

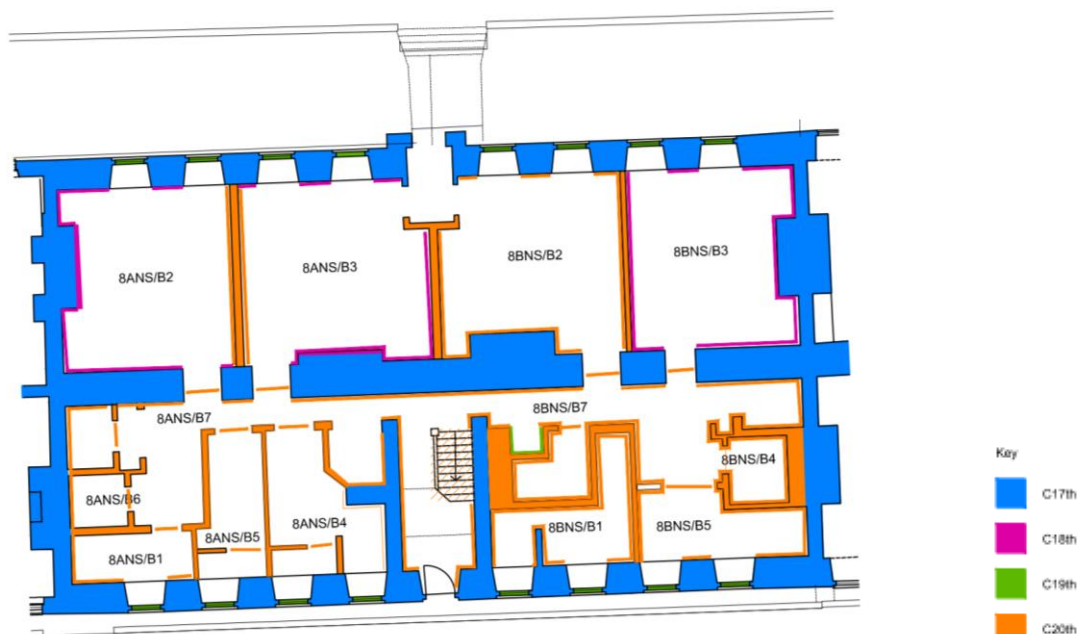
12. No 8 New Square - Observations and Survey Notes

Cross refer to Drg Nos 0951.S.013 & 014.

Historical

12.1. 17th century walls with 18th and 20th century linings. Major repairs undertaken between 1993-1994 when the building was close to collapse. Building extensively rebuilt behind the retained elevations. Basement rear rooms rebuilt in 1994.

12.2.



Plan taken from Donald Insall's 'Historic Building Assessment', March 2012.
Drawing not to scale.

External – South

12.3. The render condition is mostly good with approximately 75% well attached. Lining out just discernible in a few small places. Slate drip with mortar fillet applied over triangular brick fillet. Airbricks painted over at low level. Decorative condition fair. Excessive damp to WB04 in Room 8BNS/B2 may be linked to the condition of the drip above and a possible backfall which is feeding water into the wall, but the entrance terrace may also be the issue. The plinth may be cement rendered.

External – North

12.4. Render condition is mostly good with approximately 75% well attached. Decorative condition fair with lining out just discernible. The plinth is probably cement rendered. Slate drip course with triangular mortar fillet over and no leadwork.

Internal – South

12.5. To the two windows in Room 8BNS/B3 I observed no evidence of moisture ingress. The walls are panelled and have been stripped of their paint. The general condition is good, but with some areas of decay at low level but I have no reason to believe this is recent. To window WB03 in Room 8BNS/B2 there is no evidence of damp present but to window WB04 extensive damp is present to the cill and both reveals. The plaster is onto solid masonry and evidence of moisture is much more extensive internally than externally. The damp plaster is concealed with loose fitting boarding for aesthetic reasons. High moisture meter readings were recorded.

Internal – North

- 12.6. To Room 8ANS/B3 there is panelling at low level with solid plaster walls at high level and painted in timber shutters in the reveals. Secondary glazing has been installed. No obvious areas of damp. Room 8ANS/B2 is similarly detailed and was observed with no evidence of damp.

Rose of Jericho Analysis

- 12.7. Sample 8 (Test 5527)

This is a high strength uncarbonated Portland cement based render at c.1: 3 to 4 (binder : aggregate by volume). The aggregate is coarse quartz and flint sand. This is very likely to be a 20th century material.









Above left: Damp to the south reveal of WB04 in Room 8BNS/B3.

Above central: Damp to the north reveal of WB04 in Room 8BNS/B2.

Above right: Damp above the cill board of WB04 in Room 8BNS/B2.

