MICHAEL ALEXANDER

PRE-ACQUISITION STRUCTURAL SURVEY REPORT

ON

7 UPPER ST MARTIN'S LANE
LONDON WC2H 9DL

FOR

ANGLE PROPERTY (ST MARTINS) LTD &
TELENOMICS LTD

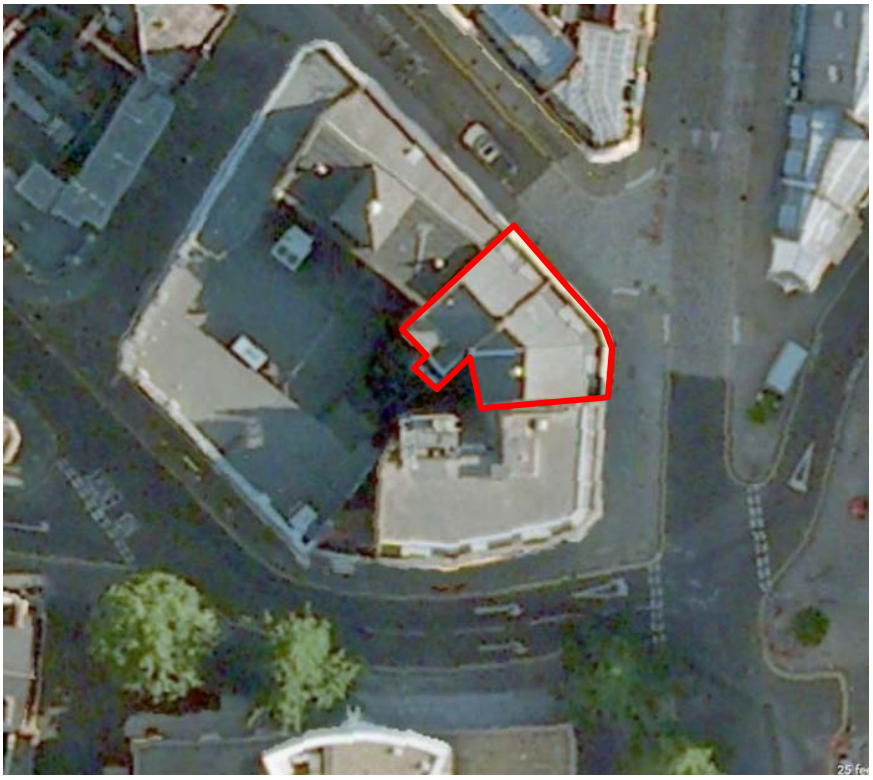
Project No. P1986

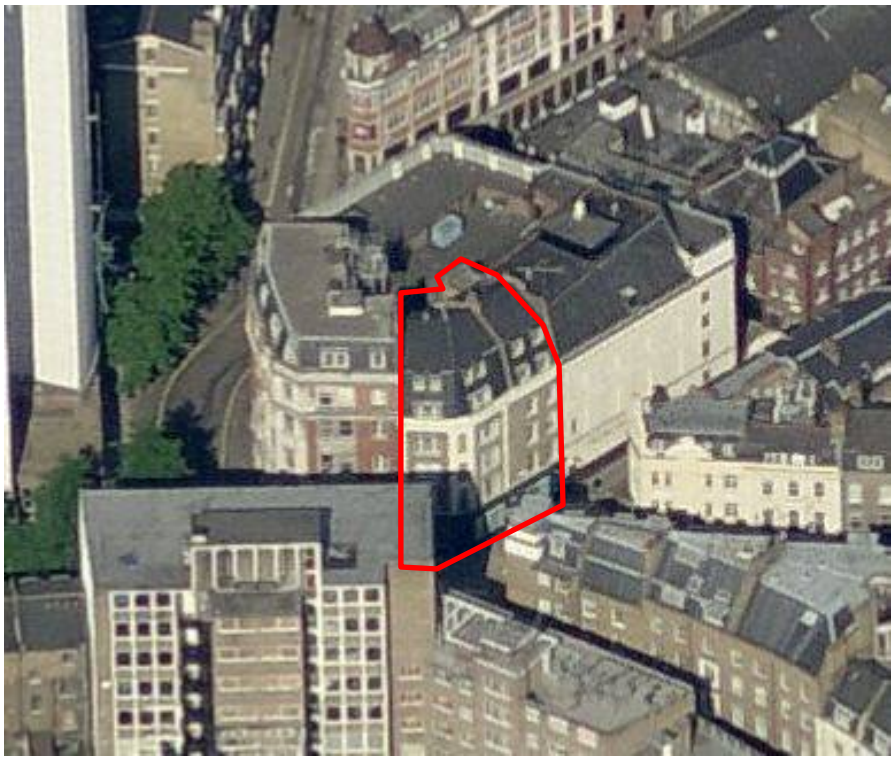
Version 2.2
Issued For Planning

September 2011

CONSULTING ENGINEERS

Foundation House, 4 Percy Road, London N12 8BU
Tel: 020 8445 9115 | Fax: 020 8446 9788
E-mail: mail@maengineers.com





1.00 INTRODUCTION

1.01 Angle Property (St Martins) Ltd and Telenomics Ltd are proposing to acquire 7 Upper St Martins Lane London WC2H 2DL.

1.02 Michael Alexander Consulting Engineers were instructed by James Good of Angle Property (St Martins) Ltd to carry out a visual inspection of the property and to report on the condition of the structure.

1.03 Mr Isaac J D Hudson CEng MIStructE of Michael Alexander Consulting Engineers visited the property on 26 July 2011 to inspect the building and this Report provides a summary of the findings. The weather on the day of visit was dry.

1.04 This Report is for the sole use of Angle Property Ltd and their advisors.

2.00 INSPECTION

2.01 The inspection was purely visual and no inspection was made of those parts of the structure, which were covered, unexposed or inaccessible; no opening up was carried out.

2.02 At the time of the inspection full access was generally available to the building, expect those rooms identified on the marked up plans as being locked or otherwise inaccessible. Areas of the first floor were in use during the visit, so a limited visual inspection was made of these areas.

2.03 No testing was carried out. No testing of electrical, mechanical, water, drainage or other services was undertaken.

2.04 No investigations have been undertaken in respect of possible past contaminative or pollutive uses of the site, nor for the presence of asbestos or deleterious materials.

2.05 Access, means of escape and other aspects of Health and Safety shall need to be considered for the proposed use and changes in layout of the premises and these are not covered by this Report.

2.06 No formal enquiries in respect of user rights, proposed use, planning, fire certificates, easements, rights of way, fire escape routes, Party Wall agreements or statutory consents have been made. Angle Property Ltd's solicitor should make such enquiries.

3.00 BRIEF DESCRIPTION OF PROPERTY

Refer to photographs in Appendix A.

References to left and right are when viewing the front of the property from Upper St Martin's Lane, with left being approximately South Easterly, and right approximately North Westerly.

3.01 The property is of assumed Victorian era and comprises 7 storeys including a single level of basement. The building currently provides office accommodation at all floors, although there is evidence that the top floor was intended for residential use.

3.02 The building is on the corner of Tower Street & Upper St Martin's Lane. It shares a party wall to the south with Guild House, Upper St Martin's Lane, and to the North West by the Grade II listed St Martin's Theatre, West Street. The property is within the Seven Dials conservation area in the London Borough of Camden.

