BRICK AND TIMBER CONDITION REPORT

Quadriga

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1 INTRODUCTION

1.1 Origin of the report

1.1.1 We were commissioned by Divine ideas Architects on behalf of Bowden House (UK) LLP to undertake a brick and timber condition report at 65 Swinton Street, London.

1.1.2 The survey is based upon a brief outlined in the Quadriga Contracts Limited quotation email 21st March 2014 and email confirmation from Reiko Yamazaki email 19th March 2014.

1.1.3 The survey was carried out over a two day period 17th and 18th June 2014 in clear warm weather conditions, the weather had been dry in the days prior to the survey which meant no possible water ingress could be observed.

1.1.4 The overall purpose of this survey was to determine the existing condition of the brickwork and timber elements of the structure, so as to enable improvement works to be formulated and specified, and that any defects should be noted and appropriate remedial works should be suggested.

1.2 Extent of Survey

1.2.1 The survey was requested to record current condition and defects to all brickwork both external and internal along with internal timber work.

1.2.1.1 Visual inspection with isolated moisture meter readings where accessible.

1.3 Limitations

1.3.1 This report provides an informed assessment of the condition of the brickwork and timber only as set out in following subsections, its coverage, findings and recommendations are limited that:

1.3.2 Our inspection was restricted to a visual examination of accessible and unconcealed elements of the structure with moisture meter readings where accessible.

1.3.3 Limited lighting in basement, other areas where windows have been covered meant a torch was used to assess the condition of the fabric.

1.3.4 We were not able to examine those parts of the structure that were covered, inaccessible or unexposed at the time of our survey including:

- The outside of the basement external wall, and basement side room.
- Small light-well at rear of building between staircase and adjacent building.
- Ground floor room to the immediate right hand of front door.
- Adjacent building goods yard where extension wall is located.

2 Main Survey Report- Brickwork

2.1 External Brickwork- Front Elevation Swinton Street

2.1.1 Brickwork appears to be yellow multi stock in Flemish type bond, 1½ brick thick with pink voussoir gauged brick flat arch window heads and stone cills, with render applied to jambs and soffits, parapet detail at roof level with what appear to be non-original flag copings. The brickwork has a paint finish from ground floor head level to floor level of basement. Figure 1

2.1.2 The front elevation has heavy carbon/ atmospheric pollution deposits.

2.1.3 The exposed brickwork appears in reasonable condition with areas that have been patch repaired in the past, low level cracks at ground floor head level and upper left shows signs of displacement at coping level possibly due to corrosion 'jacking' of handrail in that area, large areas of pointing to this elevation appears worn. Figure 2 & 3

2.2 External Brickwork- Rear Elevation

2.2.1 Brickwork appears to be yellow multi stock in Flemish type bond 1½ brick thick, with a mixture of brick arch and concrete lintel window heads, with cills that appear to be concrete and some render to jambs and soffits with carbon/ atmospheric pollutant deposits throughout. Parapet detail at roof level original brick on edge coping atop double creasing tiles. Figure 4.

2.2.2 Rear facing walls, upper levels a number of missing coping bricks and areas of broken creasing tiles, brickwork has some areas of mis-matched replacement bricks, approximately 5 number holes penetrate the rear wall where services have been removed, vertical cracks are present in several locations. . Figure 4

2.2.3 Left hand extension wall, upper parapet wall at roof level leaning inwards towards roof structure approximately upper ten courses, plant growth distorting brickwork at lower right hand side where brick nib projects past face line. The midpoint where perimeter wall intersects wall has large open joints where plant growth has been removed. Ground floor area is painted with signs of efflorescence stone cill appears in poor condition. Figure 6 to 10

2.2.4 Ground floor infil area right hand of doorway, painted brickwork in poor condition with signs of collapse of arched brick window head. Figure 8.

2.2.5 Flank wall two floor extension, chimney and wall badly bowed in unsafe condition. Figure 4, 7

2.2.6 External out building, severely bowed walls in unsafe condition. Figure 11

2.3 External Brickwork- Partition Wall and Chimney

2.3.1 Chimney appears to be leaning inwards to roof structure- further investigation required when access available. Figure 5

2.3.2 Brickwork appears in reasonable condition, pointing appears in poor condition.

2.4 Internal Brickwork

2.4.1 Basement: Where accessible brickwork appeared in good order with no visible signs off movement or cracking however the walls were extremely damp with inadequate lighting.

