

Welsh Streets, Princes Park, Liverpool

Building Survey Report

12,14,16 Kelvin Grove



1 Introduction

1.1 Inspection

- 1.1.1 The property was inspected on Tuesday 29th April 2008. The weather during our inspection was sunny with showers. The ambient temperature was approximately sixteen to eighteen degrees centigrade.
- 1.1.2 For the purposes of this report, the Kelvin Grove elevation will be treated as the front elevation and this faces north-east. All directions left and right used within the report are as taken from a point externally facing the front elevation.
- 1.1.3 The whole of the property was vacant at the time of our inspection and had been stripped of items of value including most internal doors, gas and plumbing pipework, and the central heating installation. In addition, the services connections had been disconnected. Remaining kitchen and bathroom fittings have been extensively vandalised.

1.2 General description

1.2.1 The subject properties are traditionally built three storey plus basement Victorian terraced dwellings, connected internally and converted to flats at each floor level, to a specification directly comparable to 20-24 Kelvin Grove.

Originally constructed around 1880.

Roofs are of concrete tiled pitched timber construction with traditional roof structure, with flat (assumed asphalted) roofs above the front two-storey bays to which access was not possible; rainwater goods and other external plumbing are a combination of metal gutters and plastic downpipes.

The elevations are of brick masonry construction approximately 450mm thickness to the front elevation built in Flemish bond and having ornate eaves mouldings to eaves and below first floor window sills with sandstone sills and lintels. The rear elevation has been rebuilt as cavity construction in the relatively recent past and has metal lintels with brick on end soldier courses and concrete cills to window openings.

The rear 2 storey wing remains in a re-built form to no 12, but has been removed from the other properties, since the original rear elevation remains to no 12. Window sashes/ casements have largely been removed at the front and rear and blocked-up still being largely present at second floor, but appear to have comprised single glazed timber sliding sash and/or casement windows, with pivot windows to second floor level. Ground floor construction is of solid concrete to the rear wing but suspended timber construction elsewhere with joists appearing to span left to right to the front section and from front to rear at the rear.

1.2.2 A shared passageway at the rear has been gated for security reasons and normally gives access from the rear of the property into an enclosed rear yard, with in-situ concrete surfacing. The rear yard is enclosed by brick boundary walls with a timber gate through which access was not currently possible; our observations of the rear were limited by viewing from the top of our surveyor's ladder. The front garden of the property is open to the street and is surfaced in quarry tiles, concrete and part terrazzo tiles. The front steps are finished in quarry. Former cast iron railings appear to have been removed.

1.2.3 Internally, finishes generally comprise plasterboard and skim ceilings, plastered masonry walls or timber stud partitions, and timber joinery. The timber floorboards are partially concealed by hardboard and the presence of finishes. False ceilings have been installed to reduce room volumes and hence heating costs.

1.2.4 The buildings occupy a basically level site.

2 Inspection**Estimated cost (£)****External inspection****2.1 Roofs**

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| 2.1.1 | Chimney stacks and flashings appear to be in fair condition as viewed from ground level. Some loose pointing and weed growth was noted to the stacks. Repairs allowed. | £1000.00 |
| 2.1.2 | The roof coverings appeared in fair condition generally subject to the need for continued maintenance attention. However, provision of a 30 year life and also upgrading of the roof insulation to the sloping soffits will necessitate complete renewal of the roof coverings. The increased loading imposed by the tile covering (which can be as much as 50-75% heavier) in place of the original slate also gives rise to some concern. | £28000.00 |
| 2.1.3 | No access was possible to inspect the roofs above the front two storey bays. No evidence of leakage was noted internally. However, provision of a 30 year life and also upgrading of the roof insulation to these roofs will necessitate complete renewal of the roof coverings. There is no clear means of draining these small roofs. | £1500.00 |
| 2.1.4 | The metal gutters to the front and rear elevations are leaking at joint positions and there are some missing pipework sections, requiring immediate attention by way of replacement to match the existing. | £3000.00 |
| 2.1.5 | There is staining to the brickwork to the front and rear elevations due to leakage from the waste pipes which therefore require repair or replacement. | £1500.00 |

