building (Photos 1 & 2). The roof top plant is required to ventilate and cool acoustically sealed digital editing suites on the fourth-floor level of the building.

1.2 This statement to be read in conjunction with Drawings PN 9011_A001 & A002A, A003A & A004A, which accompany the application.

2.0 Proposal

2.1 To install an air handling unit (AHU) measuring 3900 mm X 2000 mm X 2152 mm (LxWxH) on a raised steel platform (0.5m high); and four air conditioning condenser units measuring 1050 X370 X1338mm (WxDxH) on the flat roof adjacent the lift shaft (to Photo 3). Refer to Appendix 2 for data on the AHU and AC condensers.

3.0 Identifying the Heritage Asset (Source: Historic England)

3.1 SAMUEL ALEXANDER BUILDING.

List entry number: 1393664

Grade: II

Date first listed: 12 February 2010

Address: SAMUEL ALEXANDER BUILDING, LIME GROVE.

National Grid Reference: SJ 84597 96416

3.2 Reasons for Designation.

3.2.1 *698-1/0/11222 LIME GROVE 12-FEB-10 SAMUEL ALEXANDER BUILDING OXFORD ROAD (Off) SAMUEL ALEXANDER BUILDING*

II University Faculty of Arts building. 1911-1919, by Percy Scott Worthington of Manchester architects' practice Thomas Worthington and Son. Red, non-standard Ruabon brick, Portland stone, slate roof.

1950s west extension is not of special interest. ***The two c.1970 ranges which run eastwards from the west extension and are linked on the east side by a covered corridor are not of special interest.***

PLAN: E shaped. Central main entrance opening into a full-height entrance hall dividing the building into two halves; each half with rooms opening off long corridors; east and west wings terminating in lecture rooms; a central lecture room located behind the entrance hall and projecting to the rear.

EXTERIOR: Symmetrical front elevation facing north-north-west (hereafter referred to as north for ease of description). Two-storeys and a basement. Central flight of stone steps up to projecting, full-height, Portland stone portico; two Roman Doric columns, entablature with FACULTY OF ARTS inscribed and picked out in gold on the frieze, and triangular pediment above. Door architrave incorporates the date 1919 in Roman numerals, and a relief carving of two putti holding a wreath encompassing a serpent (which features on the university coat of arms), with the university motto ARDUS AD SOLEM (striving towards the sun) inscribed over. Architrave cornice with consoles, empty niche over with console. Projecting stone lion

masks on pediment are echoed in the two angular bronze lion masks attached to the double panelled doors, which have part-glazed inner doors beyond. To each side of the portico are five bays with the first floor set back from the single-storey ground-floor sections, flanked by projecting three-bay end pavilions, all built of brick in English garden bond, with the plinth/basement level, entablatures and parapets of Portland stone. End pavilions articulated by giant brick pilasters, with six-over-nine pane sash windows on ground and first floors. Single-storey ground-floor bays have parapets incorporating stone balustrading, and stone architraves to the six-over-six pane sash windows. Six-over-six pane sash windows to the set-back, first-floor bays.

East and west wings of three-storeys and basement, with eight bays to the east wing and nine bays to the west wing. Brick-built with brick parapets. Five north bays of both wings project slightly, articulated by giant brick pilasters rising through ground and first-floor levels. Portland stone plinths and entablature band over pilasters. Second-floor level of east wing has central brick niche flanked to each side by two windows separated by an oval stone medallion. West wing has five windows at second-floor level, interspersed with oval stone medallions. Six-over-nine pane sashes on ground and first floors, six-over-six pane sashes on second floors.