Key:

-  Crack
-  Render loss
-  Surface mounted wiring
-  Paint failure
-  Damp internally recorded
-  Render analysis sample point



No8 New Square (South)

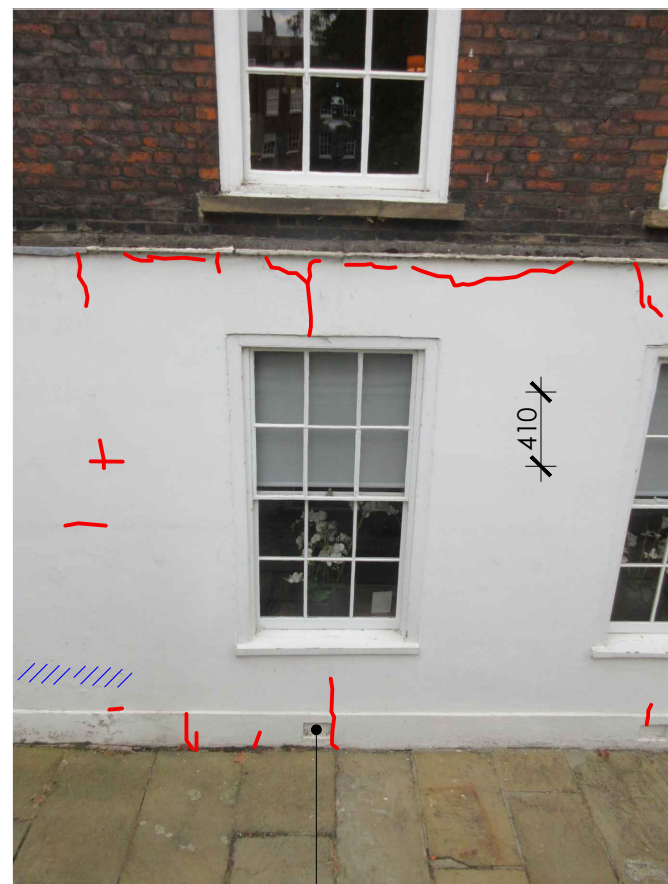
Possible defect to high level hopper

Water drips off broken pediment

Possible backfall to slate

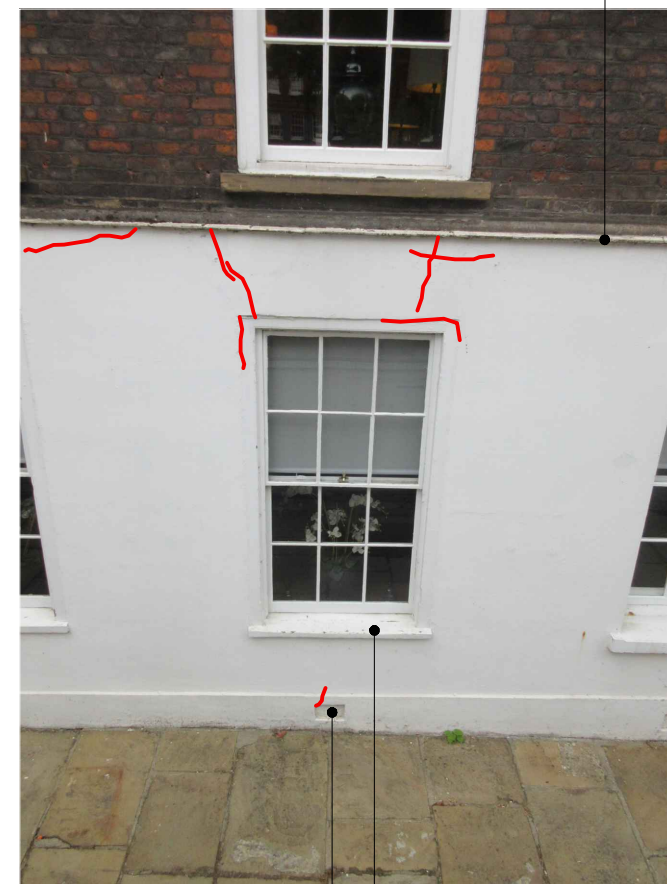
Extensive damp to both reveals and u/s of cill

Painted slate (?) drip with mortar fillet above (no lead flashing)



No8 - WB01

Painted over cast iron vent



No8 - WB02

Timber cill

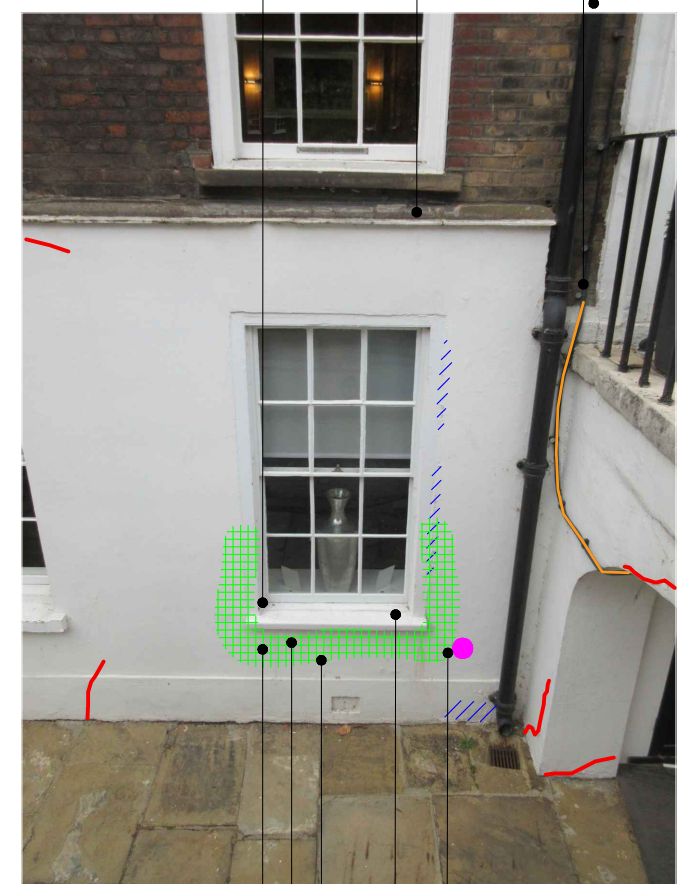
Painted over cast iron vent



No8 - WB03

Painted over cast iron vent

Stone cill



No8 - WB04

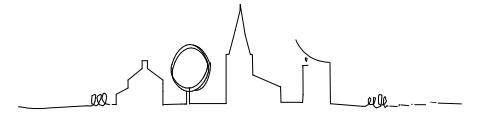
Rose of Jericho Sample No 8

Timber cill







Ground level dropped

Extensive damp to both reveals and water cill

Damp to internal wall under cill boards



Key:

