10 John Street
London
WC1N 2EB

Installation of A/C condensers

Design and Access Statement

Revision C
20 February 2108.

Revision C – This document has been revised to expand Section 4.02 describing works within the building associated with the new AC installation.

DANKS BADNELL

INDEX

1.0 INTRODUCTION

1.01 Danks Badnell Architects Ltd. has prepared this statement in support of a Planning Application for the installation of external air conditioning condensers within the existing roof construction together with removal of the existing radiator heating system within the building to be replaced by AC room units at 10 John Street.

2.0 OBJECTIVES

2.01 **The Brief.** The property was originally designed and built as a private residence between 1799 and 1813. The building was later converted to office use and has been used as such for many years. The roof to the original 4 storey building to John Street and the rear two storey underwent reconstruction in 1981. The 1981 reconstruction works were of poor standard.

The building currently becomes unbearably hot, particularly within the rooms in the roofs, during the summer, to the extent that working conditions become unacceptable

Temperatures in the indoor workplace, covered by the Workplace (Health, Safety and Welfare) Regulations 1992, require employers to provide a 'reasonable' temperature in the workplace . Conditions in the building as it stands are not reasonable.

It is important that air conditioning be installed within the building as soon as possible. This planning application is for permission to create a well within the flat roof of the front four storey building to house three AC condensers.

The AC installation will form part of the comprehensive refurbishment of the building.

2.02 **Drawings and Supporting Information.** This statement makes reference to the following application drawings:

1. 14/37/01 Site Location Plan
2. 14/37/05 Existing Building
3. 14/37/40A Proposed Scheme
4. 14/37/41-45 Floor Plans illustrating AC units
5. Heritage Statement

2.03 **Executive Summary** – This Statement will inform the reader that:

- Temperatures in the indoor workplace, covered by the Workplace (Health, Safety and Welfare) Regulations 1992, require employers to provide a 'reasonable' temperature in the workplace. Conditions in the building as it stands are not reasonable.

- Condensers. The condensers stand less than 1m from the ground including feet, weigh 88Kg, and have been designed by Daikin for tight spots and urban spaces. The Noise Assessment Report confirms that the proposed plant will satisfyi the environmental noise criteria

- The key issues of heritage value, noise control and effect upon the visible environment have been carefully considered. The resulting proposal will cause no ill affect. The proposal will ensure that the Listed Building continues to be enjoyed to the full providing suitable environmental conditions for occupants.

- The proposal to create a roof well to house air-conditioning equipment does not impact on historic fabric or the architectural or historic significance of the heritage asset, and indeed can be seen as at least a partial reinstatement of the earlier, pre-1981 configuration.

- The AC installation will form part of the comprehensive refurbishment of the building. The removal of the existing radiator system and location of the air conditioning outlets away from the window panelling will represent an improvement to the enjoyment of the building.

and that planning permission and Listed Building Consent should be granted.

3.0 SITE AND SURROUNDINGS

3.01 **Location.** The site is 10 John Street, London, WC1N 2EB. The site is on the junction of John Street and Northington Street.

3.02 **Site Extents.** Site location plan ref: 14/37/01 highlights the extent of the site in red.

3.03 **Existing Building.** The existing building consists of a formal four storey frontage to John Street with a two storey later addition extension to the rear of the site. The building has a full basement.

The building interior is in a shabby state.

3.04 **Setting.** The setting of the site is city/urban.

3.05 **Use of Site.** The entire site is in private commercial use by Oury Clark Solicitors and Accountants.

3.06 **Surrounding Properties.** The application site is the southern end building of a long terrace heading north along John Street. The terrace is uniform in terms of appearance and massing. Similar terraces run north and south along both sides of John Street. The Lady Ottoline public house stands directly opposite the application site on the far side of Northington Street.

3.07 **Views into the Site.** 10 John Street is clearly visible from John Street and Northington Street.

4.0 TOWN PLANNING AND HERITAGE CONSIDERATIONS

4.01 Planning History. The Local Authority's online Planning records show only two applications in recent years. These are:

1.	2007/2926/P	Planning	Change of Use to C3	GRANTED (S106)
2.	2009/1235/L	Listed Building	Repairs and redecoration	GRANTED
3.	2015/2037/P	Planning	Change of Use to C3	GRANTED (S106)

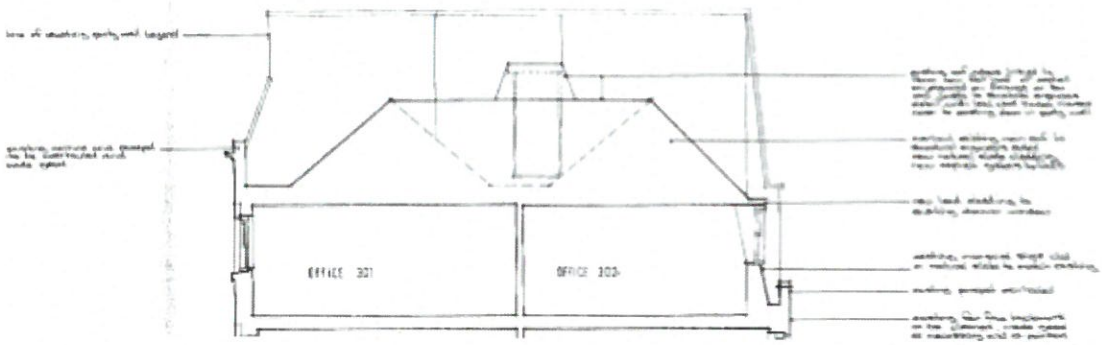
4.02 The Listed Building and Effect of the Proposals upon the Listed Building

- **Heritage Statement**

The site is part of a Grade II Listed terrace (ref: 1379156), the site falls within the Bloomsbury Conservation Area.