INTERIOR: Central entrance hall is top-lit with two Ionic columns of Portland stone at either end supporting an entablature and a coffered barrel roof. The floor is paved with stone flags primarily laid diagonally with black stone squares at the intersections. At the south end is a first-floor balcony with white painted metal balustrades incorporating laurel leaf motifs and bronze handrails. It is reached by symmetrical staircases, with similar balustrades, bronze handrails and newels, rising east and west from the hall to half landings before returning to a central doorway opening onto the balcony. To each side of the hall are two doorways with original half-glazed doors flanking a central, tall, round-headed opening, with glazed double doors and fan light, leading through to a wide corridor. To rear of the hall is a round-headed doorway leading through to symmetrical east and west staircases descending to the basement level with two sets of fielded-panel double doors opening into the large, central lecture room from quarter-space landings with ceiling domes containing circular bronze ceiling lights. The lecture room rises through basement and ground-floor levels. Towards the rear of the entrance hall is a bronze bust of Samuel Alexander by Jacob Epstein, dated 1925. It is set on a rectangular marble plinth; the layout of the original stone flags has been altered to accommodate the plinth. Features of note in the entrance hall include four original suspended bronze lanterns, circular bronze ceiling lights above and below the balcony, a copy of a section of the Parthenon Frieze above the entrance doorway, and notice boards. The lecture room has a coffered ceiling with modillion cornicing and original square bronze ceiling lights.

The wide corridors leading off to east and west on the ground floor are lit by high semi-circular windows in circular openings, with round-headed arcades to either side, some openings containing fielded-panel office doors with bottom-hinged opening fanlights, some blind. The corridors on the first floor have rooms on one side only, with similar doors with opening fanlights, and sash windows on the other, interspersed with copies of sections of the Parthenon Frieze. On both floors the corridors return through round-headed archways in a southerly direction. Second-floor corridors are barrel-vaulted and top-lit, also with copies of sections of the Parthenon Frieze. Features of note include the wooden parquet flooring and original bronze ceiling, wall, and suspended lights which light the corridors and staircases.

Individual rooms have parquet flooring, some with wooden corner mantelpieces (all now boarded), and decorative banding to the plaster ceilings. There have been some removals of sub-dividing walls to increase room sizes. Some larger rooms (mostly lecture rooms) have modern suspended ceilings containing lighting and projection equipment beneath the plaster ceilings, whilst others have modern strip lighting. The basement lavatories have been refitted.

HISTORY: The Faculty of Arts building was a major commission for Percy Scott Worthington, knighted in 1935, who was a partner in the family firm of Thomas Worthington and Son (his father, the architect Thomas Worthington, died in 1909). Work commenced in 1911, but progressed slowly due to the onset of World War I. At the opening ceremony on 7 November 1919, the University of Manchester conferred the degree of doctor of letters upon Worthington. The neo-classical building was subsequently positively reviewed in an article in the 1920 Architectural Review, and, together with his Masonic Temple in Manchester, it was cited as a principal work when Worthington was awarded a gold medal in 1930 from RIBA. In 1925 the sculptor Jacob Epstein produced a bronze bust of Samuel Alexander, Professor of Philosophy at the university from 1893. It stands in the central entrance hall and the building was renamed the Samuel Alexander Building in 2007.

SOURCES: 'Current Architecture: New Buildings for the Faculty of Arts, Manchester University', The Architectural Review, Vol.XLVIII (July-December 1920), 60-63. Hartwell, Clare, Pevsner Architectural Guides, Manchester (2001, reprinted with corrections 2002), 118-119. Archer, John H G, 'Worthington family (per.1849-1963), architects', Oxford Dictionary of National Biography, (Sept 2004; online edn, Oct 2007), [http://www.oxforddnb.com/view/article/65161, accessed 20 Oct 2009].

*REASONS FOR DESIGNATION The Faculty of Arts building (Samuel Alexander Building), University of Manchester, of 1911-19 by Percy Scott Worthington is designated at Grade II for the following principal reasons: * Architectural interest: For the quality of its dignified and harmonious neo-classical design, logical and spacious layout, and as an expression of civic pride by an expanding provincial university * Architect: A major commission for Percy Scott Worthington, who has a number of listed buildings to his name, and a principal work cited when Worthington received a gold medal from RIBA in 1930 * Craftmanship: Specifically of the imposing full-height entrance hall with giant Ionic columns and coffered barrel roof, precursor of a similarly detailed hall in Percy Scott Worthington's Masonic Temple, Bridge Street, Manchester of 1929 (q.v.) * Decorative quality: Use of high-quality materials and craftsmanship particularly of the main entrance portico and principal interior spaces * Intactness: For the intactness of the original layout and retention of many fixtures and fittings such as doors and light fittings * Group value: For its functional relationship with the other listed university buildings on the west side of Oxford Road forming part of the campus*

4.0 Assessment of Impact and Mitigation.

4.1 The proposed roof top plant is to be located on the 1960 / 70s extensions, as noted in the listing above, are not of special interest. However, the extensions are in the curtilage of the original building (1911-1919) by Percy Scott Worthington of Manchester architects' practice Thomas Worthington and Son. Therefore, consideration has been given to positioning of the roof top plant and the surrounding heritage assets. Adjacent to the original building are located new buildings (Alan Gilbert Learning Commons) and extended buildings with roof top plant visible (Students Union Building) (photo 4). It is noted on Alan Gilbert Building there is roof top screening, on the Students' Union Building the roof top plant is exposed and close to the roof edge.