-  Crack
-  Render loss
-  Surface mounted wiring
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-  Render analysis sample point



No8 New Square (North)

Missing drip

Painted slate (?) drip with mortar fillet above

Drip displaced

Failing mortar fillet

Drip damaged

Decayed cill

Painted over vents

Ground level has dropped

No8 - WB05

No8 - WB06

No8 - WB07

No8 - WB08

13. No 9 New Square - Observations and Survey Notes

Cross refer to Drg Nos 0951.S.015 & 016.

Historical

13.1. Upper floors partly rebuilt in the 1870s but the basement level at the front is relatively unaltered.

13.2.



Plan taken from Donald Insall's 'Historic Building Assessment', March 2012.
Drawing not to scale.

External – South

13.3. The render is generally well adhered at high level but hollowness was observed immediately above plinth. The plinth is probably cement rendered or cement patch repaired. Lining out is just discernible but has been filled. The decorative condition is poor at low level and adjacent to the bridge. Slate drip course with mortar fillet above.

External – North

13.4. The render is less than 50% well attached with other areas poorly bonded and a couple of small areas of render loss. The paint is probably a limewash. Paint detachment in one area confirms multiple paint layers. The decorative condition is poor. Plinth possibly stone and over painted. Slate drip course with failing mortar fillet over and damaged drips. The downpipe discharges over pavement with no gully. Ventilation grilles at high level but not at low level.

Internal – South

13.5. To Rooms 9NS/B1 & 9NS/B2 shutters are present. The reveals and internal wall surfaces have been plaster lined and covered with woodchip wallpaper. The plaster is probably lime. The decorative condition of all surfaces is good with no evidence of damp. To the small window to Room 9NS/B11 under the entrance landing, the walls have been dry lined but damp is present around the window cill. The moisture almost certainly relates to water ingress through the entrance bridge.

Internal - North

- 13.6. To Rooms 9NS/B6 & B7, the window reveals are panelled and, the walls are dry lined with lime plaster (?) and wall papered. This plaster is probably in the original position on account of the cornice. No evidence of damp observed internally.

I note that the ground levels inside may be lower than that outside. A possible small area of damp to the upper south side of WB06 - this damp appears to be more internalised and may relate to a leak in pipes in the floor above. This needs to be checked.







Rose of Jericho Analysis

- 13.7. Sample 9A (Test 5528)
This thin (<1.5mm) finish coat has not been tested as there is insufficient material to analyse by chemical dissolution. The sample reacted slowly with 10% hydrochloric acid indicating it to be a calcareous material and supporting the visual assessment that it appears to be a neat Roman cement binder. The sample is likely to be of historic significance and analysis by SEM/EDX (scanning electron microscope with X-ray microanalysis) could be considered to determine and identify the constituent compounds.
- 13.8. Sample 9B (Test 5529)
This is a moderate/high strength carbonated render of the Roman cement type at c.1: 2.5 to 3 (binder : aggregate by volume). The aggregate is principally fine quartz. This is very likely to be a 19th century material.



Above left: Damp to window reveal under entrance bridge. Room 9NS/B11.
Above right: Small area of moisture staining above WB06 in Room 9NS/B6.

Key:

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-  Render loss
-  Surface mounted wiring
-  Paint failure
-  Damp internally recorded
-  Render analysis sample point



No9 New Square (South)

Painted slate (?) drip with mortar fillet above
 Painted over cast iron vent
 Window housing decay accelerated by failed drip above
 Cracking follows fill relating to lining out
 Damaged drip
 Damp to window reveal under entrance landing









No9 - WB01
 Note plinth height change

No9 - WB02
 Decayed cast iron vent

No9 - WB03

No9 - WB04
 Painted cast iron vent
 Water splash / run off from pediment over door
 Rose of Jericho Sample No 9

- Key:
-  Crack
 -  Render loss
 -  Surface mounted wiring
 -  Paint failure
 -  Damp internally recorded
 -  Render analysis sample point



No9 New Square (North)

Large decorative iron vents

Failing mortar fillets
Damaged drip

Painted slate (?) drip with mortar fillet above
Cast iron vent
Damaged drip

Decayed sandstone cill
Small area of damp staining to upper part of window lining internally. Issue could relate to a radiator above.

Painted stone plinth
Downpipe not fixed to wall

No gully at base of downpipe
Damp ground conditions

No9 - WB05

No9 - WB06

No9 - WB07

No9 - WB08

14. No 10 New Square - Observations and Survey Notes

Cross refer to Drg Nos 0951.S.017 & 018.

Historical

14.1. 18th century rebuild following a serious fire in 1752 which consumed the majority of the building. In the 1840s, the gateway at the southern end of the building was infilled.

14.2.



Plan taken from Donald Insall's 'Historic Building Assessment', March 2012.
Drawing not to scale.