The building was originally two separate properties which have been subsequently combined, with openings made through the party wall.

3.03 The building seems generally to be of traditional construction, with timber floors and solid load-bearing masonry walls.

3.04 Two staircases serve the building, both to the rear of the property and serving all floors including the basement.

3.05 The building looks to have been extended previously, with sections of new brickwork evident to the rear elevation and a new roof over, suggesting that the two mansarded floors (fourth and fifth floors) are not original. There is also a steel framed extension to the rear with toilets at each level and projecting plant platforms. The planning history suggests that the extensions were given planning permission in 1990-91

3.06 A dimensional survey has recently been carried out for the building, and these plans have been used as a key plan for recording our findings – refer drawings included in Appendix B

4.00 OBSERVATIONS AND RECOMMENDATIONS

Refer to marked up drawings in Appendix B

4.01 Summary

The building is in reasonable condition for its age and generally appears to be robust and free from significant structural defects. There is nothing to suggest that there are or have been any foundation or subsidence issues. There are however a number of defects, which are listed below. Of these we would draw particular attention to the following: -

4.02.3	Damp area within basement
4.05.2, 4.06.2	Rotten window frames at 1st, 2nd and 3rd floor
4.07.2	Leaning and cracked parapet wall at 4th floor
4.08.2	Water ingress under small flat roof at 5th floor level
4.09.4	Ponding on flat roof at 1st floor level
4.10.3	Damp section of wall adjacent to the intake room at basement level
4.10.5	Cracking to the wall adjacent to the main staircase at most of the upper levels
4.12.2	Possible sagging of shop front, left hand side of front elevation
4.12.3, 4 & 6	Cracking to spandrel panels to front elevation.

4.02 Basement

4.02.1 The basement to the property is accessed by both staircases and comprises two principal office/storage rooms together with other ancillary accommodation. The two main rooms are divided by a substantial party wall with an opening through it.

4.02.2 The basement has a false floor with recessed floor boxes over a solid floor construction. The floor structure over (ground floor) was visible from an access panel and in this location comprised 225 deep timber floor joists spanning perpendicular to the front facade. A steel beam with a modern primer paint finish was visible from the access panel suggesting that some walls may have been removed at basement level during the early 1990s refurbishment and extension works.

4.02.3 There are two high level alcoves which are under 'Luxcrete' type pavement lights. Drawings indicated a third alcove but this was not visible either within the basement or at pavement level so it is likely to have been previously boxed in or filled up.

4.02.4 Peeling of the finishes was observed in one location (refer key plan in Appendix A), and elevated damp levels (40% humidity) were measured here. However the cause of the damp is not clear, and will require further investigation.

4.02.5 The lift motor room was not accessed during our visit.

4.02.6 There is an office to the rear of the basement, and here minor cracking was observed in two locations. Readings from damp meter gave normal readings, so it seems likely that this cracking is superficial rather than caused by any water ingress or other significant structural cause.

4.03 Ground Floor

4.03.1 The ground floor comprises a reception area divided by a partition wall from the main office area, which is itself divided by a substantial party wall. The lift shaft has hollow piers at its corner which are assumed either to conceal steel columns or rainwater pipes.

4.03.2 There is a rear room which has roof lights over and what is assumed o be a timber roof.

4.03.3 From an opening for a floor box it was possible to see the floor construction typically which comprises deep joists with services running between the joists.

4.03.4 The ground floor toilet has a cupboard within which there is a boiler. The cupboard has exposed walls so it can be seen where there are masonry walls.

4.03.5 Behind the main staircase there is a BT & security Room, which has rooflights and assumed flat roof construction, similar to the rear room.

4.03.6 There is a corridor running to the front elevation alongside the main office area as a secondary escape route. There is a substantial length of boxing out within the corridor, but is not clear what is concealed behind. There is some cracking in this corridor on the interface between stud walls and masonry walls, which is of decorative concern only.

4.04 First Floor

4.04.1 The first floor is laid out similarly to the second and third floors over. The first floor was in use for an interview during our visit so our inspection was brief and visual only; however observed defects were similar to floors over.

4.05 Second Floor

4.05.1 The second floor comprises two office areas either side of the internal party wall, with an opening between. To the rear of the left hand office there is a corridor and kitchen which are sub-divided by non load-bearing partitions.

4.05.2 The windows to the front elevation have rotten frames, particularly those to the left hand side. The worst are in need of urgent repairs and generally replacement will be required in due course. There is also a cracking to some of the stone cills beneath the windows, which will in due course need cosmetic repairs.

4.06 Third Floor

4.06.1 The third floor is laid out similarly to the second and first floors, but with no internal partitions.

4.06.2 The windows to the front elevation again have rotten frames, with attention required in the short term. There is also cracking to the reveals around the windows, which look to be have been repaired previously – this is likely to be caused by the deterioration of the sash windows.

4.06.3 At third floor it was possible to access the service riser from the office footprint – refer photos in Appendix A. It was observed that the wall between the riser and the staircase is a newer blockwork rather than an original brickwork wall.

4.07 Fourth Floor

4.07.1 The fourth floor is the lower of two floors behind a sloping mansard elevation, which looks to have been constructed in traditional materials. The floor is generally open plan, but with one section partitioned off. The party wall does not continue through this level. The mansard facades steps back from the main line of the elevation, which continues above fourth floor to form an approximately 1m high parapet.

4.07.2 The section of the parapet to the right of the building (when viewed from the street) has cracking both in elevation and on its top face. The parapet leans out by approximately 40mm at its worst point. This will need further investigation as to its cause but repairs will be required to prevent any potential worsening of the lean or cracking.

Adjacent to the mansard elevation there is cracking to the party wall to St Martin's Theatre – refer photo 4.07.2f. This may be just expansion/contraction of the finishes relative to the masonry substrate behind but it should be monitored going forward to check whether the condition is deteriorating.

4.08 Fifth Floor

4.08.1 The fifth floor has a sloping mansard elevation and is sub-divided by partition walls to create a storage area, a kitchen, bathroom and office/bedroom area. It is connected to the main staircase by a small flat-roofed lobby.

4.08.2 The small lobby was extensively damp with discolouration to walls, ceiling and floor. Humidity levels of 50% to walls and 100% to floor were recorded using a damp meter.

The cause of the damp is likely to be leaks to the flat roof over. The level of water ingress suggests that urgent attention is required to prevent further deterioration of the timber structures. Due allowance should be made for replacement of roof structure to the lobby as it may have become rotten.

4.09 Roof

4.09.1 It is assumed that all of the upper level roofs were constructed as part of the early 1990s works. Loft spaces were not accessed during our visit but the the flat roofs at 1st and fifth floor were accessed and enabled much of the roof to be viewed.

4.09.2 There is a flat roof section at fifth floor level over the 1990s toilet block extension. The roof finishes seemed in reasonable condition. An air conditioning unit is supported off the adjoining stair core wall.

4.09.3 The main roof to the building is pitched and looks to date from the 1990s works. From viewing from the fifth floor flat roof section the roof appeared to be in reasonable condition.