4.2 To mitigate the impact on the original building, it is proposed to set the AHU back from the roof edge and place adjacent to the lift shaft wall, so it is not as obtrusive if it was a stand-alone unit on the flat roof. The AC condensers will be fixed to adjacent the lift shaft wall, so they are too not obtrusive.

5.0 Heritage Impact and Assessment against National Planning Policy Framework (NPPF)

5.1 *195. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this into account when considering the impact of a proposal on a heritage asset, to avoid or minimise any conflict between the heritage asset's conservation and any aspect of the proposal.*

The proposed work will have minor negative impact on the heritage asset.

5.2 *202. 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.*

The proposed roof top plant will facilitate teaching at the University where there is a requirement to provide flexible high specification teaching space incorporating the latest digital technologies for Digital Humanities studies that require acoustically sealed film and music editing suites.

Gregory Farmer
Projects Team
University of Manchester
5.6.26

Appendix 1.
Photographs



Photo 1: Front elevation (south) to 1960 / 70s extension to Samuel Alaxander Building



Photo 2: Rear elevation (north) to 1960 / 70s extension to Samuel Alaxander Building

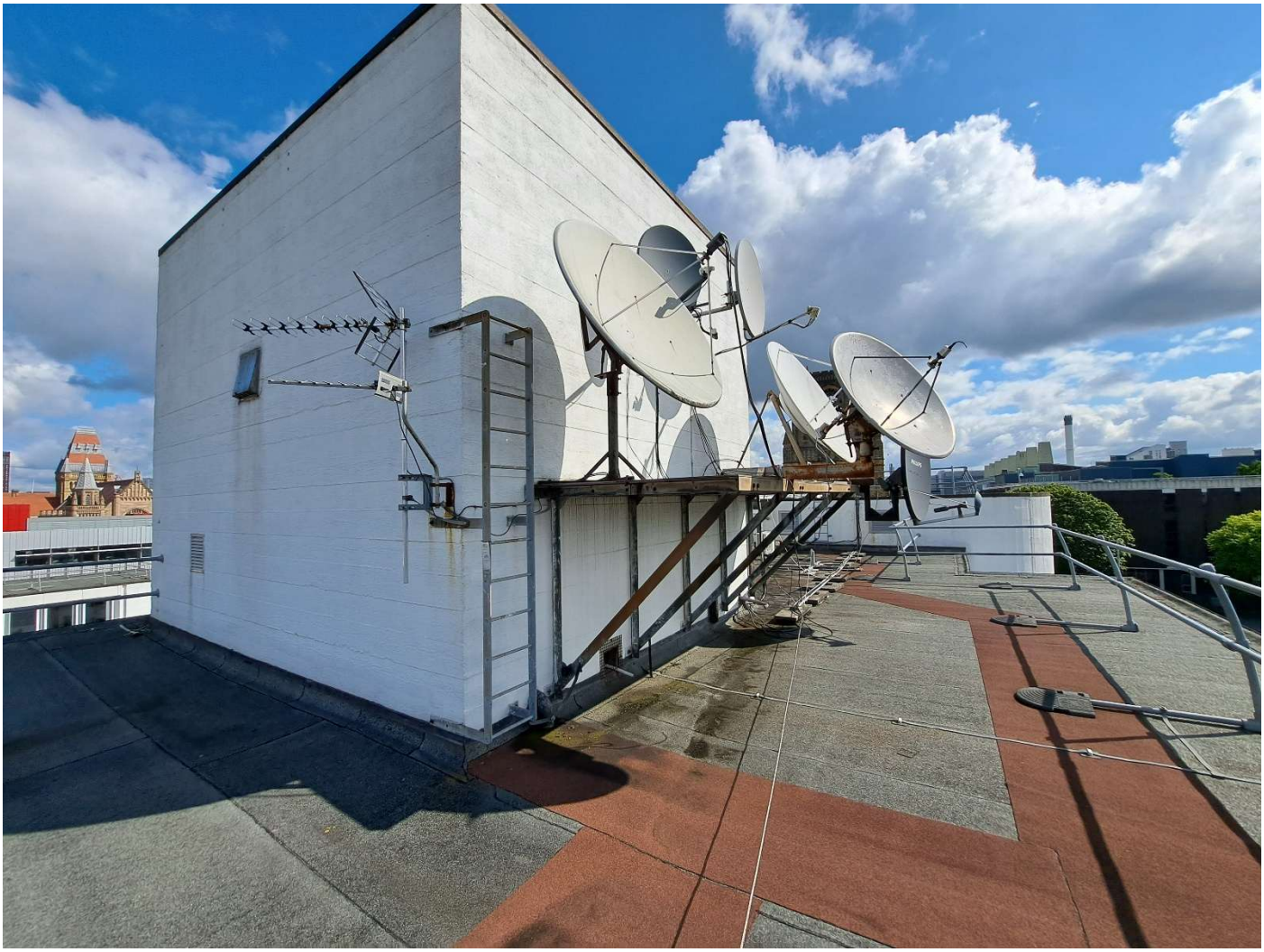
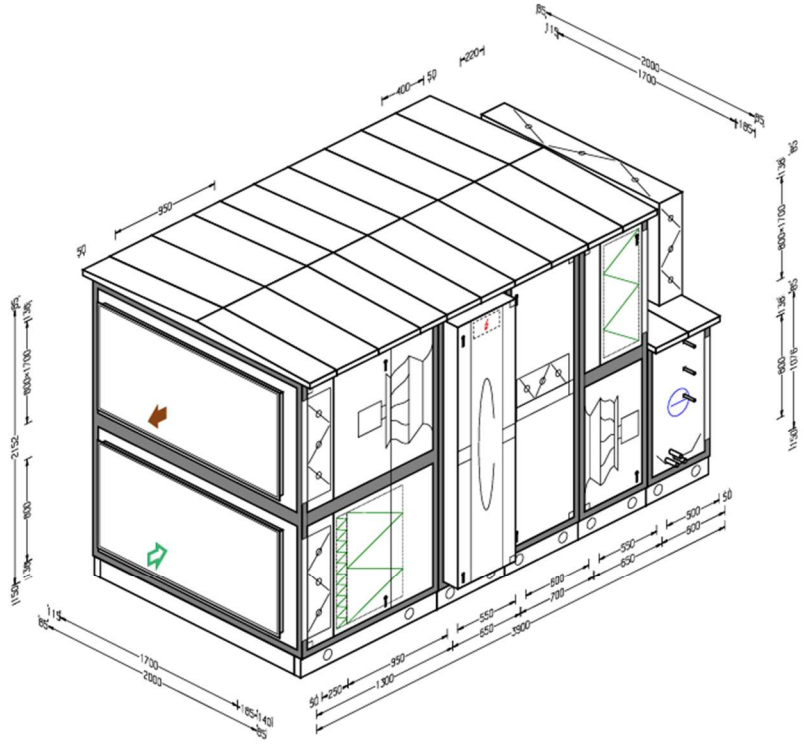


Photo 3: Lift shaft. Proposal to install the AHU and AC condensers adjacent to the blank wall. The AHU will be central to the flat roof away from the roof edge.



Photo 4: View towards Samuel Alexander Building (right hand side); extended Students Union Building with roof top plant visible (central); Alan Gilbert Learning Commons (left hand side).

Appendix 2. ROOF TOP PLANT DATA



Isometric South West	**Customer id**	69028	**Project name**	Sam Alex Digital Teaching Facility	
	Project	4508	**Unit name**	(A1) / AHU-X TW (Mixing Section)	
	Unit	2	**Supply air volume flow rate**	eQ Prime - 041	3000 l/s
	AOC	ACON-03336470	**Extract air volume flow rate**	eQ Prime - 041	3000 l/s

Proposed AHU – Isometric.