2.4.2 Ground floor: Walls mostly in good order some areas had damage where it is assumed mechanical methods had been used to remove render or plaster in the past. Formed doorway between corridor and former courtyard entrance has no lintel with signs of cracking to right hand side. Original doorway that has since been closed off with lightweight thermal blocks has the right hand side arch springer bricks missing with several vertical cracks in that area. Rear of courtyard entrance room at kink, patch of eroded brickwork high level.

2.4.3 Front room immediate right hand of entrance no access due to waste storage.

2.4.4 Rear room extension right had side corridor limited access brickwork appeared in reasonable condition, with small corridor between front and rear room inaccessible. The room directly above has defective brickwork to opposite wall to the chimney (as listed on external survey) the rear wall (original external wall) has what appears to be some remedial brick stitching work carried out.

2.4.5 Corridor brickwork appeared in reasonable condition

2.4.6 Upper floors: brickwork generally in reasonable condition again with damage where it is assumed mechanical method have been used to remove surface coatings. There are areas where movement/ cracking have occurred and have been recorded on the accompanying drawings. Figure 12 & 13

3 Main Survey Report- Timber

3.1 Main Building Roof Structure

3.1.1 The main building roof structure (visual inspection above ceiling joists only) generally appears in reasonable condition with some historic water staining and general surface deposits moisture meter readings below 18%.

3.1.2 However the large timber beams which sit underneath both outside gullies at the rear of the building show signs of decay due to moisture penetration, moisture meter readings in excess of 40% . Figure 14 & 15

3.1.3 Wall plates and window heads appeared in fair condition visual inspection only.

3.2 Two storey Extension Roof Structure

3.2.1 Visual inspection only, timber appears in reasonable condition with some historic water staining and general surface deposits.

3.2.2 External corner hipped end timber appears to be wet with some decaying elements. Fig 16

3.3 Ground Floor Flat roof Structure

3.3.1 Visual inspection only the main roof joist has broken leaving the roof without any form of support and is in an unsafe condition. Figure 17

3.4 Internal Partitions

3.4.1 Internal timber partitions appear in fair condition with past alterations in some areas which may require attention. Some signs of insect infestation in isolated areas, advise further investigation. No excessive moisture readings were recorded on areas tested ≤ 18%. Figure 18

3.4.2 Timber plates built into the original structure are generally in acceptable condition however several pieces located on external walls have decay.

3.5 Floor joists

3.5.1 Ground floor joists have been recently replaced to the former yard entrance floor, the remaining floor joists are jointed to a large 320mm X 200mm beam running diagonal from front wall to internal stairs wall. The large beam is showing signs of decay at the internal wall seating along with the wall plate, as these joists are located in the basement area it is worth noting these are exposed to damp atmosphere. Most joists appear in reasonable condition with some historic water staining and surface deposits, one number joist has split to the right hand side of the fire place as shown on attached drawing. Figure 19 & 20

3.5.2 First floor joists appear in reasonable condition with some historic water staining and surface deposits front room has a repeat detail of ground floor with a large 320mm X 200mm beam running from front wall to internal stair wall again this shows signs of decay due to excessive moisture content at stair wall seating along with wall plate no access to this area advise further investigation with one number joist broken to left hand side of fire place. Floor joists in rear extension appear in fair condition. Figure 21 & 22

3.5.3 First floor joists to courtyard entrance show signs of historic water staining and surface deposits most joists appear in fair condition. Most of the curved 'arch formers' are showing signs of decay at the seating point in the brickwork in some pieces the decay has progressed. Three joists and 'arch formers' to the rear of the building are showing signs of advanced decay and insect infestation advise further investigation. Figure 23

3.5.4 Second floor joists appear in reasonable condition throughout with signs of historic water staining and surface deposits, the stair landing area is not level this is due to lack of original bracing/ support.

3.5.5 Third floor joists appear in reasonable condition throughout with signs of historic water staining and surface deposits, the stair landing area is not level this is due to lack of original bracing/ support.

3.6 Staircase

3.6.1 The entire staircase has been very well used and is showing signs of wear and tear throughout. Where exposed timber structure appears in reasonable condition. Figure 24

3.7 Windows

3.7.1 Timber sash windows visual inspection, windows had no visible signs of recent maintenance or painting, albeit with no visible signs of rot/ decay most windows have some misalignment of the opening sash and some windows have become unseated from their original position within the jamb. However most of the windows did not appear beyond repair/ restoration. Figure 25

3.7.2 Metal 'Crittall' type windows had no visible signs of recent maintenance or painting, albeit with no visible signs of rot/ decay most of the windows did not appear beyond repair/ restoration. Figure 26

4 CONCLUSION AND RECOMMENDATIONS.

4.1.1 It is our conclusion that the majority of the brickwork structure is in reasonable condition with the exception of the areas noted within this report which will require remedial measures. We would recommend that the excessively distorted or badly bowed brickwork is carefully taken down and rebuilt to the required heritage method and specification. The vertical cracks identified (noted on attached drawings) we would recommend these are stitch repaired to the correct method and specification such as the Helifix system Appendix 2.