External – South & North

14.3. The walls are brickwork with a small offset present above render band above the windows. The plinth is rendered with localised paint failure. The window reveals have been rebuilt and the pointing here is probably cement. The brickwork is very dirty. The rendered band above the windows includes some hairline cracks – the render appears very hard and is probably cement based. There is no lead cover flashing. Decay to sandstone window cills.

14.4. Between the north and south sides of the building the brick arch is painted with what is probably a limewash. All surfaces are in very poor decorative condition as a result of moisture trying to escape from masonry behind. The majority of water will be entering through gaps between the small paving slabs on the entrance landing above.

Internal – South

14.5. To window WB01 in 10ANS/B3b there is damp to the reveals and cill. To DB0, no weather bar is present at the base of the door and there are high damp readings to the plaster reveals at low level. Positively, there is a slight step up from the ground level outside.

To Room 10ANS/B2, the shutters have been painted shut and the walls are panelled. No damp observed.

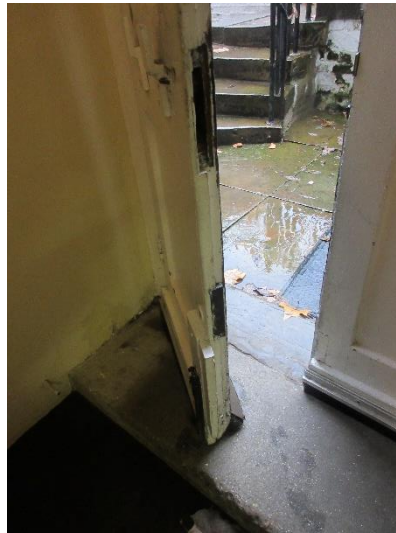
To the rear of the building in Room 10ANS/B4, a damaged/leaking foul drain is almost certainly the cause of damp observed and the foul smell.

Internal - North







- 14.6. Windows WB04, WB05, no damp observed with the walls lined out with timber panelling. No plaster present or visible. To window WB06 and DB02 no damp observed. Walls lined with timber full height.

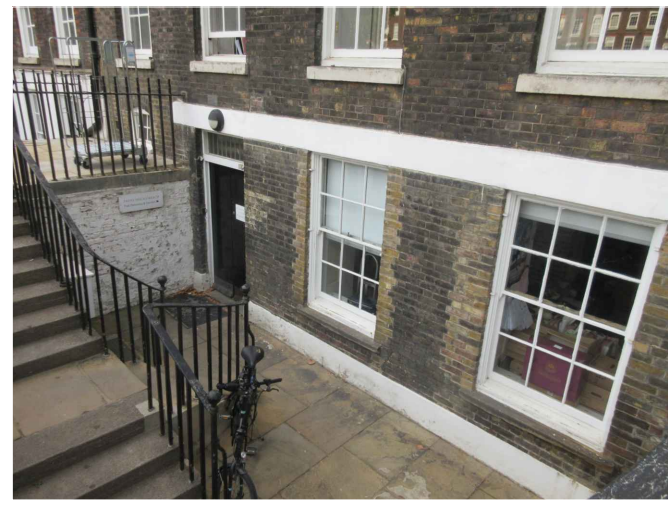
Rose of Jericho Analysis

- 14.7. None.

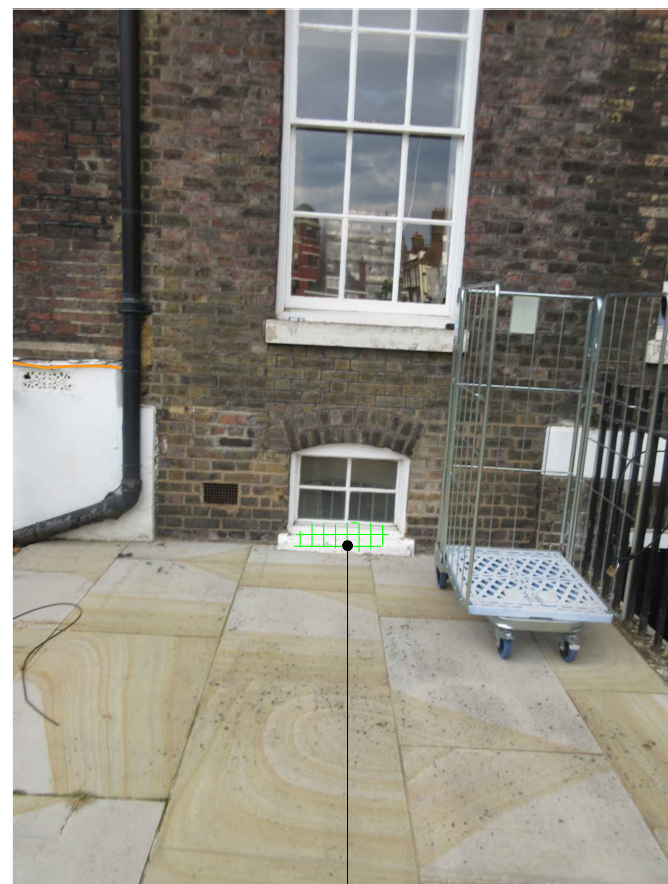


Above left: Peeling paint to the cill and reveals to WB01 in Room 10ANS/B3b.
Above right: Damp to door reveals at base of door DB01. No weather bar.