Air Conditioning | Product Information

PUZ-ZM200/250YKA R32
High Capacity Outdoor Units
Power Inverter Heat Pump (Three Phase)

R32

POWER INVERTER

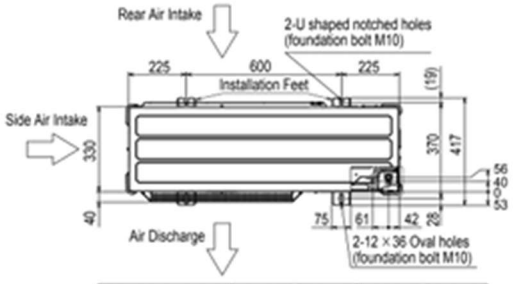


PUZ-ZM200/250YKA OUTDOOR UNITS		PUZ-ZM200YKA	PUZ-ZM250YKA
Capacity (kW)	Heating (nominal)	22.4	27.0
	Cooling (nominal)	19.0	22.0
SCOP (nsh) / SEER (nsc) (BS EN14825)*1		4.50 (177.1%) / 7.49 (296.4%)	4.47 (175.7%) / 7.43 (294.3%)
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	62 / 59	62 / 59
WEIGHT (kg)		137	138
DIMENSIONS (mm)	Width x Depth x Height	1050 x 330+40 x 1338	1050 x 330+40 x 1338
PIPE SIZE mm (in)	Gas	28.58 (1 1/8")	28.58 (1 1/8")
	Liquid	9.52 (3/8")	12.7 (1/2")
ELECTRICAL SUPPLY		380-415v, 50Hz	380-415v, 50Hz
PHASE		Three	Three
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	5.63 / 4.95	7.81 / 6.86
	Heating/Cooling (UK)	5.07 / 4.11	7.03 / 5.69
STARTING CURRENT (A)		5	5
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	9.57 / 8.58 [22.5]	13.3 / 11.6 [22.5]
FUSE RATING (BS88) - HRC (A)		25	25
MAINS CABLE No. CORES		5	5
MAX PIPE LENGTH (m)		100	100
MAX HEIGHT DIFFERENCE (m)		30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675) - 30m	6.3 / 4.25	6.8 / 4.59
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	2.9 / 1.96	2.4 / 1.62

*1 PUZ-ZM200YKA connected to 2 x PLA-ZM100EA, PUZ-ZM250YKA connected to 2 x PLA-ZM125EA

PUZ-ZM200/250YKA DIMENSIONS

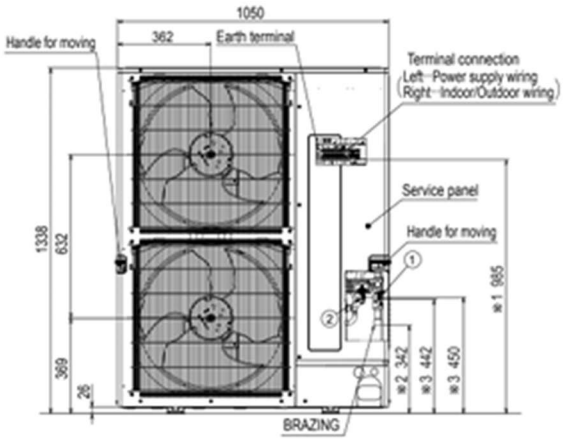
UPPER VIEW



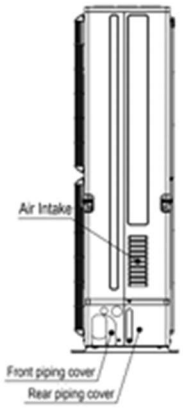
Model	① Refrigerant GAS pipe connection	② Refrigerant LIQUID pipe connection
PUZ-ZM200YKA	ø19.05 (3/4F)	ø9.52 (3/8F)
PUZ-ZM250YKA	ø19.05 (3/4F)	ø12.7 (1/2F)
PUHZ-ZRP200YKA.UK	ø19.05 (3/4F)	ø9.52 (3/8F)
PUHZ-ZRP250YKA.UK	ø19.05 (3/4F)	ø12.7 (1/2F)

*1···Indication of Terminal connection location.
*2···Refrigerant GAS pipe connection (BRAZING) O.Dø25.4.
*3···Indication of STOP VALVE connection location.

FRONT VIEW



SIDE VIEW



Proposed AC units