[redacted]

18th February 2019

Ms A Symons
48b St Albans Road
London
NW5 1RH

Dear Ms Symons

48-52 St Albans Road London NW5 1RH
Defect Diagnosis – Cracking

In accordance with your instructions, we can confirm that we have carried out an inspection of the above property on Tuesday 12th February 2019 when the weather was dry and sunny. We have not carried out a full building survey of the property, but, as instructed, assessed the cracks to the property, which we understand have arisen over the last few years and have noticeably worsened.

You have not advised us whether your building insurer has been notified of the issue, and we recommend that you inform them as soon as possible if not. Accordingly, you have instructed BS Initiative Ltd to independently assess the cracking and advise on potential causes and necessary remedial works.

Our visual inspection was based on the accessible parts of the property and from ground floor level externally. No opening up works were carried out during the survey.

General Description of the Property

The property comprises a two-storey building constructed in the 1930s and appears to have originally housed six dwellings, with the ground floor and first floor comprising three dwellings each. The first floor flats extend into the roof space in each case, with dormer windows to the rear roof slope in each case, with two dormer windows to the front roof slope of no. 50.

The building is of brick construction, with render applied to the external walls at first floor level, with corbelled brick cornicing between the two. The roof is of hipped construction, with small gables to the flank elevations, and with clay tile coverings. Windows were originally of single glazed timber construction, although some have been replaced with modern double-glazed units.

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Observations

Externally

There are two mature London plane trees to the front of the property, within the curtilage of the front gardens. These stand at a distance of approximately 2.5 metres from the front wall of the building.

Externally, cracking is present to the front elevation to nos. 50 and 52, although little in the way of cracking is present to no. 48.

It can be clearly seen when viewing the front elevation that the section of front wall to nos. 50 and 52 has dropped vertically downwards, with the bottom of the curve corresponding with the party wall between the two properties. The heads to the ground floor windows either side of the party wall are noticeably declined towards one another, and the pattern of cracking to the front elevation also indicates that the front external wall has dropped at a point corresponding to the party wall between nos. 50 and 52.

Cracking is present to a number of window and door openings and are most prevalent to the exterior front wall of no 52.

Whilst much of the cracking to the brickwork appears to follow the mortar courses and perpend joints to the brickwork, it can be seen that a proportion of the damage has resulted in bricks being split.

Internally

No. 48

Internally, a degree of cracking is present to no. 48; this is most prevalent in the bedroom to the front right-hand side; the cracking appears on the front wall close to the window opening and extends around the perimeter of the room to the wall / ceiling junctions. Cracking then extends down the rear right-hand side corner and down the rear wall at a diagonal. The cracking to the rear wall extends through the wall and appears within the hallway behind.



Further cracking is present within the hallway corridor, extending longitudinally along the ceiling and into the bathroom.




Further cracking is present to the ceiling of the front central room, extending longitudinally back from above the window opening, although this is less pronounced.

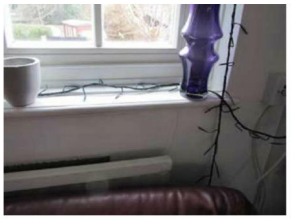
Access to the first floor flat of no. 48 was not available at the time of our inspection, and so we are unable to comment upon the condition of the property.

No. 50

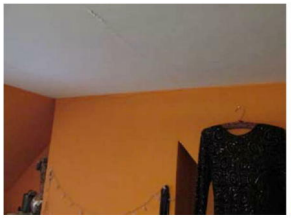
Access was available to the first floor flat, which is accessed via the front entrance door.

Cracking was present to the right-hand side wall of the entrance hall, immediately to the right of the entrance door, extending diagonally downwards from the front elevation.

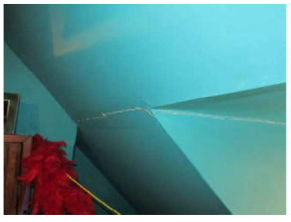
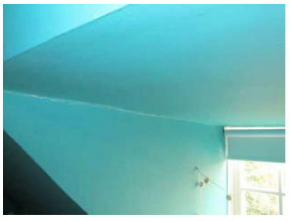
To the first floor, cracking is present to the sitting room front wall below the window and is also present to the stairway to the second floor, with cracking to the wall / ceiling junction and adjacent the window cill of the front wall.