A detailed analysis of the site history, prepared by Harvey Van Sickle, is provided in the Heritage Statement submitted with this application.

Sections 4.3–4.5 of the Heritage Statement discuss the alterations carried out to the original roof of the four storey front terrace, the Statement refers to the approved drawings of the time including the drawing extract below



Extract from 1981 drawing for installation of flat roof.

The annotation at top right reads: ***"existing roof ridges linked to form new flat roof of asphalt on plywood on furrings on sw roof joists to structural engineers detail, with lead clad timber mansard cover to existing door in party wall".***

The roof that existed in 1981 was not the original roof of the building but a later addition. That later addition was itself reconstructed in 1981. The works carried out were of a poor standard.

The Proposed Alterations to the Listed Building Upper Roof

The following photograph is of the existing roof void following the works carried out in 1981. Original roof timbers have been removed and the new structure framed using 100 x 50mm untreated softwood. The whole fabrication is of poor quality.

Referring to the Heritage Statement summary:

The existing roof configuration dates to 1981, and was further altered when the door in the party wall to No. 11 John Street was closed up.

The proposal to create a roof well to house air-conditioning equipment does not impact on historic fabric or the architectural or historic significance of the heritage asset, and indeed can be seen as at least a partial reinstatement of the earlier, pre-1981 configuration.

The formation of the roof well will provide an opportunity to fully refurbish and insulate the upper roof, the works represent an improvement to the Listed Building.

Alterations within the Listed Building

The existing building is heated by a low quality low pressure hot water heating system. The radiators in many places have been placed below windows obscuring the original timber panelling. Riser pipework is housed in vertical ducts to the front and back corners of the building, the cornice work runs around the existing ducts.

Removal of the radiators and location of air conditioning units onto side walls will represent an improvement to the fabric of the Listed Building. The replacement pipework will run within the existing ducts and pipe runs and will not damage the fabric of the building.

4.03 Consultations and Pre-Application Advice.

In 2014-2015 pre-application advice was sought alternative options for AC condensers to be located on/within the low rear flat roof. All options were considered detrimental to the setting of the Listed Building.

The experience through the 2014-2015 pre-application advice sequence was that at no time was it possible to know the name of, or speak to, a Conservation Officer. Neither was it possible to engage in discussion with the Planning Case Officer. As a result pre-application advice has not been sought for the current scheme.

5.0 CONTEXT

5.01 **Physical Context**. The site is in a city/urban area. The surroundings are relatively flat although the ground levels do fall away slightly along Northington Street.

5.02 **Social Context**. The neighbouring property at 11 John Street is a private residence although the majority of other properties along the terrace are in commercial use.

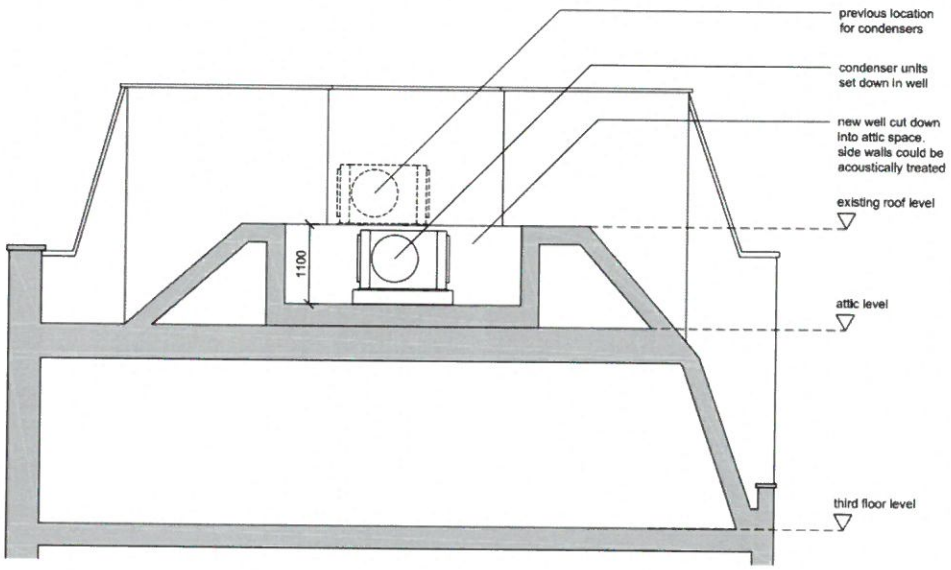
Rigorous acoustic tests have been undertaken and the scheme designed to ensure that neighbours are not disturbed by the proposed condenser units, refer to Section 6.09

6.0 DESIGN PROPOSALS

6.01 The Condensers within the proposed Roof Void.

- Scale and Visibility.

The condensers will be housed in a newly formed ell set into the existing flat roof area at the top of the four storey section of the building. The condensers will not be visible from any point.



The Daikin condensers stand less than 1M high including legs, the actual size of the units being 823h x 940l x 460dp. The units are grouped compactly.

Construction Work

The 3no. AC condensers are to be set into a sunken well created in the existing flat roof structure.

The photographs below are of the existing roof void. The roof construction includes an access hatch onto the flat roof. The new well will be formed in the area of the existing hatch and close to the Party Wall chimney stacks:

- The well structure will be formed of bolted softwood and will not affect the remaining structure of the building.
- The new well surface water will be drained to the rear parapet gutter
- The existing access hatch will be moved into the new well
- The roof void will be stripped out and re-insulated

The proposals are illustrated on application drawing 14/37/40A.

The formation of the roof well re-insulation of the roof void will represent an improvement to what was a shoddy alteration carried out in 1981.

- **The Air Conditioning Condensors**

Acoustics. Hann Tucker Associates have been appointed to carry out an Environmental Noise Survey and a Plant Noise Assessment Report. The Report ref: 24502/PNA1 Rev 3 is included with the submission documents.