4.1.2 We would recommend the external brickwork is cleaned using mild chemical lightly agitated and low pressure rinse, followed by cut out of all joints and lime mortar pointing.

4.1.3 It is our conclusion that the majority of the timber structure is in reasonable condition with the exception of the areas noted within this report which will require remedial measures. We would recommend further inspection of the timber elements which were not accessible but appeared to be wet or decaying and appropriate measures taken upon inspection. Timber which was identified as having decay or insect infestation will require replacing as necessary.

5 BUDGET COSTS

5.1.1 Dependant on extent of work required a budget price will be a separate

6 APPENDIX 1 Images

Figure 1 – Front Elevation

Figure 2 – Front Elevation upper floor window head & displaced coping brickwork

Figure 3 – Front Elevation displaced brickwork at door head

Figure 4 – Rear Elevation

Figure 5 – Partition wall & chimney

Figure 6 – Rear extension parapet leaning inward

Figure 7 – Rear extension return wall & Chimney

Figure 8 – Rear ground floor external wall

Figure 9 – Rear extension brickwork affected by plant growth

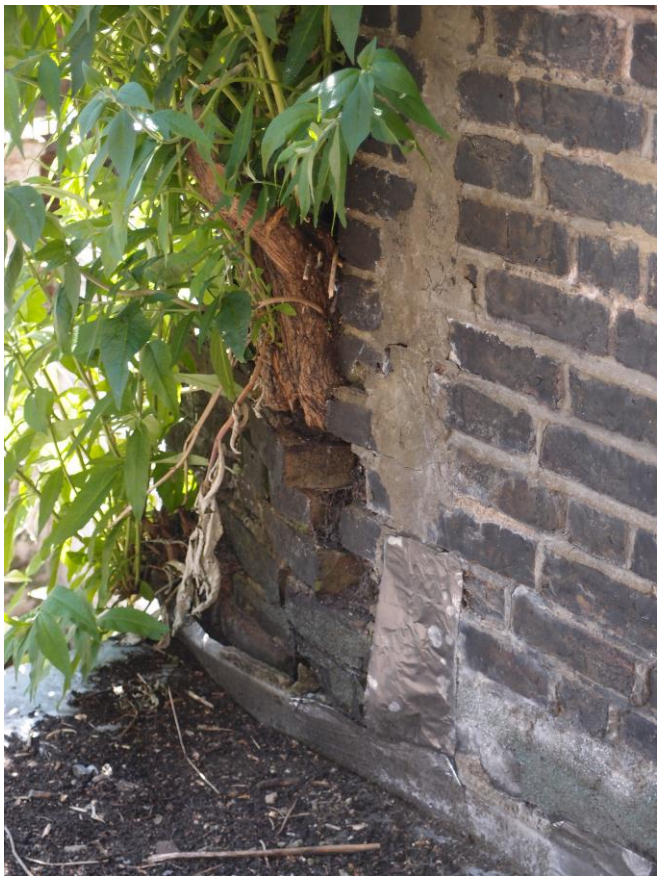

Figure 10 – Rear extension brickwork affected by plant growth

Figure 11 – Rear yard outbuilding

Figure 12 – Internal brickwork upper floor crack at partition wall

Figure 13 – Internal brickwork second floor crack at partition wall

Figure 14 – RHS roof beam underside gully showing signs of decay

Figure 15 – LHS roof beam underside gully showing signs of decay

Figure 66 – Rear two story roof structure external corner hip

Figure 77 – Rear flat roof structure

Figure 18 – Typical internal floor joists & partition

Figure 89 – Ground floor broken floor joist & large floor beam

Figure 20 – Large ground floor beamt showing decay

Figure 21 – First floor broken floor joist

Figure 22 – First floor large beam at intersection with rear wall

Figure 23 – Rear courtyard entrance first floor joists with arch formers

Figure 24 – Typical stairs

Figure 25 – Typical metal Crittall window and broken concrete cill

Figure 26 – Typical wooden sash window and stone concrete cills

7 APPENDIX 2 Helifix

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