To the second floor, cracking is present to the left-hand side bedroom, manifesting at the wall / ceiling junctions and following the joints to the plasterboard of the ceiling.




To the right-hand side bedroom, significant cracking is present to the junctions of the sloping and horizontal sections of ceiling as well as around the dormer window, with generalised cracking to the wall / ceiling junctions throughout.


No. 52

Access was obtained to the ground floor flat of no. 52, but not to the first floor.

Substantial cracking was present to all rooms to the front of the property and within the hallway. To the front right-hand side room, substantial cracking is present to the rear, left hand side and front walls, with the cracks passing through the full thickness of each wall.



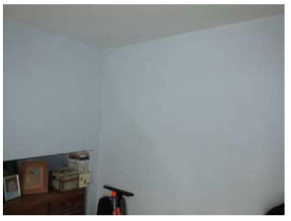

The cracking to the front wall below the right-hand side corner of the window opening is some 8mm wide at its widest and is clearly visible on the exterior face of the wall.


Further cracking is present within the flat within both the longitudinal and lateral sections of the hallway corridor, with cracking to both the front and rear walls of the lateral section.



Cracking is also present within the front left-hand side room, largely manifesting at the wall / ceiling junctions, although cracking is also present to the rear wall at the rear left-hand side corner.





Diagnosis

Following our inspection, it is clear that there has been structural movement to the front part of the building. The movement appears to have occurred largely towards the right-hand side of the building, with severe damage to the flats to no.52 in particular, but damage is present throughout the block.

The degree of the damage is severe and will require remediation as soon as possible. We cannot rule out the need for underpinning, although this will require the consultation of a structural engineer.

It is apparent that the movement and cracking is centred around the two plane trees to the front of the building, with the most pronounced movement aligning with the position of the right-hand side tree, which stands roughly along the line of boundary between nos. 50 and 52.
The nature and pattern of the cracking indicates that the subsoil has shrunk at this point, causing the front elevation to sag. This shrinkage has also affected those internal walls towards the front of the building which are masonry and we believe stand on foundations of their own.

The properties stand on the London Clay formation, a shrinkable clay that expands and contracts with variations in the moisture content of the subsoil. The presence of trees, especially during a dry summer, can cause water to be removed from the soil causing it to shrink.

The subsoil beneath the block has clearly shrunk over time, causing the front elevation and the internal walls to the front part of the building to drop, resulting in the damage seen.

It is our considered opinion that the two plane trees to the front of the building have played a substantial part in the shrinkage of the subsoil and the resultant damage. We therefore consider the removal of the trees to be of paramount importance in safeguarding the building.

Recommendations

We recommend that your insurers inspect the property immediately to conduct a full assessment of the damage and commence remedial works. We are unsure as to exactly how they will wish to procure the works but we anticipate the following actions: -

1. Appointment of a Chartered Structural Engineer to assess the damage.
2. A period of monitoring by the engineer to assess whether the movement is continuous.
3. Investigation work including exposing the foundations and a CCTV survey of the drains.
4. A schedule of repair works completing, which is likely to involve partial underpinning, bed joint reinforcement, areas of local rebuilding, re-plastering and redecoration and removal of any trees and roots. If any repair works are

required to the drainpipes then this will also need instigating and involve complete replacement of lining of the pipe runs.

5. The works onsite.
6. Interim and final inspections by the insurers loss adjuster or the like.

If you have any suspicions regarding the adequacy of the insurers investigations or repairs, please contact us and we would be happy to provide you with further advice.

We trust that the above provides the information that you require in respect of the cracking, however if we can be of any further assistance or you wish to discuss the content of this report, please do not hesitate to contact the undersigned.

Yours sincerely

Benedict Nairn BSc (Hons) MRICS
Director
BS Initiative Limited