The Hann Tucker Associates Report confirms that the proposed units will meet the Local Authority's recently updated noise criteria.

Condensers. The proposed scheme is for the installation of 3no. Daikin RXYSCQ5TV1 low profile VRV IV S-series condenser units. The condensers stand less than 1m from the ground including feet, weigh 88Kg, and have been designed by Daikin for tight spots and urban spaces. Technical details for the condensers are provided as an appendix to this document.

To ensure that noise emissions are kept to an acceptable level:

- A night set-back card will be included to reduce emissions at source.
- The newly formed well will be lined internally with an acoustic cladding.

The Hann Tucker Associates Report concludes that:

- An environmental noise survey has been undertaken in order to establish the currently prevailing noise levels.
- Plant noise emission criteria have been recommended based on the results of the noise survey and with reference to the Local Authority's requirements.
- An assessment has been carried out to determine the plant noise emissions at the nearest noise sensitive window.
- The assessment confirms that the proposed plant will be capable of achieving the proposed environmental noise criteria at the nearest noise sensitive residential window with the installation of the Night Set-Back Card.

6.02 The Air Conditioning Installation within the Building
Refer to drawings numbers 14/37/41-45 for room details

- Removal of the Existing Radiator installation and Reuse of Ducts

The existing low pressure hot water installation complete including all radiators and fittings will be stripped out.

In many cases the radiators have been mounted on the panelling below window cill level effectively obscuring the panelling. The panelling will be left free for repair and redecoration with AC outlets fitted elsewhere.

The existing vertical riser ducts to both front and rear corners of the building will be reused between basement and third floor. The existing vertical ducts are clear of the ceiling cornice work, the new installation pipework will not disturb the fabric of the original building.

A new vertical riser will be formed at third floor to take two 12mm pipes and electrical supply to and from the condensers. At the riser point there is no coving and is an existing bulkhead, the riser will not disturb the fabric of the existing building

Existing heating pipes run within the floor void will be removed and route reused for the new AC installation.

- The Air Conditioning Room Units

Positions for the new air conditioning units are illustrated on the room detail drawings.

With the exception of the entrance hall unit all units will be Daiken floor mounted units as illustrated on the drawings. The radiator casing in the hallway is not 'original'. The existing radiator casing in the entrance lobby will be modified to suit a concealed air conditioning unit chassis model.

The removal of the existing radiator system and location of the air conditioning outlets away from the window panelling will represent an improvement to the enjoyment of the building.

6.03 **Use.** The site will remain entirely in Class B1 use. The proposal will have no impact upon the floor area of the building.

6.04 **Landscaping and Appearance.** The proposal will have no impact upon landscaping. The proposal will have no impact upon the appearance of the building.

6.05 **Access.** The proposals will not have any impact upon the access arrangements for the building.

6.06 **Heritage.** Refer to Section 4 of this Statement and to the Heritage Statement included with the submission papers

The proposal to create a roof well to house air-conditioning equipment does not impact on historic fabric or the architectural or historic significance of the heritage asset, and indeed can be seen as at least a partial reinstatement of the earlier, pre-1981 configuration.

7.0 CONCLUSION

The key issues of heritage value, noise control and effect upon the visible environment have been carefully considered. The resulting proposal will cause no ill affect. The proposal will ensure that the Listed Building continues to be enjoyed to the full providing suitable environmental conditions for occupants.

SITE LOCATION PLAN

REVISIONS

SCALE
0 5 10 15 20 25
1:500

SITE	10 JOHN STREET, WC1N 2EB		
DRAWING	SITE LOCATION PLAN		
NUMBER	14/37/01	DATE	OCTOBER '14
SCALE	1:500	PAPER	A4

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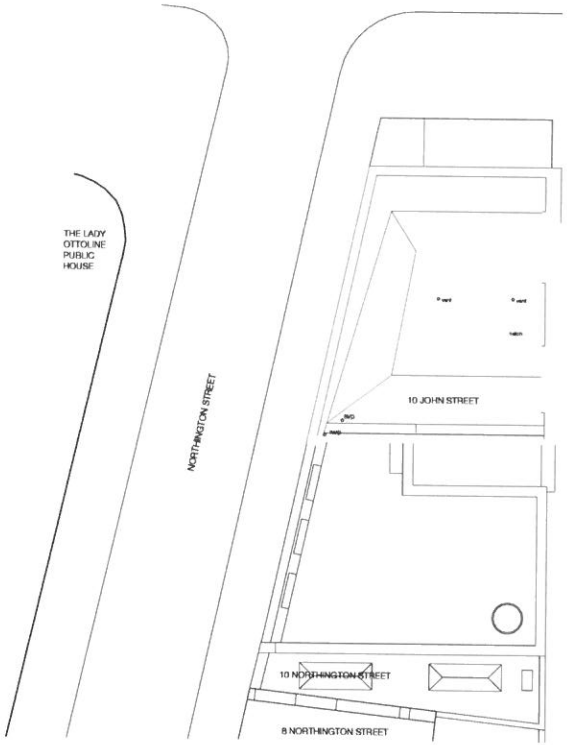
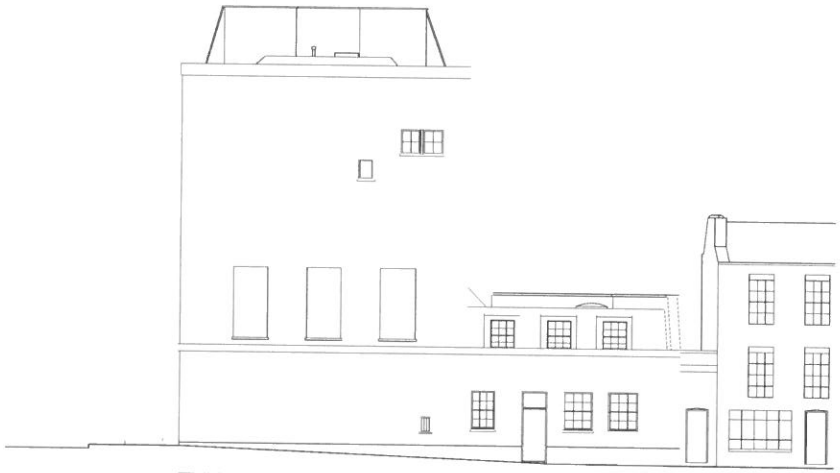