- Key:
-  Crack
 -  Render loss
 -  Surface mounted wiring
 -  Paint failure
 -  Damp internally recorded
 -  Render analysis sample point

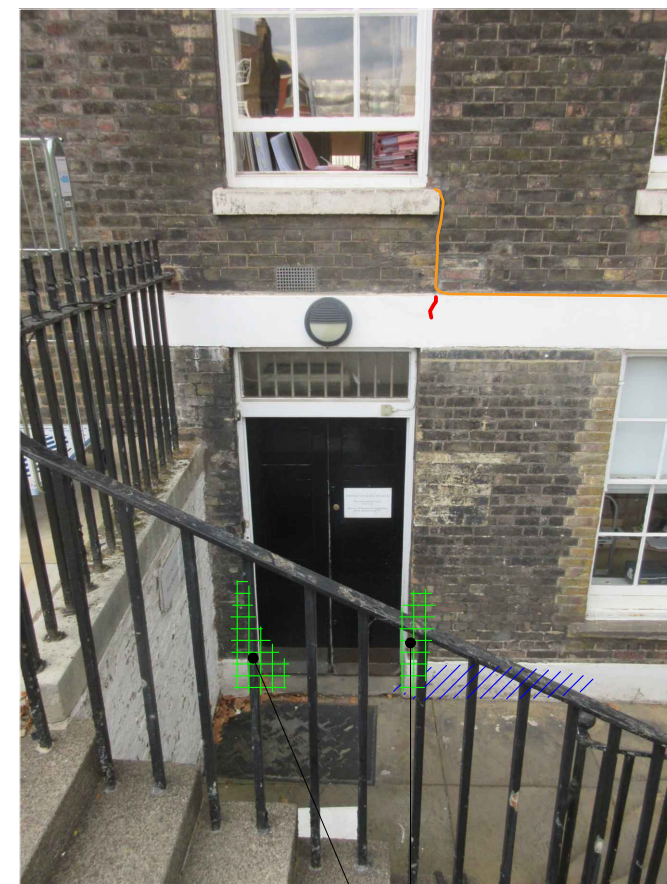


No10 New Square (South)



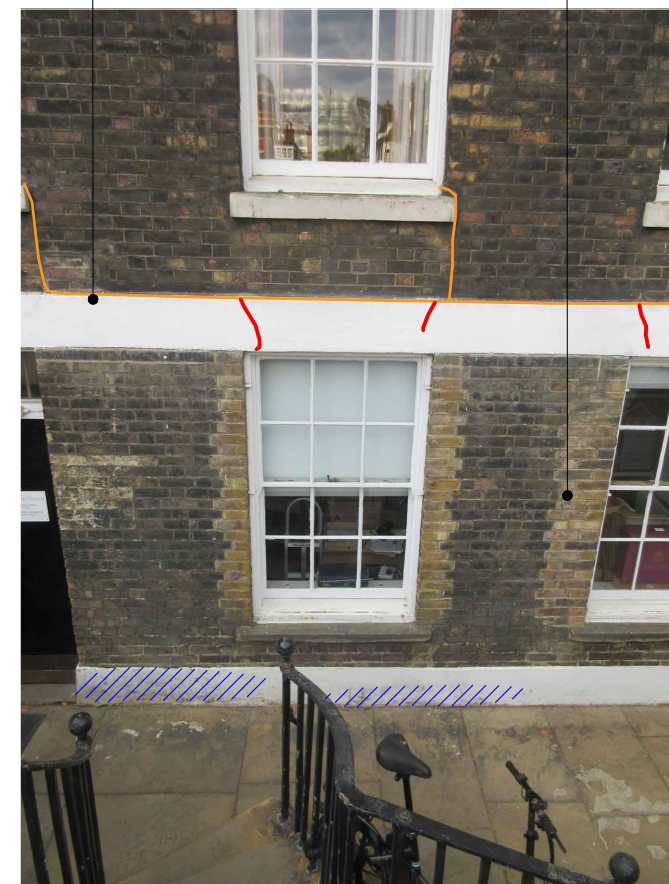
No10 - WB01

Peeling paint to internal cill and reveals. Slight damp recorded.



No10 - DB01

Damp to reveals at base of door. No weather bar to door.



No10 - WB02

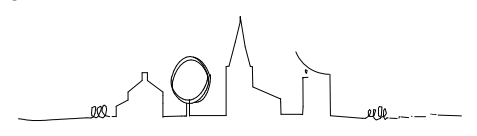
Brckwork reveals rebuilt









No10 - WB03

Cill damaged / decayed

Run off water damage
Brick decay



Key:

-  Crack
-  Render loss
-  Surface mounted wiring
-  Paint failure
-  Damp internally recorded
-  Render analysis sample point



No10 New Square (North)

Cement render suspected

No flashing to offset



No10 - WB04



No10 - WB05

Ground level dropped slightly

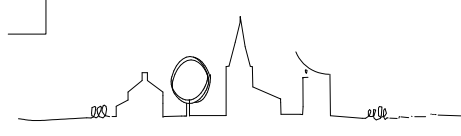


No10 - DB02



No10 - WB06

Cast iron vent under window



15. No 11 New Square - Observations and Survey Notes

Cross refer to Drg Nos 0951.S.019 & 020.

Historical

15.1. No 11 was rebuilt in 1787 following a serious fire and again after the Second World War in 1951 following bomb damage. Fragments of early fabric at basement and ground floor level remain. The basement rooms have recently been replastered and externally, a cement render with triangular vents is present.

15.2.



Plan taken from Donald Insall's 'Historic Building Assessment', March 2012.
Drawing not to scale.