4.09.4 There are sections of flat roof at first floor level with rooflights – refer 4.03.2 and 4.03.5 for details of rooms under. The roof finishes looked generally in poor condition and there was ponding of water adjacent to the main facade of the building. Air conditioning units are suspended over the roof, but it difficult to access them safely.

Although there is no evidence of water ingress to the floors below, the water ponding should be resolved by clearing of outlets. In the medium term it will be necessary to make more general repairs to the roof coverings to this area.

4.10 Main Staircase

4.10.1 The main staircase rises the full height of the building, with timber balusters.

4.10.2 Between ground floor and the half landing over the handrail has excessive movement, which is most likely to be due to a missing baluster at ground floor level. This should be replaced and additional fixings added as required to secure the handrail.

4.10.3 At basement level there is a damp section of wall adjacent to the staircase, with readings of 40% humidity observed using a damp meter. The cause of this damp was not clear and will require further investigation. This section of wall backs onto the lift motor room, which was not accessed.

4.10.4 Under the half landing between the basement and ground floor level there is an intake room. The half landing over is constructed in steel; it is not clear whether this is the typical construction of the staircase, or just to safely enclose the intake room for fire separation purposes.

4.10.5 At all levels above ground floor there is diagonal cracking adjacent to the windows to the rear elevation. From the external elevation it is apparent that the spandrel panels have been historically re-constructed, and that the wall was extended above fourth floor level, presumably at the time of the 1990s extension. The cracking has also occurred and in some cases is more extensive in these recently constructed sections. The cause is not clear, but it could be due to movement of the lintels above the windows, or possibly due to poor restraint to the wall adjacent to the staircase.

If the staircase is to remain as is then it would be prudent to monitor the cracks to see if they are worsening. It may be that helibar crack stitching will be required in due course. If works are proposed to the staircase then it would also be prudent to introduce tying back of the wall to the floor plates.

4.11 Rear Escape Staircase and Toilet Extension

4.11.1 There is a secondary staircase in the west corner of the building adjacent to St Martin's Theatre. It looks to have been extended by two floors as part of the 1990s works.

Adjacent to the staircase there is an extension running from first floor up to underside of 5th floor level which comprises a toilet at each level. The cladding to the extension appears to be some kind of insulated panel and it is assumed that the structure behind is a steel frame. To the south west (rear elevation) there is a projecting plant deck at each level which cantilevers out from the extension.

4.11.2 There is a good deal of cracking evident with the finishes to the walls around the staircase, particularly at first floor level and high level above 3rd floor.

It is probable that this cracking is due to differential movement between the staircase and the adjacent masonry walls, and is hence confined to the plaster finishes. However this should be confirmed by local removal of finishes.

4.12 Front Elevations

4.12.1 Refer mark up in Appendix B. The front elevation wraps around the corner of Tower Street and Upper St Martin's Lane. From left to right there is the Upper St. Martin's Lane elevation ('Elevation 1' on the survey drawing) and then the West St elevation ('Elevation 2). The left hand side of Elevation 2 looks similar to the Elevation 1, whereas the fenestration is different to the right hand side, supporting the understanding that the right hand section was originally a separate property.

4.12.2 The shop front to elevation 1 looks to be sagging whereas the elevation behind is true. It is not clear whether this was deliberately laid to a slope but it is more likely that there has been some deterioration of the timber shop front, which will therefore need repairs in due course.

4.12.3 There is diagonal cracking within elevation 1 in the brick panel adjacent to the Equity building, occurring at first floor and second floor levels. This suggests that there has been differential movement between 7 Upper St Martin's Lane and the adjoining building, which may be attributable to failure of lintels or excessive deflection of the beam over the shop front.

This should be monitored going forward to establish whether the movement is ongoing. It would be prudent to open up the beam over the shop front at high level ground floor to check the condition and whether there is excessive deflection.

4.12.4 Within the left hand side of Elevation 2 there are cracks visible within the lintels at 2nd and 3rd floor levels. This is a common problem with buildings of this age and there is a risk of the cracking becoming more widespread if the lintels start to 'slip'. The solution will be to use helical stainless steel rod repairs in the spandrel panels above the lintels.

4.12.5 As described in 4.07.2 there is some movement of the parapet at fourth floor to the right hand side of Elevation 2. This is also evidenced by vertical cracks to the front face of the parapet wall which are visible from street level.

4.12.6 At 2nd and 3rd floors within Elevation 2 there has been previous rebuilding of the spandrel panels between windows. However there is diagonal cracking to the right hand side of these rebuilt sections. It seems likely this is due to movement of the lintels below, so helical stainless steel bar repairs will again be advisable in due course.

4.13 Rear Elevations

4.13.1 The rear elevation has three principal sections; the rear wall to the secondary staircase (left hand side of Elevation 3 on the survey elevations), the toilet block extension (central section of Elevation 3) and the side wall to the main staircase (right hand section of Elevation 3)

4.13.2 For the right hand section of Elevation 3, sections of brickwork have been rebuilt between the windows.

4.13.3 More general brickwork repairs have been made to the left hand side of Elevation 3, to spandrel panels and around the windows.

4.13.4 The toilet extension has an external finish of metal panels, which appear to be in reasonable condition.

4.14 Externals, Ground Floor

4.14.1 At ground floor level there are 'Luxcrete' type pavement lights in two locations. These have not recently been replaced look in fair condition. There is no pavement light in the location where it is suspected that a former pavement light has been infilled (refer 4.02.3)