EXISTING ROOF PLAN

EXISTING REAR ELEVATION

EXISTING FRONT ELEVATION



EXISTING SIDE ELEVATION

SCALE
0 5 10
1:100

KEY PLAN

REVISIONS

SITE 10 JOHN STREET, LONDON, WC1N 2EB
DRAWING EXISTING BUILDING
NUMBER 14/37/05 DATE JULY 2017
SCALE 1:100 PAPER A1

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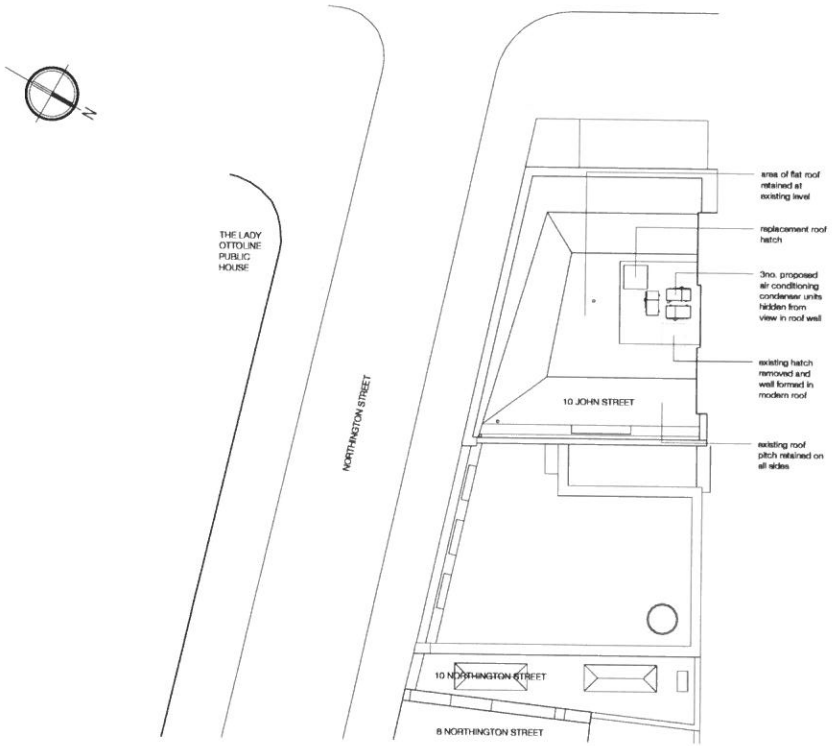
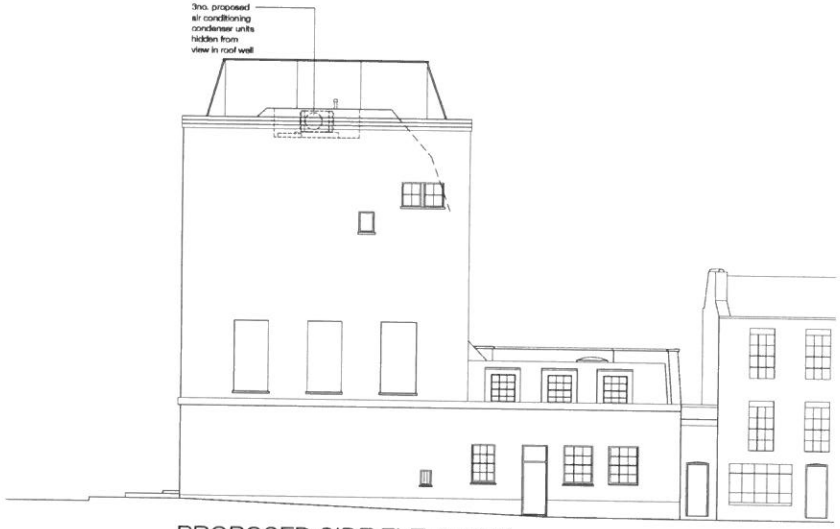


PROPOSED ROOF PLAN

PROPOSED REAR ELEVATION

PROPOSED FRONT ELEVATION



PROPOSED SIDE ELEVATION

SCALE
0 5 10
1:100

KEY PLAN

REVISIONS
A Sunken well formed in modern roof structure to screen condensers Oct 2017

SITE 10 JOHN STREET, LONDON, WC1N 2EB
DRAWING PROPOSED A.C. CONDENSER UNITS
NUMBER 14/37/40A DATE JULY 2017
SCALE 1:100 PAPER A1