External – South & North

15.3. The wall is cement rendered and the wall surfaces are characterised by horizontal cracks. Modern circular vents in the wall have been painted over. The introduction of these vents suggests a rubble filled core. The render is capped with a lead drip with brick fillet above and mastic sealed (failing). The render condition is poor and the decorative condition similarly so. The paint may be a limewash. The presence of cement render is the primary cause of the damp observed internally.

The pointing at high level is probably cement based but mostly in good condition. The cement mortar pointing may be a contributing factor to the moisture in the wall at low level.

Internal – South

15.4. In room 11NS/B3 the walls have a modern plaster directly applied to the masonry behind. Damp was observed approximately 900mm off the floor to the northern reveal of window WB02. In 11NS/B4 (Window WB03) there is peeling in decoration and damp to the upper part of the northern reveal on the inner face and adjacent there is damp in the inner northeast corner of the room. The problem could be caused by either the failure of the mastic at the top of the render or as a result of moisture penetrating the front door entrance terrace.

Internal - North

15.5. In Room 11NS/B9, there is a small damp patch on the southern reveal of WB04 approximately 1000mm off the floor. To WB05 a horizontal damp patch was observed to the south reveal approximately 1200mm above the floor and there are two vertical damp patches either side of the window.

In room 11NS/B10, extensive damp was revealed on the north reveal of window WB06 north side and a horizontal damp line on the south side approximately 1500mm above FFL.

In Room 11NS/B10, Damp was also observed in the east side of the fireplace. The wall is an external retaining structure with the Porter's Lodge constructed over. No tanking system appears to be present so this wall will always be vulnerable to damp. The WC drainage immediately above may be a factor meanwhile open joints in the paving at ground level could make the situation worse.

- 15.6. Cement render on the external wall to the rear of the property is most likely the cause of the damp observed in 11NS/B11.

Rose of Jericho Analysis

- 15.7. Sample 10A (Test 5530)
This top coat is a high strength carbonated Portland cement based render at c.1: 5 (binder : aggregate by volume). The aggregate is principally quartz. This is very likely to be a 20th century material.
- 15.8. Sample 10B (Test 5531)
This base coat material is a high strength uncarbonated Portland cement based render at c.1: 4 (binder : aggregate by volume). The aggregate is a medium-coarse quartz and flint sand. This is very likely to be a 20th century material.



Above left: Damp patch to north side of WB02 in Room 11NS/B5.

Above central: Damp parch at high level in the northeast corner of Room 11NS/B4.

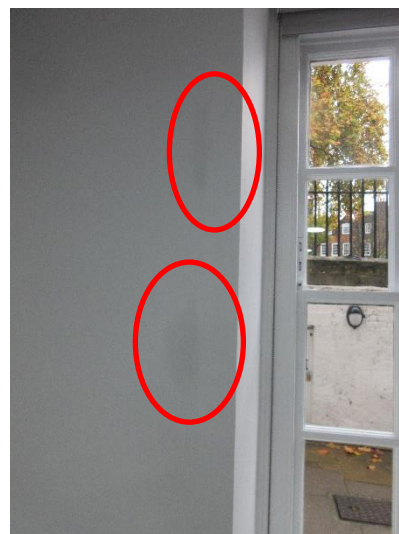
Above right: Damp parch to the northern reveal of WB03 in Room 11NS/B4.



Above left: Damp patch to south side of WB04 in Room 11NS/B9.



Above central: Damp to the southern side of WB05 in Room 11NS/B9.



Above right: Damp to the northern side of WB05 in Room 11NS/B9.









Above left: Large damp patch to the north of WB06 in Room 11NS/B10.



Above central: Damp patch to the south of WB06 in Room 11NS/B10.



Above right: Damp patch to the east of the fireplace in Room 11NS/B10.

- Key:
-  Crack
 -  Render loss
 -  Surface mounted wiring
 -  Paint failure
 -  Damp internally recorded
 -  Render analysis sample point



No 11 New Square (South)

Brick fillet detaching

Moss growing out of cracks

Paint / render skim detachment

Lead cover flashing with triangular brick fillet over lead mastic used

High level damp to window reveal internally.

Brick fillet detaching open joint

Peeling paint and damp in corner at high level - ceiling and two wall surfaces.