APPENDIX A

PHOTOGRAPHS

Photograph 4.02.1a

Photograph 4.02.1b

Photograph 4.02.1c

Photograph 4.02.2

Photograph 4.02.3

Photograph 4.02.4

Photograph 4.02.6a

Photograph 4.02.6b

Photograph 4.03.1a

Photograph 4.03.1b

Photograph 4.03.2

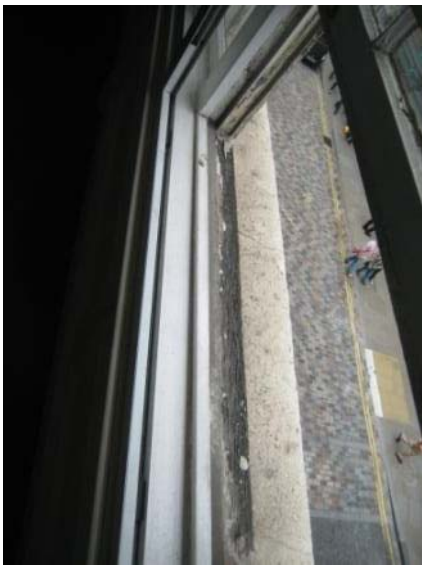
Photograph 4.03.4

Photograph 4.03.5

Photograph 4.03.6a

Photograph 4.03.6b

Photograph 4.05.1



Photograph 4.05.2a

Photograph 4.05.2b

Photograph 4.06.1

Photograph 4.06.2a

Photograph 4.06.2b

Photograph 4.06.3a

Photograph 4.06.3b

Photograph 4.07.2a

Photograph 4.07.2b

Photograph 4.07.2c

Photograph 4.07.2d

Photograph 4.07.2e

Photograph 4.07.2f

Photograph 4.08.1a

Photograph 4.08.1b

Photograph 4.08.2a

Photograph 4.08.2b

Photograph 4.08.2c

Photograph 4.08.2d

Photograph 4.09.2a

Photograph 4.09.2b

Photograph 4.09.3a

Photograph 4.09.3b

Photograph 4.09.3c

Photograph 4.09.3d

Photograph 4.09.4a

Photograph 4.09.4b

Photograph 4.10.2

Photograph 4.10.3

Photograph 4.10.4a