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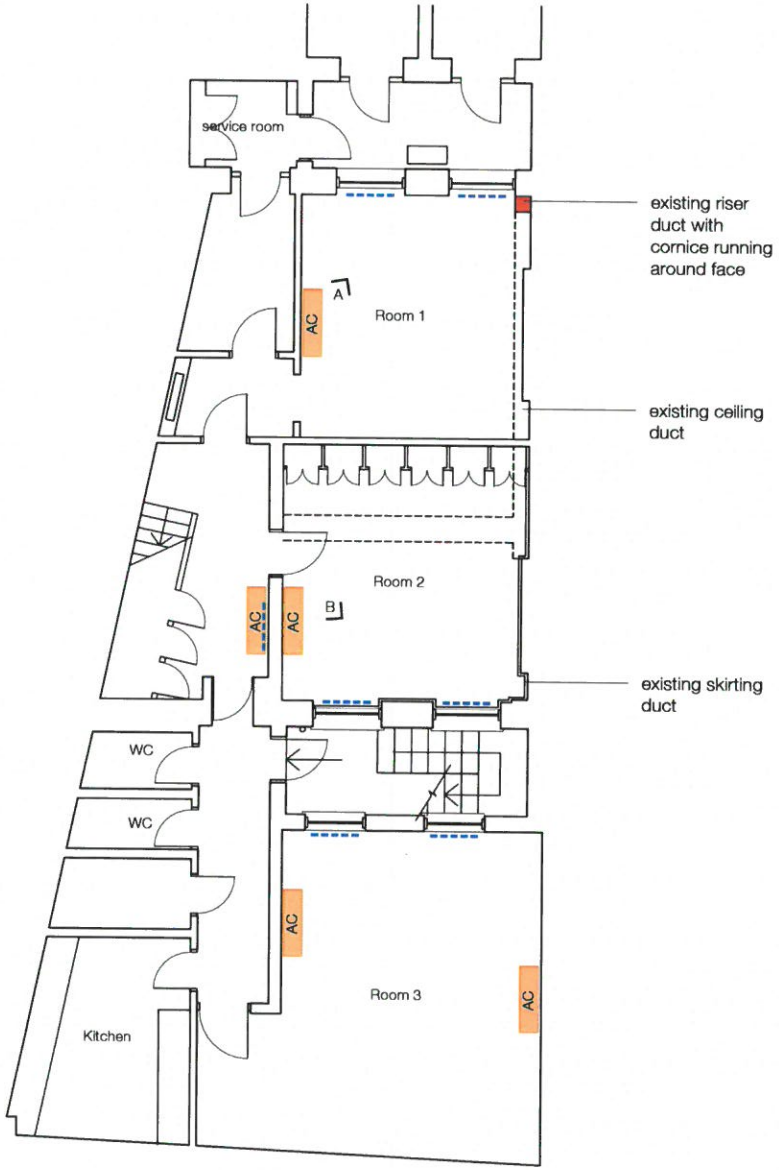

PROPOSED BASEMENT PLAN

ROOM 1 - A

ROOM 2 - B

LEGEND

A	Photo Location
-------	Existing Radiator Removed
▭	Riser Duct
AC	New AC Unit, Daikin FXLQ-P

SCALE
0 1 2 3 4 5
1:100

KEY PLAN

REVISIONS

SITE	10 JOHN STREET, LONDON, WC1N 2EB
DRAWING	PROPOSED A.C. CONDENSER UNITS, BASEMENT FLOOR
NUMBER	14/37/41
DATE	FEB' 2017
SCALE	1:100
PAPER	A3

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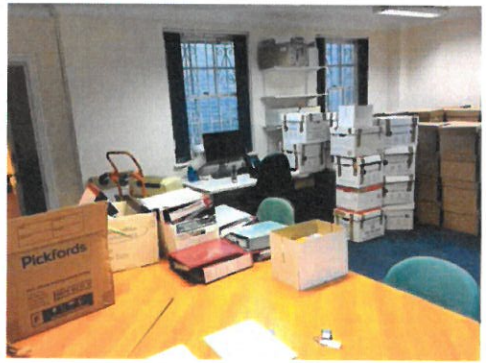
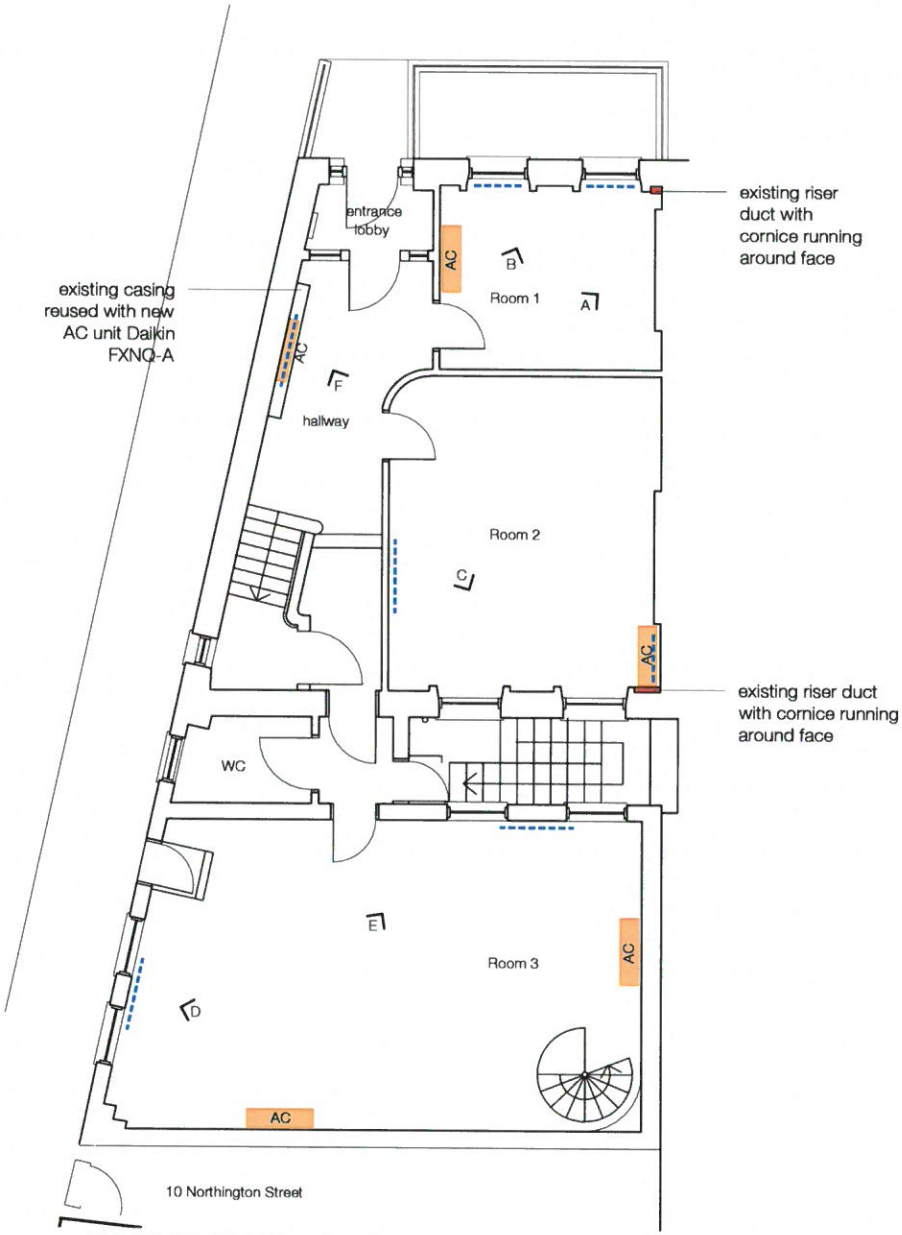
HALLWAY - F

