STRUCTURAL SURVEYS AND DESIGN
A QuestGates Company

INSURANCE INCIDENT REPORT

THE PROPERTY:
222 Finchley Road
London
NW3 6DH

PREPARED BY:
Edsel Meneaud
MRICS, CBuildE, MCABE

REPORT REFERENCE
QG1U1287632

PREPARED FOR:
QuestGates

SURVEY DATE:
13th September 2024

QG REFERENCE:
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INSURER REFERENCE:
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INSURANCE INCIDENT REPORT ON 222 Finchley Road, London, NW3 6DH

Prepared By:	Edsel Meneaud MRICS, CBuildE, MCABE	**Approved By:**	Andrew Russell BSc(Eng), MSc, DIC, CEng, FIStructE, FICE
Signed:	[redacted]	**Sign d:**	[redacted]
Date:	16th September 2024	**Date:**	16th September 2024

Issue	Revision	Revised by	Revised Date

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A Scope of Instruction

We have been instructed by Insurers to inspect 222 Finchley Road, London, NW3 6DH in respect of loss or damage that is alleged to have occurred as a result of an insured event. We report our findings describing the damage, possible cause, recommendations for further investigation or repair where appropriate and provide advice regarding liability.

The report is prepared specifically in connection with the current insurance claim and is not to be relied upon as a structural survey. It does not comment in detail upon the condition of the building or services.

The inspection is non-intrusive and parts of the property that are covered, unexposed or inaccessible will not be inspected.

The report is prepared on behalf of QuestGates Ltd for use by the client. The report is private and confidential and any Client or Third Party relying on the information within the report do so at their own risk.

Where damage and repairs have been identified and these are not covered by the insurance policy we recommend that further advice is sought from an appropriately qualified construction professional.

B Details of Instruction

Address of Property Surveyed	222 Finchley Road, London, NW3 6DH
Terms of Reference	To investigate and report on the following specific aspects to the property:- Cracking to rear. This report covers no other aspects of the property and, as instructed, is not a full structural report.
Date of Instruction	6th September 2024
Other Information	
Conditions of Engagement	Association of Consultancy and Engineering, ACE 2009, Agreement No.2 (Advisory and Investigatory Services)

C Circumstances

We understand that cracks were noticed by one of the leaseholders but we have not been supplied with any dates of discovery.

We met the Tenant of flat D on the top floor at the front of the property. He advised that he had been here since June this year and the cracks were already present to the stairs.

We also briefly met the occupier of Flat A on the ground floor but he was not aware of our appointment so was unable to provide access to his flat and the rear of the property. We understand that he is the Freehold owner and has cracks inside his flat.

D Property and Site Overview

The property is a three storey brick built, semi-detached house with a multi pitched roof.

The age of the original property is thought to be around 120 years old.

The property is split on to five flats with 2 on the top floor, 2 on the first floor and one on the ground floor.

E Geology

British Geological Survey (BGS) maps do not indicate the immediate superficial deposits that are likely to be supporting the building foundations and a search of nearby borehole logs was inconclusive. The bedrock below this is London Clay Formation - Clay, silt and sand.

F Mining and Mineral Extraction

Reference to the Coal Authority Interactive Maps, indicates that this property is not within influencing distance of past, current or proposed mine workings. The Coal Authority state that a Mining Report is not required for this property.