Photograph 4.10.4b

Photograph 4.10.5a

Photograph 4.10.5b

Photograph 4.1d0.5c

Photograph 4.10.5d

Photograph 4.11.1a

Photograph 4.11.2a

Photograph 4.11.2b

Photograph 4.11.2c

Photograph 4.11.2d

Photograph 4.12.2

Photograph 4.12.3a

Photograph 4.12.3b

Photograph 4.12.4

Photograph 4.12.5

Photograph 4.12.6a

Photograph 4.12.6b

Photograph 4.12.6c

Photograph 4.13.1a

Photograph 4.13.1b

Photograph 4.13.1c

Photograph 4.13.2a

Photograph 4.13.2b

Photograph 4.13.3

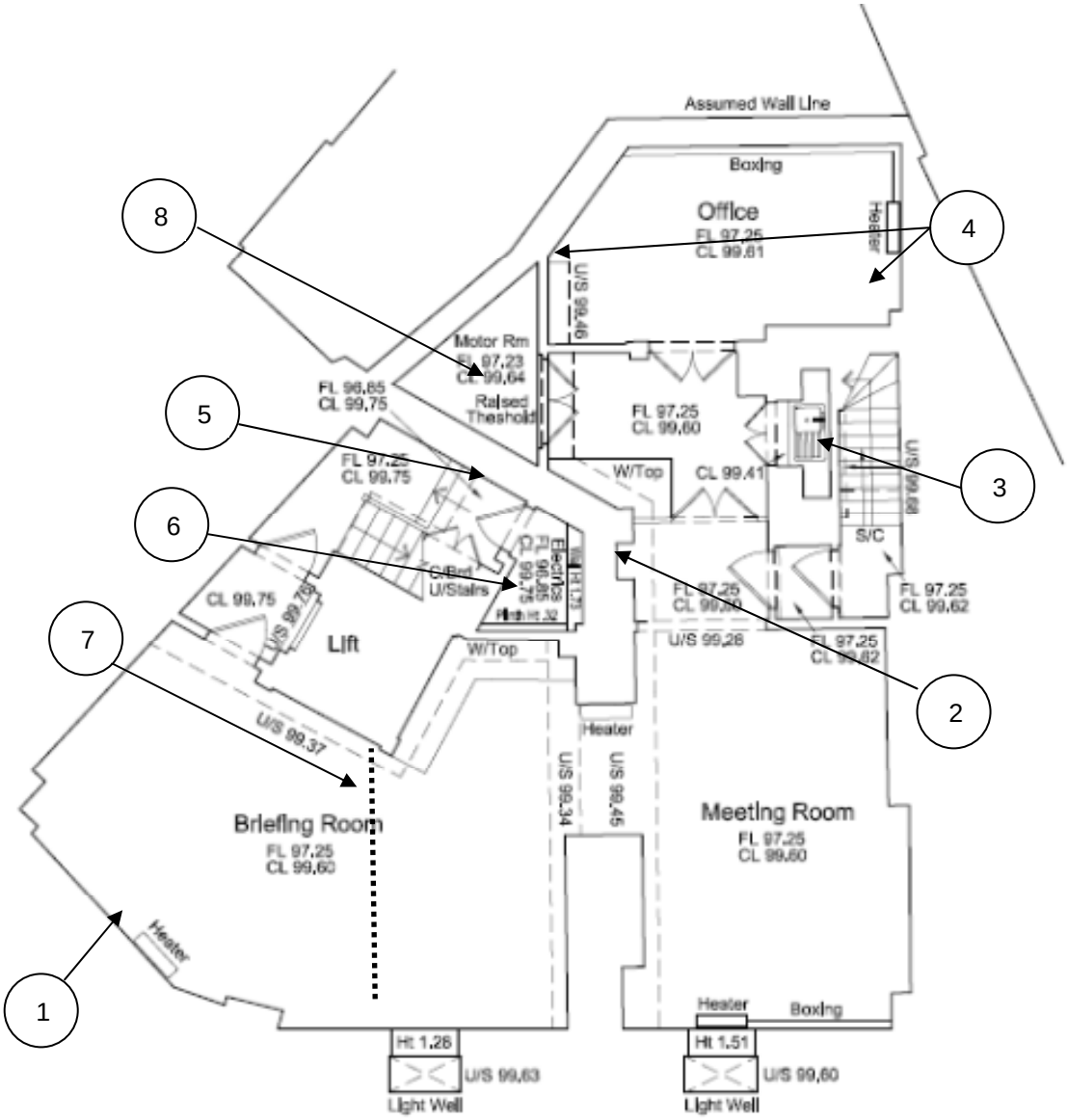
Photograph 4.13.4

Photograph 4.14.1

Photograph 4.14.2

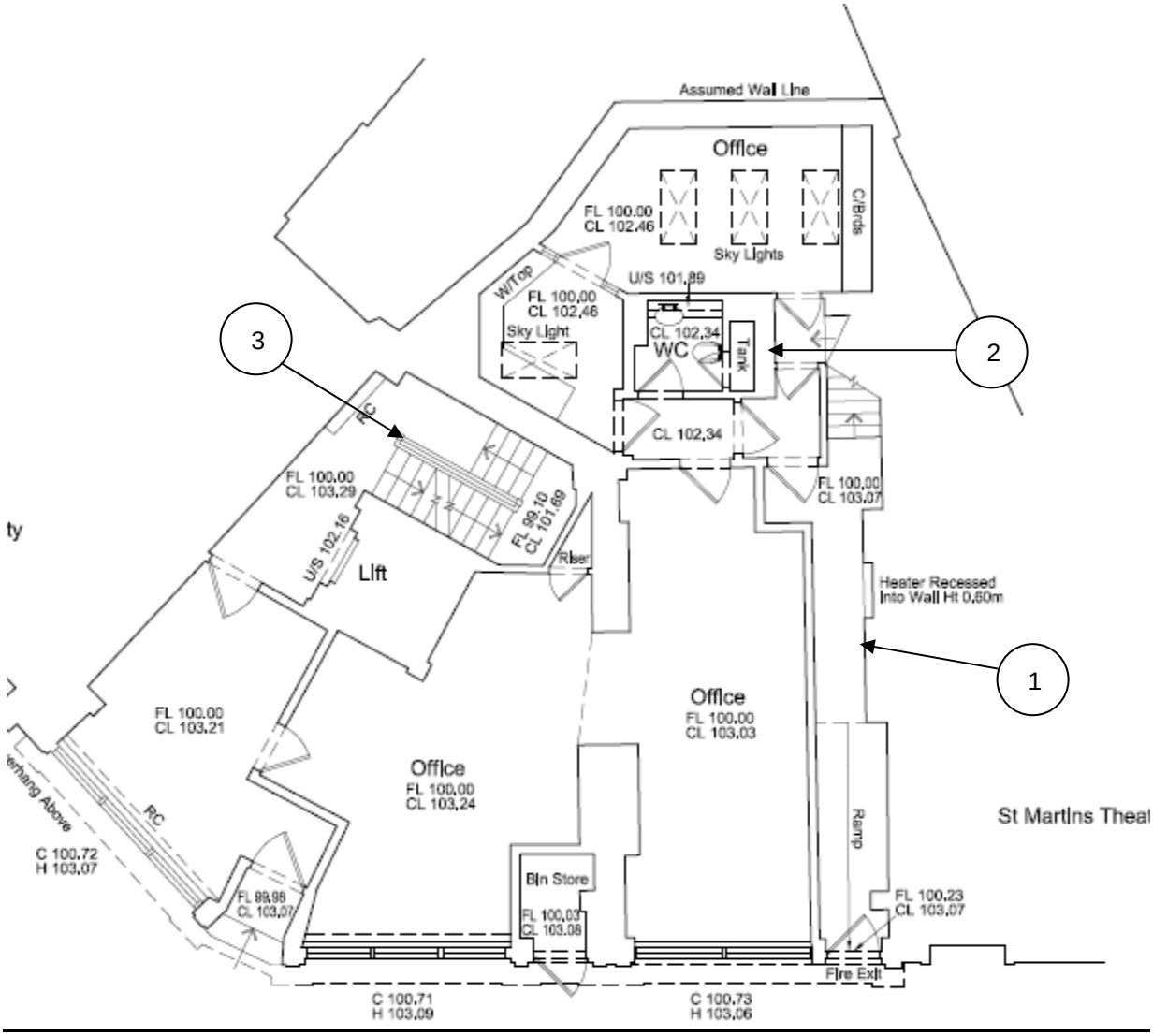
APPENDIX B

KEY PLANS



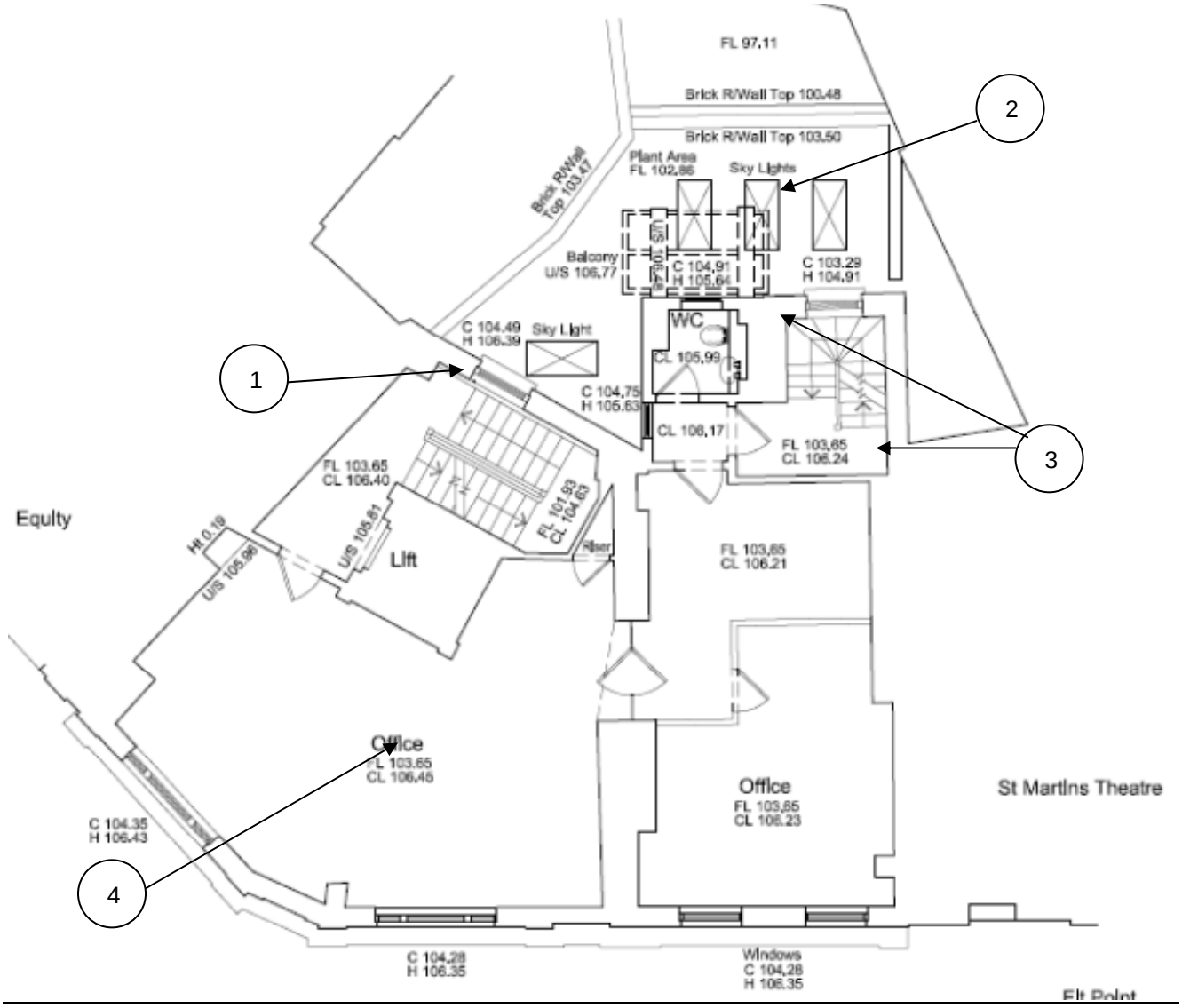
BASEMENT LEVEL KEY PLAN

1	Lightwell shown on earlier drawings but not evident on site	5	Damp section
2	Damp corner	6	Service intake under reconstructed half landing
3	Kitchenette surrounded by masonry walls	7	Steel beam over
4	Cracks in wall	8	Lift motor room not accessed