2.2 Elevations

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| 2.2.1 | The front elevation has been re-pointed in the past. Local re-pointing is required, particularly at low level where moss and algae growth is also visible. The front elevation has a marginal lean away from the street and there are vertical cracks to the external corner of the bay windows to all units, most marked to no.16. Allowance include for crack repairs. | £1000.00 |
| 2.2.2 | Rear main elevation – in good overall condition having largely been rebuilt in the fairly recent past. | |
| 2.2.3 | External joinery – generally casements and sashes have been removed and openings protected by | £34,000.00 |

Estimated cost (£)

steel grilles or shutters and concrete blockwork infilling. In order to provide a 30 year life we recommend replacement of all external joinery incorporating double glazed units.

- 2.2.5 Redecoration of all retained external joinery and stonework is required. £3600.00

2.3 External areas

- 2.3.1 The front yard was generally cracked requiring repair. Similarly various defects to the rear concrete yard require repair. We would envisage that these areas would be re-designed as part of any retention proposal. £1500.00

- 2.3.3 The quarry tiled steps to the front were cracked and required repair or replacement. £500.00

- 2.3.3 The rear boundary walls are in fair condition. Renew gates and other minor repairs. £750.00

Internal inspection

For the purposes of this report we have assumed that reinstatement of the property would be as existing in terms of layout.

2.4 Roof voids

- 2.4.1 The roof timbers and party wall brickwork were damp stained in some areas but there were no obvious signs of beetle, as far as could be ascertained from limited inspection from the loft access hatch positions; the roof timbers appear to have been renewed in the relatively recent past, certainly the ceiling members. There is approximately 100mm of glass-fibre loose fill at ceiling level, well below required levels for Building Regulations compliance. Allowance made for timber treatment. £900.00

2.5 Ceilings

- 2.5.1 Extensive damage has been caused to ceilings due to vandalism and/ or water penetration and we anticipate that approximately 75% require replacement. £10500.00
- 2.5.3 Otherwise ceilings require redecoration. £2700.00

2.6 Walls and partitions

- 2.6.1 Walls and partitions have also been damaged by vandalism and removal of the services installations requiring making good plasterwork to £8000.00

Estimated cost (£)

approximately 50% of the area.

2.6.2 Vandals have also broken openings in the party walls in the rear stairwells, linking all of the units and no 18 at the landing level between first and second floors. This will clearly require reinstatement. £1000.00

2.6.3 Redecoration of all walls and partitions is required. £9000.00

2.7 Floors

2.7.1 The floors exhibit some downward slope towards the rear, more marked in No 12, and marginal to 14 and 16. Allowance for tying floors to main elevations. £500.00

2.7.2 The existing solid floor to the rear wing is in poor condition and should be replaced. £3500.00

2.7.3 Replacement of floor coverings is required throughout. £11000.00

2.8 Internal joinery

2.8.1 All internal doors have either been removed or have been vandalised and thus require replacement throughout including architraves and repairs to damaged frames. £22000.00

2.8.2 Isolated repairs are required to the staircase, skirting boards and window boards where damaged. Some repairs will be required to the stair guarding and flights. £1000.00

2.8.3 Redecoration of joinery is required throughout. £3300.00

2.9 Kitchen

2.9.1 The kitchens had been removed/vandalised throughout and thus require reinstatement. £36000.00

2.10 Bathroom and WC

2.10.1 The sanitary fittings had been removed/vandalised throughout and thus require reinstatement. £27000.00

2.11 Electrical installation

2.11.1 The electrical installation has been disconnected and partially removed, with the remnants of a fire alarm system, intruder alarm system, and door entry system remaining. Complete reinstatement of these installations is therefore required. £13500.00

Estimated cost (£)**2.12 Heating installation**

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| 2.12.1 | Gas fires to the fireplaces generally remain but are assumed scrap due to potential damage. Brick up and vent flue. | £1500.00 |
| 2.12.2 | The central heating systems had been removed throughout and thus require reinstatement. | £33000.00 |