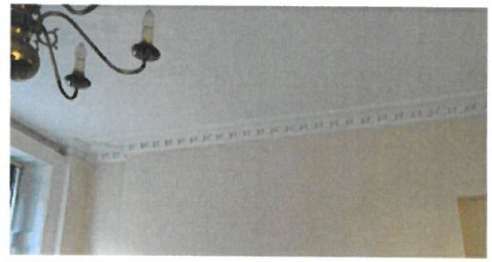
ROOM 3 - D



ROOM 3 - E



PROPOSED GROUND FLOOR PLAN



ROOM 1 - A

ROOM 1 - B

ROOM 2 - C

LEGEND

A	Photo Location
-------	Existing Radiator Removed
▭	Riser Duct
AC	New AC Unit, Daikin FXLQ-P

SCALE 0 1 2 3 4 5 1:100

KEY PLAN

REVISIONS

SITE	10 JOHN STREET, LONDON, WC1N 2EB
DRAWING	PROPOSED A.C. CONDENSER UNITS, GROUND FLOOR
NUMBER	14/37/42
DATE	FEB' 2017
SCALE	1:100
PAPER	A3

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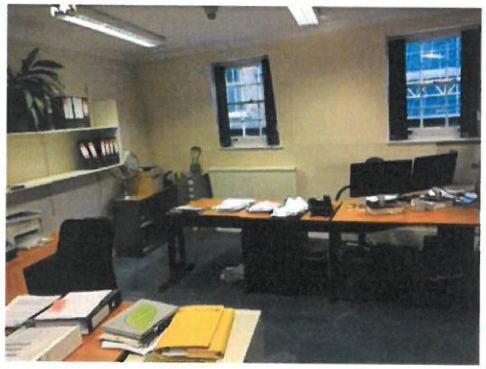
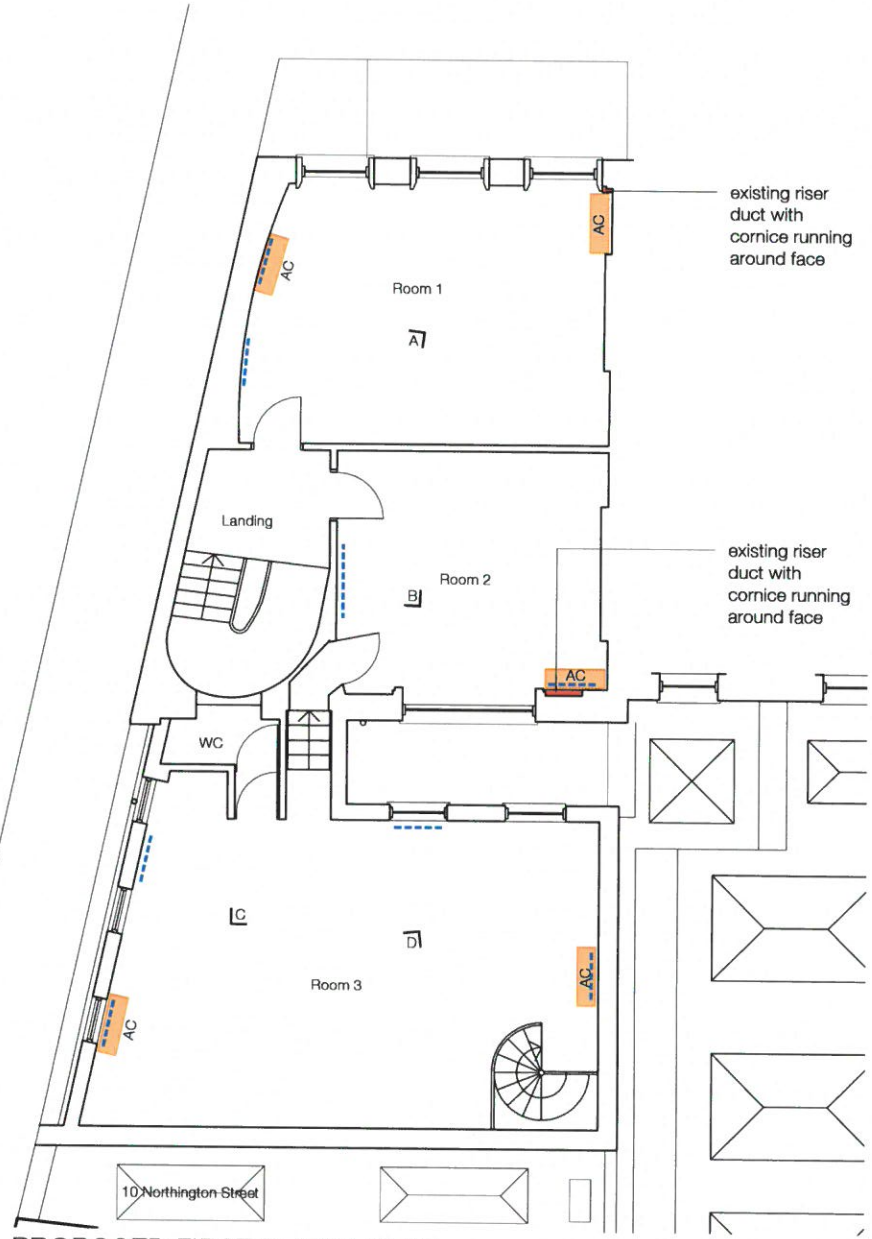