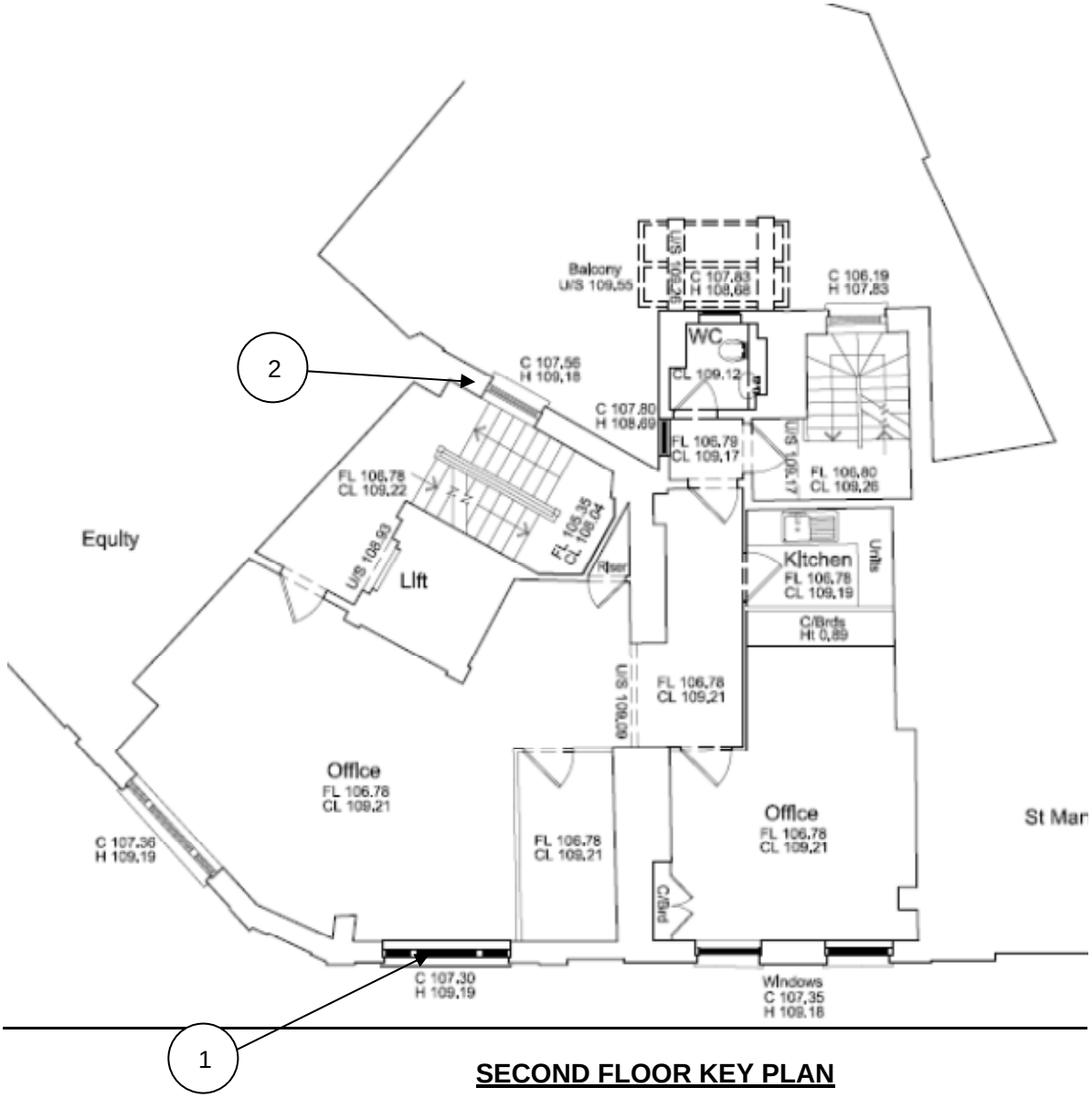
GROUND FLOOR KEY PLAN

1	Boxing out within access corridor
2	Recess for boiler with original masonry wall behind
3	Newel missing from staircase



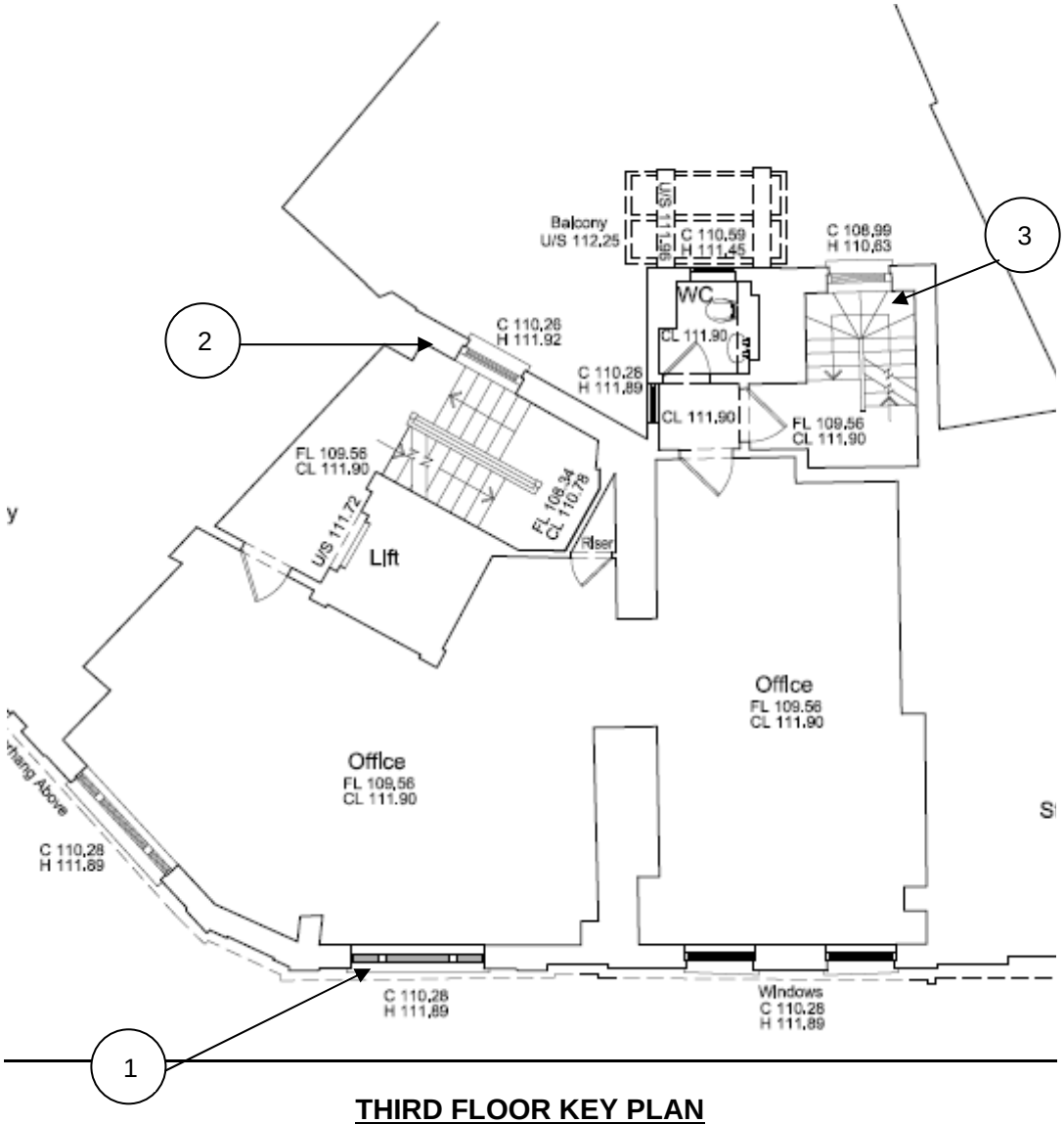
FIRST FLOOR KEY PLAN

1	Cracking to rear wall
2	Poor condition of roof finishes
3	Cracking around staircase
4	Limited inspection to this area