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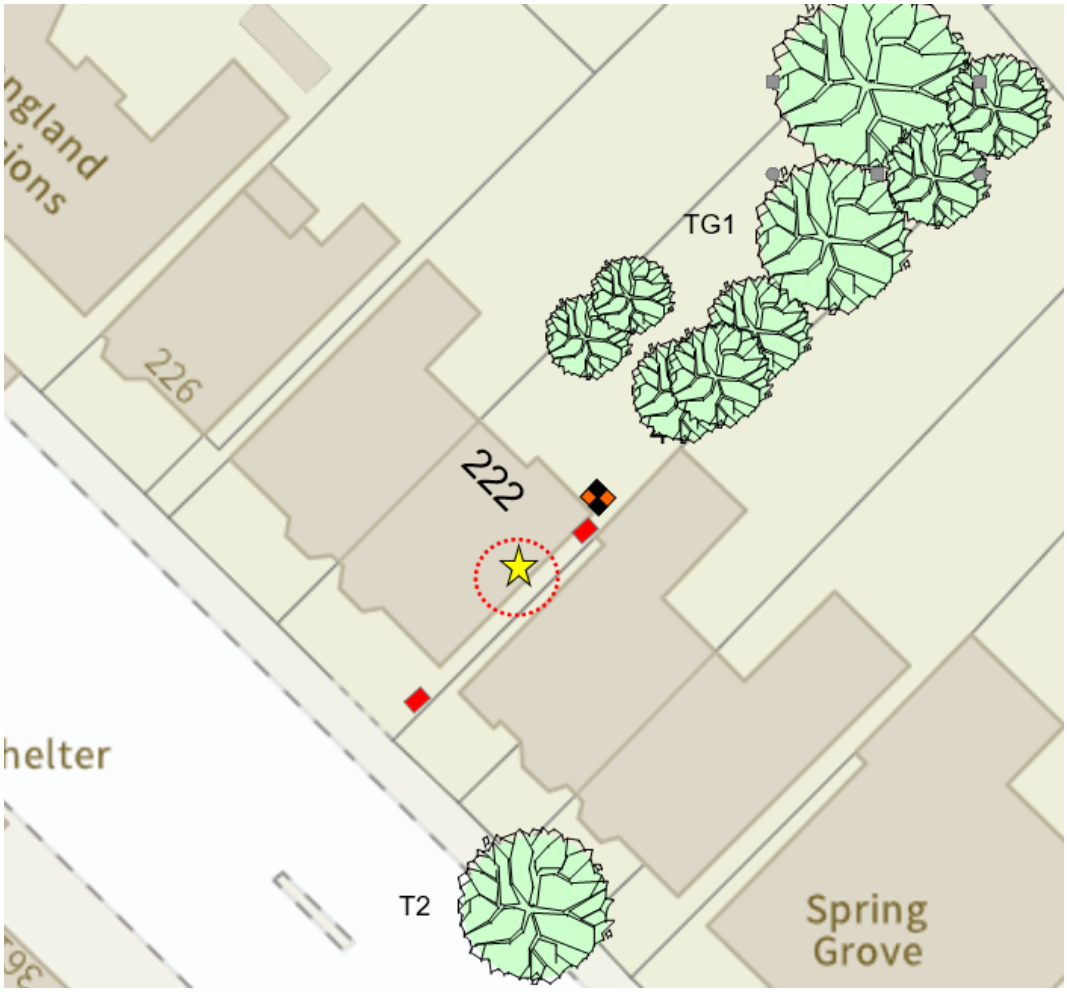
G Site Plan



KEY:

- Conifer Tree
- Deciduous Tree
- Area of Damage
- Hedge
- Shrub
- Trial Hole & Bore
- Hand Augered Bore
- Foul Water Gully
- Surface Water Gully
- Soil/Vent Pipe
- Rainwater Pipe
- Foul Water Manhole Or Inspection Chamber
- Surface Water Manhole Or Inspection Chamber
- Foul Water Drain
- Surface Water Drain
- Steep Slope
- Level Monitoring Station
- Level Monitoring Deep Datum
- Demec Stud on Photo
- FRONT — Indicated front of property

H Trees

There are numerous trees growing at the rear of the property within a potentially influencing distance, which could adversely affect the stability of the foundations. Where the sub-soils are cohesive, clay soils, trees will draw moisture from the clay, resulting in shrinkage of the clay and associated subsidence of the site. This can cause foundations to move downwards. This movement induces stress on the building materials and when the stress exceeds the strength of the material, cracks will develop. These are detailed in the site plan that follows.

Name	Species	Height	Distance to property	Owner	Action
TG1	Maples and others	around 5 to 20m	from around 5m	Subject Property	Await arboriculturist report
T2	London Plane	12-15m	15m	Local Authority	Await arboriculturist report

I Drainage

Given the evidence of potential issues with the underground drainage pipes, it would be recommended that the drainage system is subject to a CCTV drains survey by a specialist drainage contractor. This survey should confirm the condition and integrity of the underground pipes and determine whether any repairs are necessary.