No 11 - WB01

No 11 - WB02







No 11 - WB03

Rose of Jericho Sample No 10

Damp to window reveal internally

Modern cavity vents

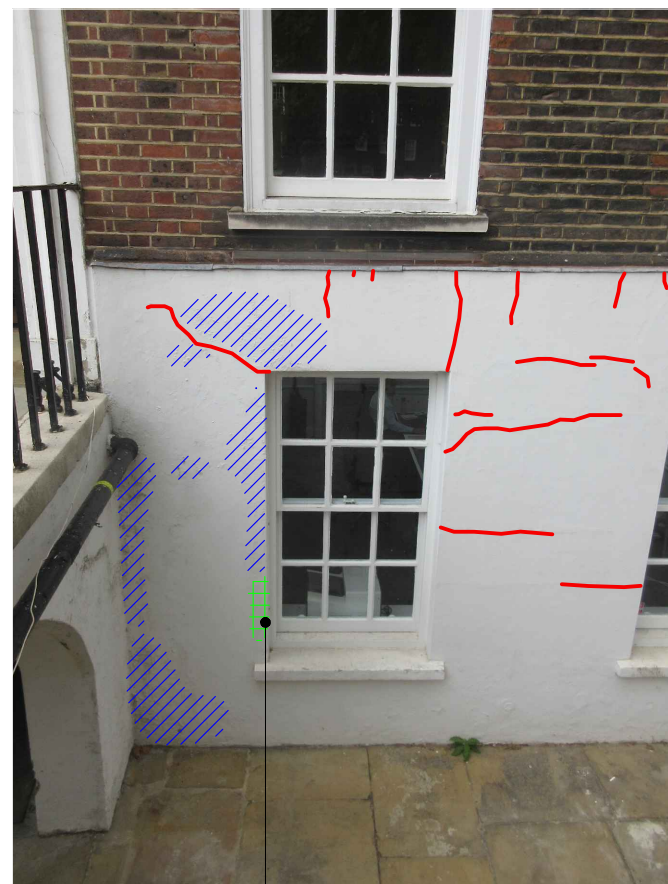
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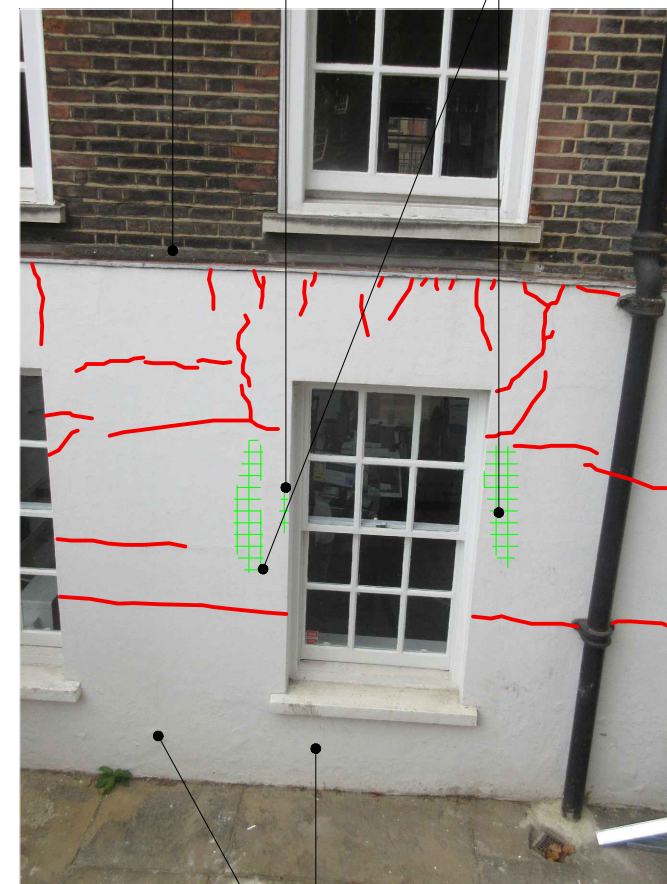
No 11 New Square (North)

Lead cover flashing with triangular brick fillet over and mastic ??
 Horizontal damp patch to south reveal.
 Vertical damp patches to inner wall
 Large damp patch to window reveal.



No 11 - WB04

Small patch of damp to south reveal



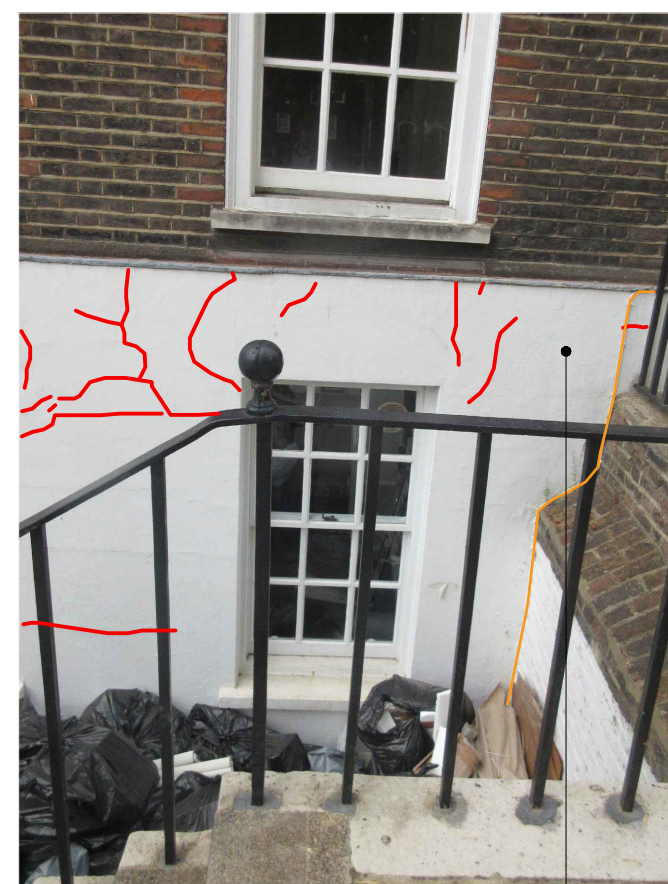
No 11 - WB05

Modern cavity vents



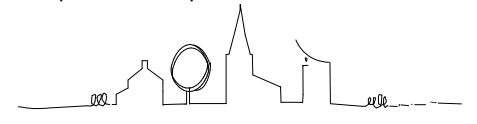
No 11 - WB06

Horizontal damp patch 1500mm above floor level



No 11 - WB07

Damp also observed to fireplace wall (north wall)



16. Recommendations

Elevations - Brickwork

- 16.1. The high level brickwork needs to be maintained in good condition and ideally with cement mortars removed and replaced with a more sympathetic lime mortar.