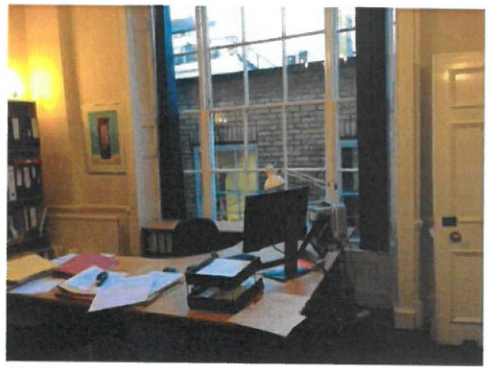
ROOM 3 - D

ROOM 3 - C



PROPOSED FIRST FLOOR PLAN

ROOM 1 - A



ROOM 2 - B

LEGEND

A	Photo Location
-------	Existing Radiator Removed
▭	Riser Duct
AC	New AC Unit, Daikin FXLQ-P

SCALE 0 1 2 3 4 5 1:100

KEY PLAN

REVISIONS

SITE	10 JOHN STREET, LONDON, WC1N 2EB
DRAWING	PROPOSED A.C. CONDENSER UNITS, FIRST FLOOR
NUMBER	14/37/43
DATE	FEB' 2017
SCALE	1:100
PAPER	A3

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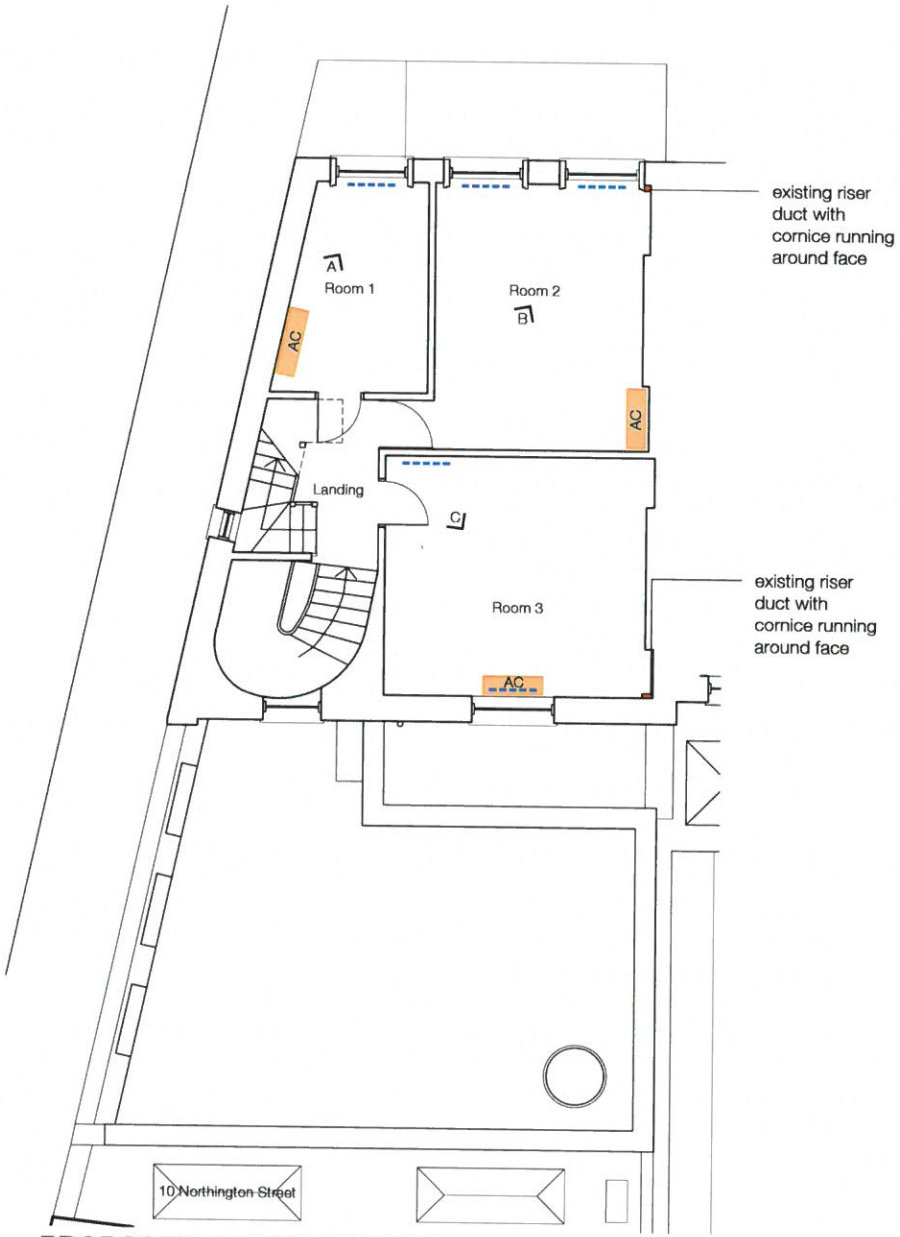
ROOM 1 - A