J Damage Summary

We were able to undertake a visual inspection of the hall, stairs and landings and the front only to identify any structural defects that could be of detriment to stability and also to identify any remedial works necessary to maintain future integrity. The inspection was restricted to these specific areas.

The damage seen is located at the right side of the property and is affecting the right hand wall of the stairs only.

BRE Digest 251, is used widely in the industry as a way of categorising cracks and determining what, if any, intervention is necessary.

Category 0 Hairline <0.1mm
Category 1 Fine >0.1mm <1mm
Category 2 Slight >1mm <5mm
Category 3 Moderate >5mm <15mm
Category 4 Severe >15mm <25mm
Category 5 Very Severe >25mm

In general, categories 0, 1 and 2 can be regarded as 'aesthetic' issues that require only redecoration. These cracks are easily filled and doors and windows may require some ease and adjustment.

Categories 3 and 4 can generally be regarded as 'serviceability' issues, that is, they affect the function and weathertightness of the building and the operation of doors and windows. These cracks may require some opening with localised replacement of brickwork. Service pipes may become damaged, requiring repair.

Category 5 presents 'stability' issues and is likely to require structural intervention. Beams may lose bearing, walls lean badly and require shoring and windows/frames become broken.

In this instance the damage is Category 3.

K External Damage

External Damage Incident Related Damage

Minor cracks were noted on the front wall above the garage door in the render and brickwork.

Further cracks were noted higher up above the brick arch.

General cracking was noted to the decorative birch arch and capital above the main front entrance door.

Our inspection of the right hand flank wall was very limited since could not access the side alley. We were however able to see a long vertical crack to the rear between the lower and upper landing windows. We were able to view this from the first floor windows on the landing. The crack externally was around 12mm wide below the second floor window but below the first floor window the wall had been repointed so we could not see any crack to

correspond with that seen inside.

No access was gained to the rear wall. We understand access is only through the ground floor flat A. The occupant of this flat did arrive home during our Engineers inspection but was not aware of our meeting so did not have time to show us inside his flat.

External Damage Non-Incident Related Damage

None seen.

L Internal Damage

Internal Damage Incident Related Damage

Access was gained to the hall, stairs and landing. No cracks were noted on the ground floor hallway.

On the first floor landing to the right hand side there was a long vertical crack extending up to the ceiling around 4mm wide and a further diagonal crack around 1.5mm under the window.

Significant distortion of the window sill was measured at 12mm per metre towards the rear.

On the first floor half landing the cracks were more severe with a crack below the window at 6mm wide but around 12 to 14mm at ceiling level.

Significant distortion of the window sill was again measured at 12mm per metre towards the rear.

These cracks coincided with that seen externally. Access through the windows revealed a large vertical crack externally below the upper landing window.

Internal Damage Non-Incident Related Damage

Acces was gained to flat D on the upper floor at the front. No significant cracks were observed.

M Conclusions

Without full access to the property at the rear, and flat A on the ground floor, we are unable to positively confirm the causes of damage. The pattern of cracks, and distortion towards the rear clearly shows this property has subsided. The direction of movement is towards the rear right hand side so we strongly suspect this is due to the London Clay subsoil and the large amount of trees in the rear garden.

There are trees growing within potential influencing distance of the property, which could adversely affect the stability of the foundations. Where the sub-soils are cohesive, clay soils, trees will draw moisture from the clay, resulting in shrinkage of the clay and associated subsidence of the site. This can cause foundations to move downwards. This movement induces stress on the building materials and when the stress exceeds the strength of the material, cracks will develop.

There are trees and shrubs nearby, some of which may have roots that extend beneath the foundation. These are detailed within the site plan.

There are further significant cracks to the right hand side wall of the entrance steps, which have been previously repaired and opened up. These are around 12mm wide near the front and around 5mm wide higher up the wall. These are likely to be due to the shallow foundations of these steps. They are also just with influencing distance of the London Plane tree in the highway.