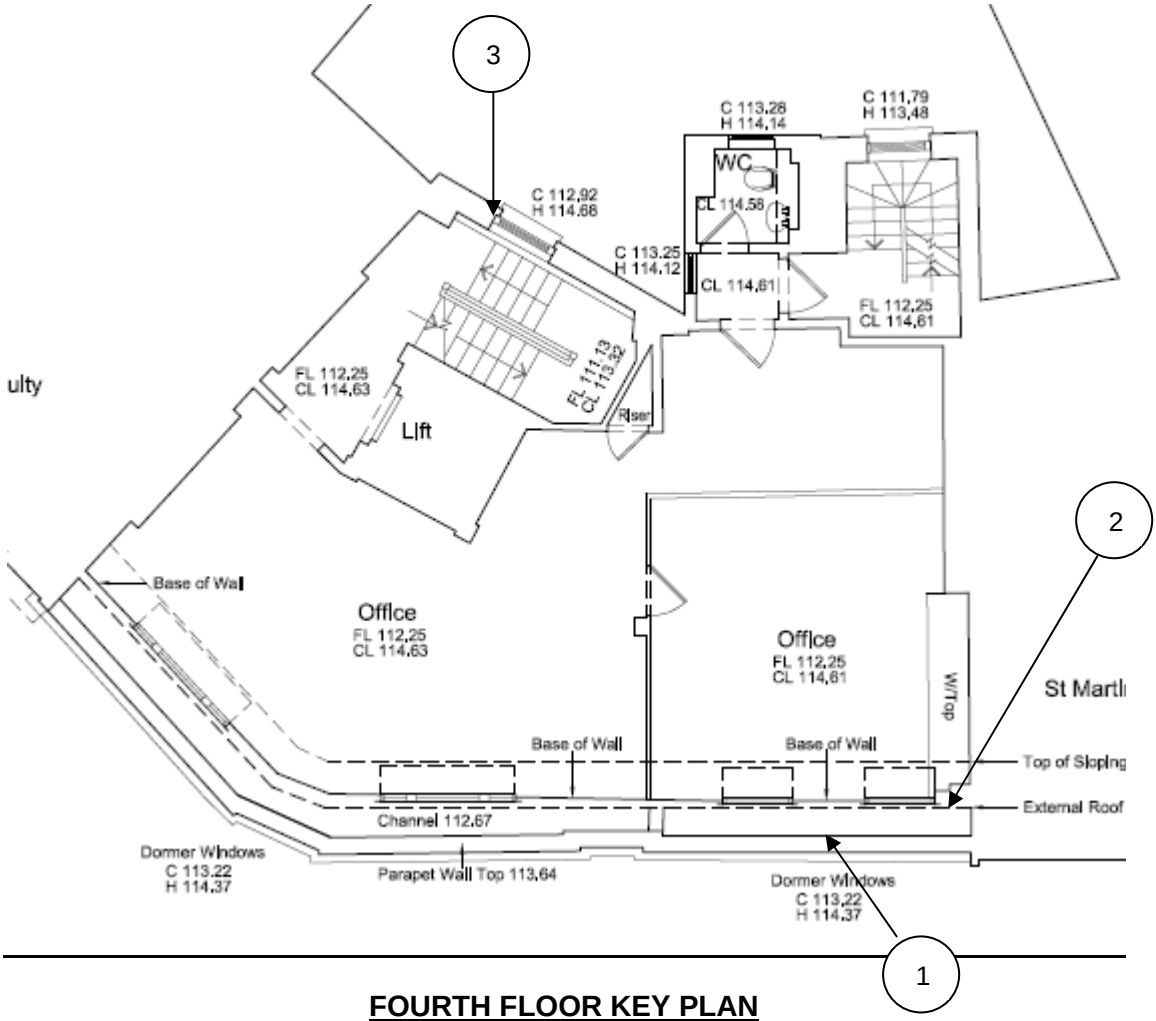
SECOND FLOOR KEY PLAN

1	Cracking of cill. Poor condition of window frame (typical)
2	Cracking around staircase



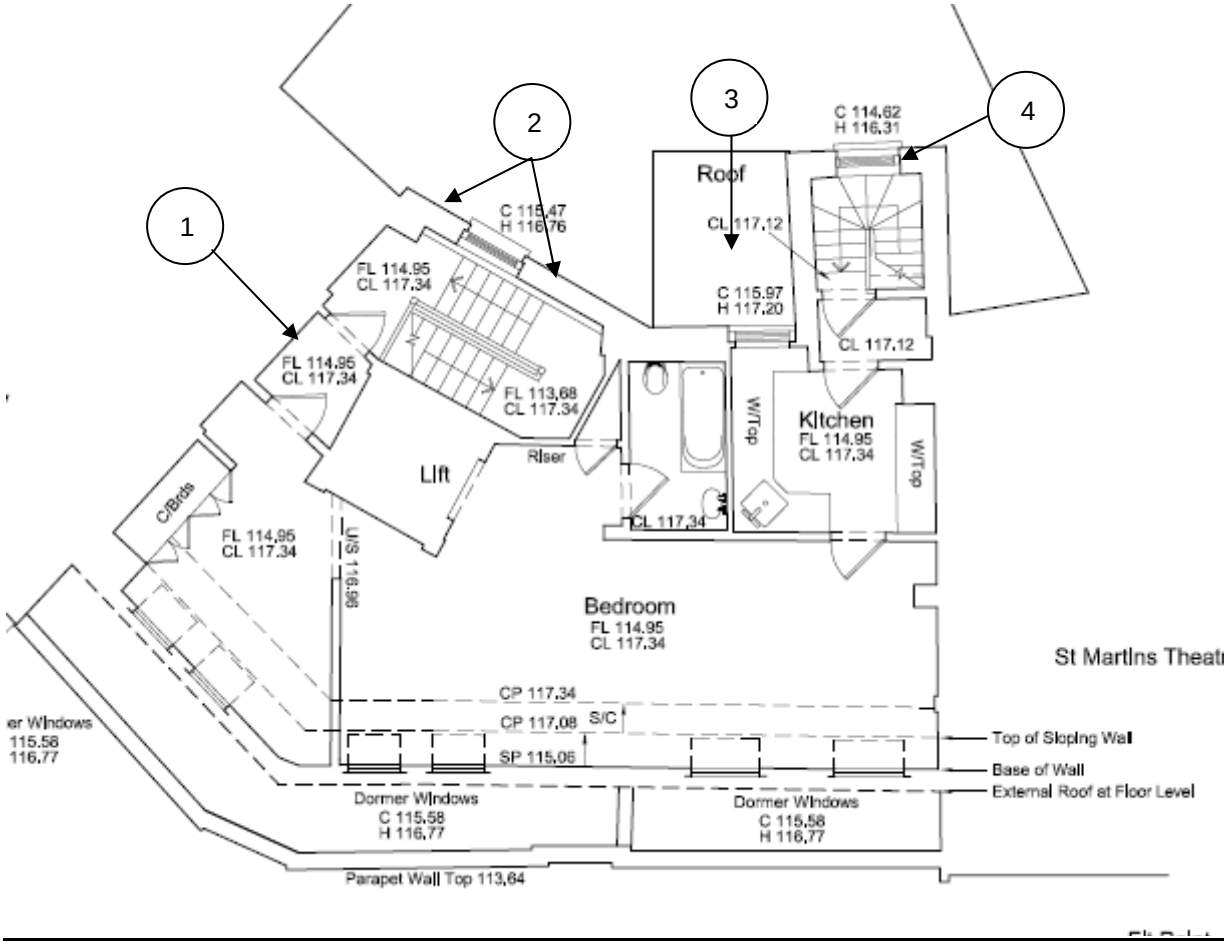
THIRD FLOOR KEY PLAN

1	Cracking of cill. Poor condition of window frame (typical)
2	Cracking around staircase
3	Cracking at high level between staircase and rear wall



