

# Engineers Report

**Risk Address** 54 Vicars Hill  
London  
SE13 7JL

**360 Reference** DLG-SN-22-004841  
**Claim Refence** 084305994  
**Policy Holder** Ms Quartano & Mr Bailey

**Date Notified** 17.08.2022  
**Date Instructed** 18.08.2022  
**Report Date** 01.09.2022



### **Description of premises**

The insured's property is a 3 storey, semi detached, 5 bedroom house, constructed in 1906 from brick walls and part rendered under a pitched tiled roof and purchased by the policyholder over 25 years ago.

The property is situated on a gentle sloped site with no unusual features.

### **Discovery of Damage**

Damage was first noticed by the policyholder recently, the neighbouring property has also registered a claim and the adjuster noticed the damage to the property and therefore a claim was then registered with insurers.

### **Focus of Damage and Report**

This document addresses damage notified to insurers in relation to cracking focused and localised to the internally within the property, mainly towards the front half In hall, on staircase, in dining room and kitchen. The descriptions below relate to the damage observed and considered to be the result of the subsidence movement.



### **Internal Damage**

Hall/Stairs and First Floor landing.

- Crack above the entrance door to the lounge 2- 3mm wide, moving towards the front of the property.
- Vertical tapering crack to the wall of the stairs moving up towards the ceiling 2- 3mm wide.
- Tapering crack on the first floor landing from the small window 2- 4mm wide.

Lounge

- Mirrored crack above the door from the hallway towards the front of the property 2- 3mm wide.

Further cracking has been noted to the rear of the building since the claim was logged.

### External damage

There is some minor cracking to the rear brickwork.

### Non-Subsidence Related Damage

There was no other damage observed at the time of the inspection.

### Classification of Damage

It is common practice to categorise the damage in accordance with B.R.E. Digest 251 "Assessment of Damage in Low-Rise Buildings". In this case, the localised damage to the rear projection falls into Category 2 "Slight".

Category	Crack Width	Degree of Damage
0	Hairline cracks of less than 0.1 mm	Negligible
1	Typical crack widths are 0.1 to 1mm.	Very slight
<b>2</b>	<b>Typical crack widths are 1 to 5mm.</b>	<b>Slight</b>
3	Typical crack widths are 5 to 15mm, or several of, say, 3 mm.	Moderate
4	Typical crack widths are 15 to 25mm, but also depends on number of cracks.	Severe
5	Typical crack widths are greater than 25mm but depends on number of cracks.	Very Severe

**Indicative Site Geology and Soils Data for:  
54 Vicars Hill, London, SE13 7JL**

Ref: 084305994

No of SI's within 0.62km from address on identical lithology. (See comments)							<b>7</b>	
Closest - Furthest distance of a site investigation from the address (km).							<b>0.19 - 0.62</b>	
Total number of boreholes.							<b>8</b>	
Percentage of site investigations where root samples were taken.							<b>71%</b>	
Percentage of site investigations where drainage was recorded.							<b>14%</b>	
Number of samples tested at greater than 0.5m depth.							<b>37</b>	
BRE Digest 240. "Volume change potential" from Av. Modified Plasticity Index (I <sub>p</sub> ) of 37%.							<b>Medium</b>	
<b>Previous Soils Data</b> nr = Non recorded	<b>Depth</b> <i>m.</i>	<b>M.C.</b> <b>(%)</b>	<b>L.L.</b> <b>(%)</b>	<b>P.I.</b> <b>(%)</b>	<b>P.L.</b> <b>(%)</b>	<b>425um</b> <b>(%)</b>	<b>Suction</b> <b>kPa</b>	<b>Oed</b> <b>Strain</b>
<b>Sample population</b>	37	37	12	12	12	12	21	7
<b>~ Minimum</b> (Av - 1 StdDiv)	0.8	20	43	28	15	98	25	0.0113
<b>~ Maximum</b> (Av + 1 StdDiv)	4.0	33	67	44	23	100	621	0.0230
<b>Average</b>	2.2	27	55	36	19	99	314	0.0113
<b>General soils description</b>	Firm brown/grey CLAY with some sand / fine-medium gravel / silt							
<b>BGS 1:50 000 maps as a: Bedrock Geology</b>	<b>1:50 000 scale bedrock geology description:</b> London Clay Formation - Clay And Silt. Sedimentary Bedrock formed in the Palaeogene period. Local environment previously dominated by deep seas. <b>Setting:</b> Deep seas. These sedimentary rocks are marine in origin. They are detrital and comprise coarse- to fine-grained slurries of debris from the continental shelf flowing into a deep-sea environment, forming distinctively graded beds.							
<b>BGS 1km Hexagonal Superficial Deposit Depth Data</b> Mean Depth = 2m Max Depth = 6m Coverage = 20% <b>Note:</b> The BGS only record superficial deposits greater than 1m in depth	<b>1:50 000 scale superficial geology description:</b> None recorded.							
<b>BGS 1:50,000 Artificial Ground</b>	Non recorded							
<b>BGS "GeoSure" 5km Hexagonal Hazard Ratings</b>								
<b>Shrink/Swell</b>	Significant with areas of localised significant rating.							
<b>Collapsible Deposits</b>	Low							
<b>Compressible Ground</b>	Low with areas of localised significant rating.							
<b>Landslides</b>	Moderate with areas of localised significant rating.							
<b>Running Sand</b>	Low							
<b>Soluble Rocks</b>	Low							
<b>Mining (not coal) 1km hx grid</b>	Localised small scale mining may have occurred in the area.							
<b>Government Coal Authority Data (&lt;25m = found within 25m)</b>	No data recorded for this location.							
<b>Comments:</b> The location is in a very high SI density area. The seven SIs reported above are on exactly the same Bedrock Geology with no overlying Superficial deposits.								
Contains British Geological Survey materials © NERC [2022]							18-08-22	

## **Evidence of external influences**

### **Trees**

There are a number of nearby trees and other vegetation at the property that could be considered an influence in the damage at the property.

### **Drains**

There is no drainage to the front of the property. There is drainage along the left hand side of the building. We will arrange a CCTV survey of the drainage identified will be undertaken as a separate instruction to confirm if any defects exist.

## **Summary and Conclusions**

All the indications from the evidence obtained suggest that the damage results from subsidence of the site upon which the property stands. A valid subsidence claim can be confirmed, and this will be subject to the policy excess of £1000.

The optimum solution in this instance would be to remove the cause of the problem, whilst we are not sure the cause of the movement at present, we will arrange for site investigations to be completed and then provide a further report which advises on the cause of the damage and what mitigation is needed to be completed in order to stabilise the property

Following successful mitigation, a schedule of works will be compiled for the above ground repairs necessary, a copy of which you will receive.

## **Next Steps**

- Contact policyholder and arrange for site investigations to be undertaken at a suitable date, which will include 2 trail pits and a CCTV survey of the nearby drainage.
- Instruct an arborist to visit to assess the nearby vegetation.
- Update all parties on a regular basis.
- Provide a schedule of work for repairs to be considered.
- Provide further updates when outcome of tree removal application is received.