There are also several minor cracks on the front wall, in the render to the garage door, in the bricks just above this, in the brick arch over the RH ground floor window and above the main entrance door brickwork. These appear to be due to movements in the brick arches and lintel rather than subsidence of the foundations. Access internally would be required to comment further.

N Recommendations

It appears likely that the cause of the movement is shrinkage of the subsoils beneath the property foundations. It is recommended that a trial hole investigation is undertaken and extended by hand auger up to 3.0 metres inclusive of shear vane and Macintosh probe. Root samples should be taken from the trial hole and analysed in accordance with the arboriculturist recommendations.

If the vegetation is protected or in a conservation area, also obtain soil testing comprising of:
- Moisture Content immediately beneath the foundation and every 0.5 metres thereafter.
- Atterbergs immediately beneath the foundation and every 1.0 metres thereafter.
- Remote Control Borehole

Appoint a specialist drainage contractor to carry out a detailed CCTV survey of the underground drainage system within 3.0m of defects to confirm the extent and location of any defects. Any identified defects should be repaired in full to eliminate the risk of escape of water from the drains into the surrounding sub-soils.

The property should be level monitored to provide diagnostic evidence as well as being used to determine when the house is stable following mitigation works.

It is recommended that the trees, suspected to be affecting the property, are subject to maintenance / removal works to reduce the risk of instability of the house foundations. Expert advice should be sought from an arboriculturist as to the most appropriate course of action for these trees. These actions may include significantly lowering the height of the trees and maintaining them at this lower height, to reduce water demand or complete removal. The specialist will be able to recommend the most appropriate time to remove any trees, and whether removal needs to be carried out in stages. In certain circumstances, the removal of high water demand, mature trees growing in cohesive, shrinkable clay sub-soils, can lead to rapid re-hydration and associated swelling of the clay, leading to lifting of the foundation. This is known as recovery. In order for an arboriculturist to assess the site and any potential tree related damage, they may require trial pits and laboratory analysis of soil samples to determine the type and classification of the soils beneath the wall foundations.

Access is needed to the rear and particularly the ground floor flat to comment further.

O Photograph Schedule

External Record

A) The Building

:

Photo 3 - Ground floor

Photo 4 - Upper floors

Photo 5 - Minor crack to render and bricks

Photo 6 - Crack to brick arch

Photo 7 - Minor above portico

Photo 8 - Crack to decoarative portico

Photo 9 - Crack to arch

Photo 10 - RH flank ground level

Photo 11 - RH flank high level

Photo 12 - Crack between windows

Photo 13 - MH in steps

Photo 14 - Crack to boundary wall RH side

Photo 15 - Crack to boundary wall near street

Photo 16 - Steps to RH side

Photo 17 - London Plane 15 from steps

Photo 18 - Flank wall below sill

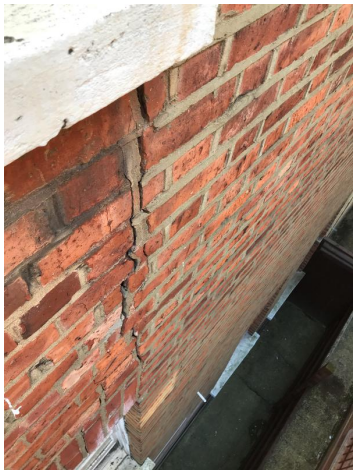


Photo 19 - Flank wall below upper window

Photo 20 - Reveal pulling out

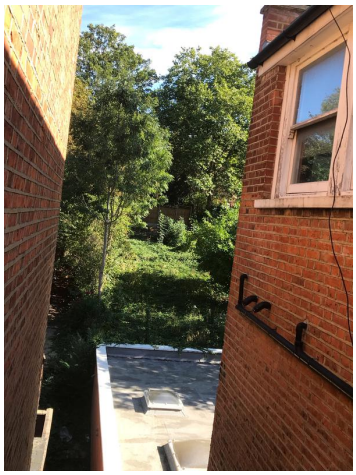


Photo 21 - Trees to rear

Photo 22 - MH to rear RH side

B)