2.13 Water installation

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| 2.13.1 | The water installation has been disconnected and internal pipework removed. Complete reinstatement is therefore required. | £4500.00 |
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2.14 Drainage installation

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| 2.14.1 | No safe access to the cellar was possible, and this should be provided. Within the cellar various rubbish and debris could be seen from the access hatch requiring removal. The drainage installation externally could not be inspected due to lack of access to the rear yard. It is anticipated that the drainage will require jetting through prior to re-occupation of the property. | £6000.00 |
| 2.14.2 | Internally the above ground plumbing and drainage installation has been substantially removed and requires reinstatement. | £4500.00 |

2.15 Thermal insulation

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| 2.15.1 | Blown mineral wool insulation has been provided within the roof voids and this should be replaced with 250mm insulation to meet current standards. Cost includes suitable insulation to the sloping ceiling sections not accessible from within the roof voids. Fully sealed and insulated loft traps should be provided. | £1800.00 |
| 2.15.2 | There was no evidence of insulation to the external walls. We have included for insulating primary elevations to Building Regulations standards. | £14400.00 |
| 2.15.3 | There was no evidence of insulation to the ground floors. We have included for replacement of rear solid floors incorporating insulation, and for provision of insulation to the existing suspended timber floors to the front of the property. | £8500.00 |

2.16 Structural movement

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| 2.16.1 | To the front elevation there is a marginal lean away from Kelvin grove and a general tendency for the floors to slope down toward the rear. We | |
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Estimated cost (£)

assume that this mechanism has resulted in the re-building of the rear elevation.

There is vertical cracking to the external corners of the front bay windows, requiring repair.

We are also concerned that there is some evidence that the modern rear elevations continues to be affected by movement, with inclined cracking in the stairwell walls and to the internal wall/rear elevation junctions.

2.16.2	Having examined other buildings in the locality, there seems to be a widespread issue with foundation movement. However, without ascertaining the precise cause of this mechanism, we are unable to reach a formal conclusion at this stage. It is therefore recommended that some form of ground investigation is instigated including a structural engineer's input, in order to fully determine the reasons for the movement and appropriate remedial measures. At this stage we have allowed a provisional sum for foundation stabilisation.	£110,000.00
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2.17 Dampness

2.17.1	High moisture meter reading were encountered within the ground floor within the front bays, as elsewhere. There is also some dampness to the front elevation at high level in No12. Faulty and missing rainwater goods and effective water services are amongst issues that could be contributing to existing problems. As part of overall refurbishment we recommend that further detailed evaluation and appropriate remedial measures be undertaken. The sill detail externally to the ground floor is felt to be contributing to this dampness since it has no drip to its underside.	£8000.00
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Total estimated works cost	£418,450.00
Access and preliminaries – 15%	£62,767.50
Contingency Sum – 5%	£20,922.50
Sub-total	£502,140.00
Professional fees – 10%	£50,214.00
Total estimated cost	£552,354.00

3 Comments on HHSRS

- With the property presently being void and most amenities being stripped out, an assessment in terms of HHSRS is not considered to be of relevance

4 Conclusion

- 4.1 These properties in common with other adjoining units are affected by foundation movement which may possibly be active. Further, due to the widespread evidence of foundation movement locally we have recommended further investigation in this regard.
- 4.2 As the property has some current water penetration and has been vandalised and stripped of items of value, significant expenditure would be required, as set out above, to return the property to a habitable condition.
- 4.3 Please refer to our Main Summary Report for additional information relating to SAP rating and further optional improvement measures.

5 Limitations

- 5.1 Please refer to our Main Summary Report.

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Mark C Smith BSc(Hons), MRICS
Director
The Edward Finch Partnership

**Appendix 1
Photographs**



Rear elevation showing part re-built outrigger to No 12.



Main rear elevation.



Openings broken in party walls.



Typical roof roof with quilt insulation



View down rear wall cavity – blocked with mortar



Cracking to corners of front bay windows.