ROOM 2 - B

ROOM 3 - C



PROPOSED SECOND FLOOR PLAN

LEGEND

A — Photo Location

Existing Radiator Removed

Riser Duct

AC — New AC Unit, Daikin FXLQ-P

SCALE 0 1 2 3 4 5 1:100

KEY PLAN

REVISIONS

SITE	10 JOHN STREET, LONDON, WC1N 2EB
DRAWING	PROPOSED A.C. CONDENSER UNITS, SECOND FLOOR
NUMBER	14/37/44
DATE	FEB' 2017
SCALE	1:100
PAPER	A3

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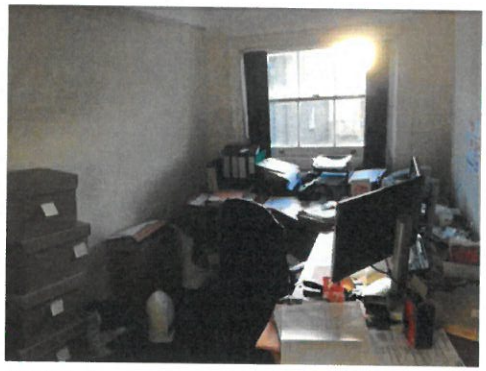
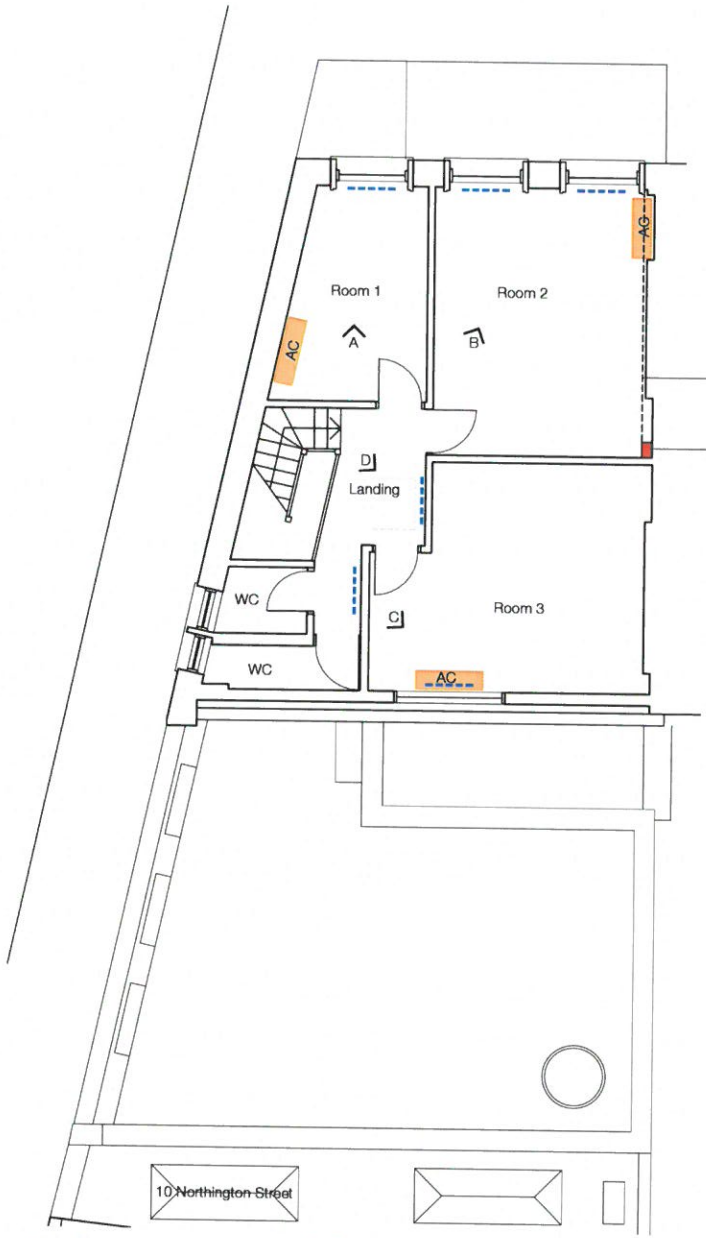
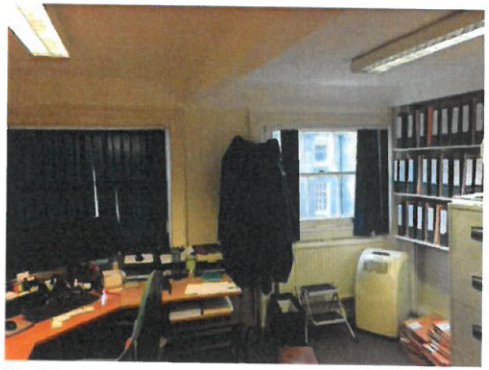


ROOM 1 - A

LANDING - D



PROPOSED THIRD FLOOR PLAN



ROOM 2 - B

ROOM 3 - C

LEGEND

A	Photo Location
-------	Existing Radiator Removed
▭	Riser Duct
AC	New AC Unit, Daikin FXLQ-P

SCALE 0 1 2 3 4 5 1:100

KEY PLAN

REVISIONS

SITE	10 JOHN STREET, LONDON, WC1N 2EB
DRAWING	PROPOSED A.C. CONDENSER UNITS, THIRD FLOOR
NUMBER	14/37/45
DATE	FEB' 2017
SCALE	1:100
PAPER	A3

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