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Internal Record

A) Main Building

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Photo 23 - Ground floor entrance

Photo 24 - Half landing

Photo 25 - 12mm drop to rear

Photo 26 - Crack up to ceiling 4mm

Photo 27 - Crack below window

Photo 28 - 1.5mm wide

Photo 29 - Upper half landing

Photo 30 - Below window

Photo 31 - 6mm wide

Photo 32 - 12- 15mm wide at ceiling

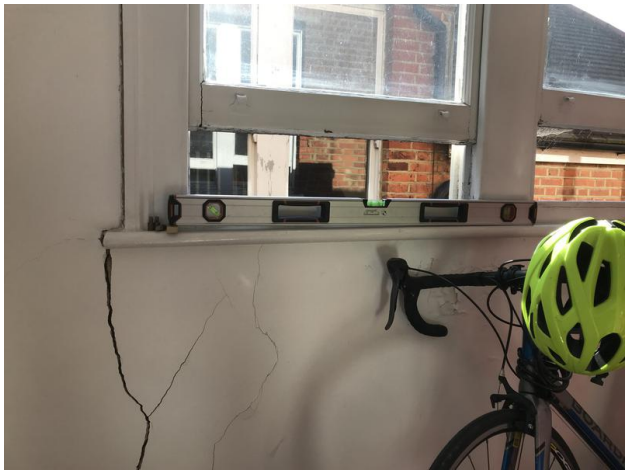

Photo 33 - 12 out or level to rear

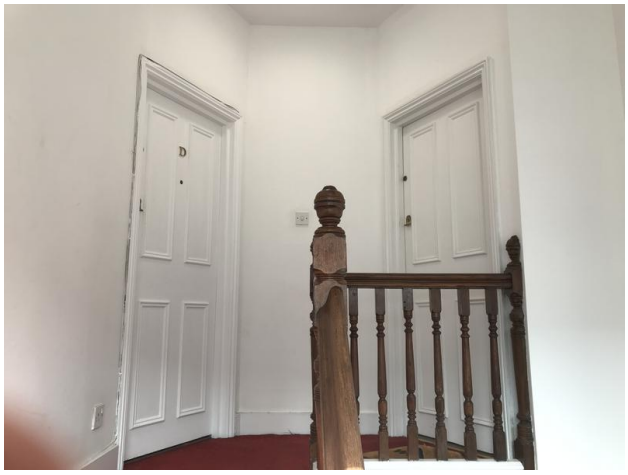

Photo 34 - Access to flat D only

P Limitations

P1. Our survey is limited to the structural aspects of the building, such as the roof, floors, walls and foundations.

P2. We have not inspected, nor reported on, non-structural elements such as windows, doors, rainwater goods and internal decorative finishes.

P3. We have not inspected, nor reported on, the plumbing, heating system, electrical wiring, gas or water supplies to the building.

P4. We have not inspected, nor reported on, the integrity of the underground drains or any on-site sewage treatment plants, cess pits, septic tanks. Specialist advice should be sought in this respect

P5. Unless explicitly stated to the contrary, we have not carried out a dampness survey, or a timber infestation survey, and therefore cannot comment on these aspects of the building.

P6. We have not inspected woodwork which is covered or any other concealed or inaccessible parts of the structure and therefore cannot report that any such part of the building is free from defect.

P7. No comment is made in this report as to the presence of new or old mine workings or tunnelling, heavy metals, chemical, biological, electromagnetic or radioactive contamination or pollution, or radon, methane or other gases, underground services, or underground structures, springs and watercourses, sink holes or the like, noise or vibration, pollution, mould, asbestos or asbestos products.

P8. Unless explicitly stated to the contrary, the void below the ground floor has not been examined and therefore we cannot give any opinion on the condition of materials under the floor.

P9. For the avoidance of doubt, The Contracts (Rights of Third Parties) Act, 1999, shall not apply to this Contract.

P10. Our service does not include for confirming the presence or not, of any invasive plant species that may be present on the site such as Japanese Knotweed, Giant Hogweed, Himalayan Balsam etc. This is outside our area of expertise.