Elevations - Render

- 16.2. The wholesale removal and replacement of Portland cement renders dating from repair campaigns in the 20th century is recommended. It is recommended that the Portland cement to the following are replaced with an Hydraulic Lime render:

- No2 – North side
- No7
- No8 – South side
- No8 – North side (If Portland cement is confirmed)
- No11

The render type to the following areas needs to be confirmed:

- No1 – South side (Probably Portland cement)
- No5 – West side (Probably Roman cement)
- No8 – North side (Probably Portland cement)
- No9 – North side (Probably Roman cement)

- 16.3. Where Roman cement renders exist it is recommended that these are retained and repaired with render patch repair mixes developed in accordance with Rose of Jericho's advice.
- 16.4. To No 4, there is an unusual historic oil mastic render whose repair needs careful H&S consideration. The render mix should be developed in accordance with Rose of Jericho's advice.
- 16.5. The slate offset should be retained, repaired and protected with a lead cover flashing which includes a welted rear edge where chased into the wall. The Lead Sheet Association guidelines should be followed for lengths of new cover flashings. The flashing should not be dressed down the wall face to avoid streaking. The use of triangular brick fillets above can continue.
- 16.6. To retained renders, further paint analysis is required to establish the build-up of paints and whether breathability is maintained. Ideally where only limewashes exists then further limewashes can be applied but if modern paints are present then these should be removed prior to redecoration. Limewashes are preferred to existing historic render surfaces but where new hydraulic render is being introduced then the use of a mineral paint such as Keim might also be appropriate. Evidence of previous applications of limewash should be retained wherever possible.

Air bricks

- 16.7. All air bricks would benefit from being carefully stripped of multiple layers of paint to maximise ventilation to the void(?) behind. Following stripping, they should be repainted to match the limewash colour.

Plinths

- 16.8. The plinths require repairs and redecoration and they should be considered in parallel with the approach to the render above. If a stone plinth is found then masonry repairs will be required.

Windows and Doors

- 16.9. The traditional repair of windows should take place in parallel with render repairs and replacement with particular attention given to ensuring that no Portland Cement is retained around the woodwork as this will accelerate decay. In some instances, pieced-in stonework repairs are required to the masonry cills.
- 16.10 The introduction of a weather bar is recommended below doors to prevent wind-blown water ingress under doors.

Entrance Door Pediments

- 16.11 The introduction of lead cover flashing with very shallow diagonal weirs over the entrance door pediments represents a way to direct away from the front elevation of the building. One consequence will be increased splashback off the paving - a balanced view of the benefits of this leadwork needs to be taken and a trial and monitoring is suggested to see if splashback is a problem.

Downpipes

- 16.12 The downpipes should be visually inspected twice a year to check for any leaks.
- 16.13 An assessment of the capacity of the downpipes should be undertaken to confirm their appropriateness for changing climate.
- 16.14 Where downpipes are built into the render, these downpipes should be carefully cut out, removed, redecorated and then refixed. The fixing should incorporate stainless steel fixings for longevity and where badly decayed pipework is found, this should be replaced on a like-for-like basis. Consideration should also be given to offsetting the downpipe slightly.

Gullies

- 16.15 Gullies, where not present, gullies should be installed directly under each downpipe shoe. In some instances, gully positions should be adjusted and appropriate aprons installed to ensure all water is collected and discharged into the below ground pipework.

Below ground drainage

- 16.16 The drainage survey needs to be reviewed with repairs or relaying undertaken where necessary. In particular, drainage repairs are probably required under No2 and in No10.

Entrance Bridges and Area Paving

- 16.17 The introduction of a French drain along the base of the front of the building will help to reduce the risk of water migration into the building. The paved areas need repair and repointing with falls directed away from the building. The presence of mastic asphalt under the paving needs further investigation to establish its purpose and condition.
- 16.18 Maintaining the condition of the paved surface to the top of each entrance bridge is critical to managing the damp problems observed internally. Some relaying and repointing is required. Railings also need repair on the bridges.

Services

- 16.19 The presence of surface mounted services should be removed and rationalised where possible.

Internally

- 16.20 The presence of solid plaster applied to basement walls will continue to be problematic although a switch away from cement render on the outside is likely to lead to significant improvements. Ideally solid plaster walls at basement level should be changed to a dry-lined solution to eliminate the decorative problems.

- 16.21 Where historic lathe and lime plaster surfaces are present these should be maintained and looked after.
- 16.22 Where modern dry-lined plasterboarding has been installed, black mould is vulnerable at the 'dot and dab' cold bridging spots. Better ventilation and heating will assist with reducing this and anti-fungicidal paints can additionally be used to resolve the issue in the short term although redecoration every five years is likely to be necessary. An alternative approach to dot and dab fixing is recommended.
- 16.23 In conclusion, none of the render is original but historically important renders are present and these should be maintained and repaired. Modern Portland cement renders are causing problems in some areas and these should be replaced with a hydraulic lime render. The detailing of all the render junctions is very important and the condition of the paving on the entrance bridges needs to be maintained in excellent condition to prevent damp ingress below. Modern paints, if present, should be removed from historic renders. External paving needs to be maintained in good condition with appropriate falls and the introduction of a French drain in front of the building is encouraged.



SIGNED
benjamin + beauchamp architects ltd

Dated 6 March 2023