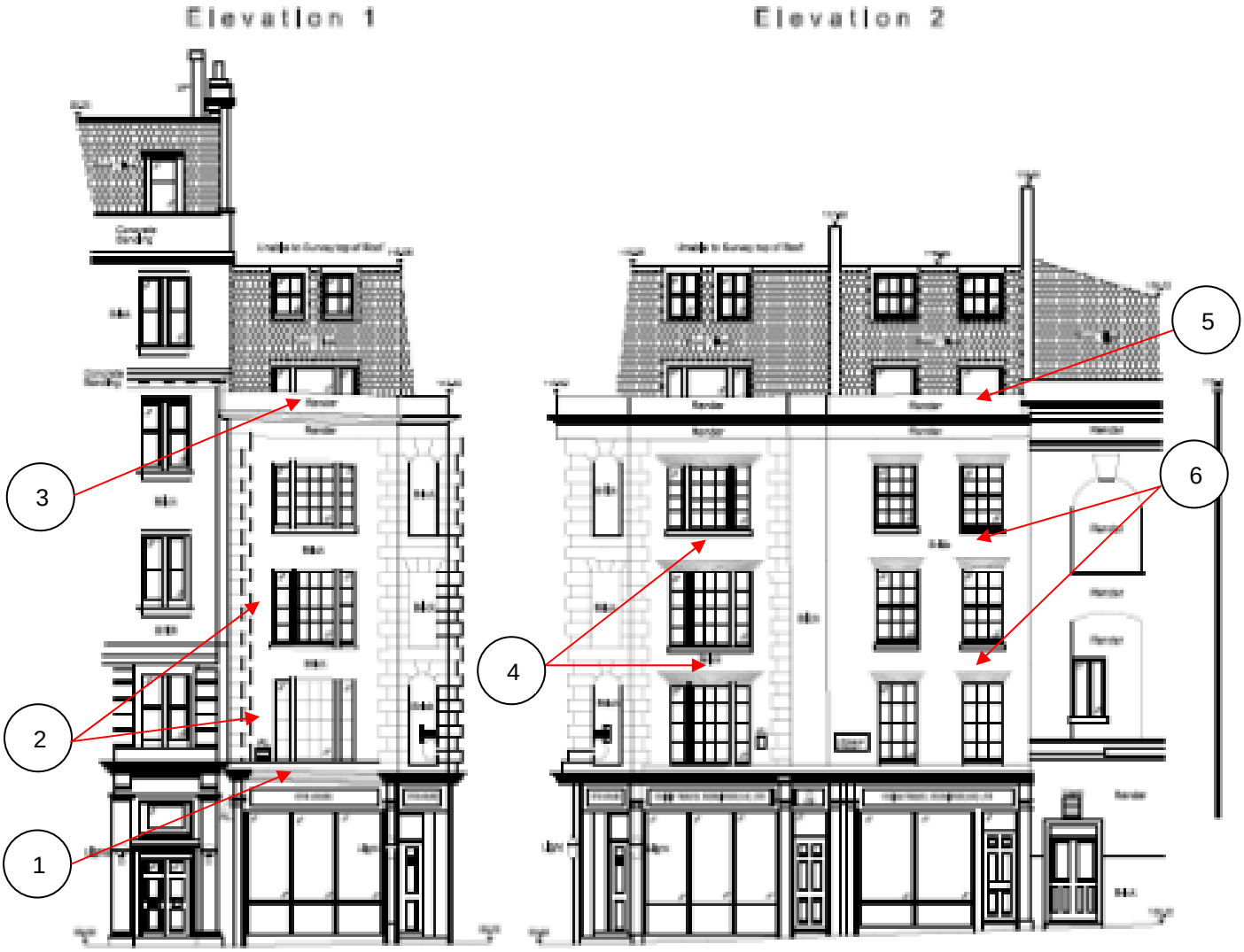
FOURTH FLOOR KEY PLAN

1	Lean and cracking of parapet wall
2	Cracking of party wall
3	Section of wall rebuilt but has diagonal cracks



FIFTH FLOOR KEY PLAN

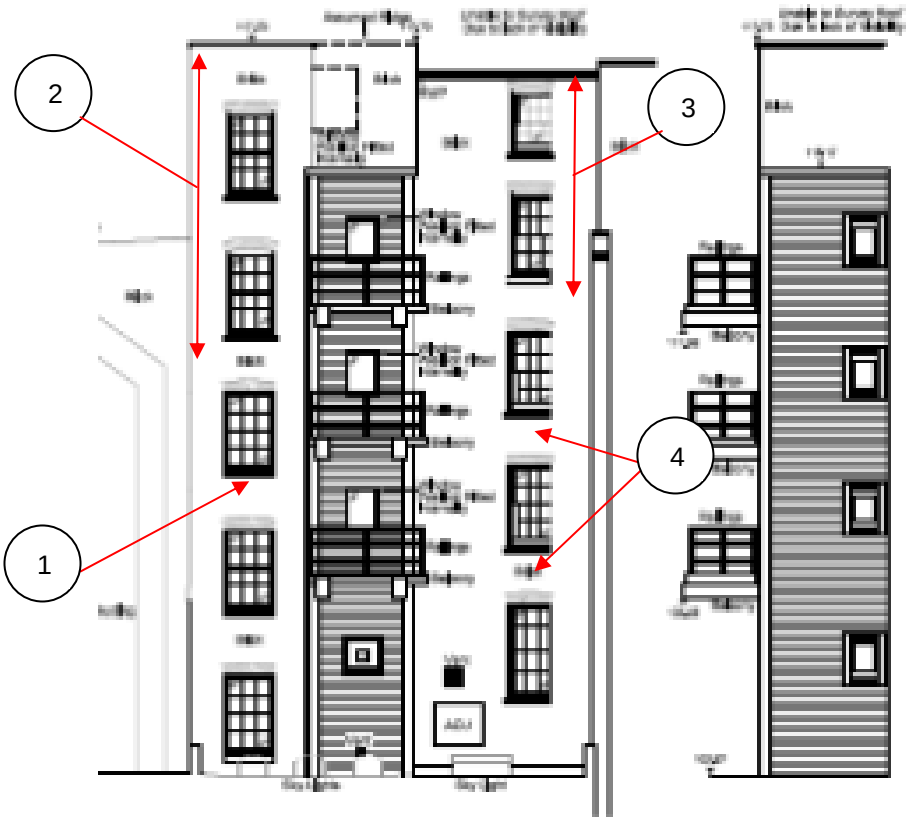
1	Flat roofed section with damp to roof, walls & floor
2	Section of wall rebuilt. Cracks both side of window opening
3	Flat roof over fourth floor
4	Cracking to staircase wall



FRONT ELEVATIONS

1	Sagging of shop front	4	Cracks in lintels
2	Diagonal cracking adjacent to window	5	Cracking to parapet
3	Cracking to parapet	6	Sections of wall previously re-built, new cracking.

Elevation 3 Elevation 4



REAR ELEVATIONS

1	Spandrel panel has been rebuilt	3	Top two floors look to have been more recently constructed
2	Top two floors look to have been more recently constructed	4	Spandrel panels have been rebuilt