



Subsidence Scanning Centre, 2 The Boulevard, City West Office Park, Gelderd Road, Leeds, LS12 6NY

INSURANCE CLAIM: ENGINEERING APPRAISAL REPORT

This report is prepared on behalf of Direct Line 4 Business for the purpose of investigating an insurance claim. It is not intended to cover any other aspect of structural inadequacy or building defect that may otherwise have been in existence at the time of inspection.

Date: 10/11/2025

Out Ref: 10834637

Name of Insured: Paul Briggs

Address of Insured: 15 The Mount, Caversham, READING, Berkshire, RG4 7RU

Situation of Damage: 14 Fakenham Close, Lower Earley, READING, Berkshire, RG6 4AB

INTRODUCTION

The technical aspects of this claim are being overseen by our Building Consultant Sarah Granlund BSc (Hons) Grad IEMA Cert CILA Cert CII, in accordance with our project managed service.

The claim is primarily concerned with damage to the front/front left of the building. All references to the property are as observed facing the front of the building.

DESCRIPTION OF BUILDING AND SITE

The subject property is a 2-bed semi detached house constructed in 1980s, in a residential estate on a plot that is level. The property frontage faces toward a woodland area with a public footpath in between.

DISCOVERY AND NOTIFICATION

Circumstances of Discovery	The tenants advised the policyholder that cracks were starting to appear within the property.
Subsequent action	The policyholder advised the insurer of the damage.
Claim notification	Insurers were notified on 25/08/2025.

NATURE AND EXTENT OF DAMAGE

Description and Mechanism	The main area of damage is to the front of the property but damage is noted throughout. This takes the form of tapered diagonal cracking to internal walls and stepped cracking to brickwork
Significance	The level of damage is moderate, and is classified as category 3 in accordance with BRE Digest 251 - Assessment of damage in low-rise buildings.
Onset and Progression	We consider that the crack damage has occurred recently, but that distortions are historic. It is likely that movement will be of a cyclical nature with cracks opening in the summer and closing in the winter.

SITE INVESTIGATION

A site investigation was undertaken by CET in October 2025. This comprised a single trial pit and borehole on the front elevation, and a CCTV survey of the proximate drainage. See the site plan below for location and layout.

The trial pit was excavated to reveal brick and blockwork at 600 mm thick, atop a 500 mm thick concrete foundation. The underside of the foundation was recorded as stiff silty CLAY. Roots were observed from 600 mm to the base of the trial pit.

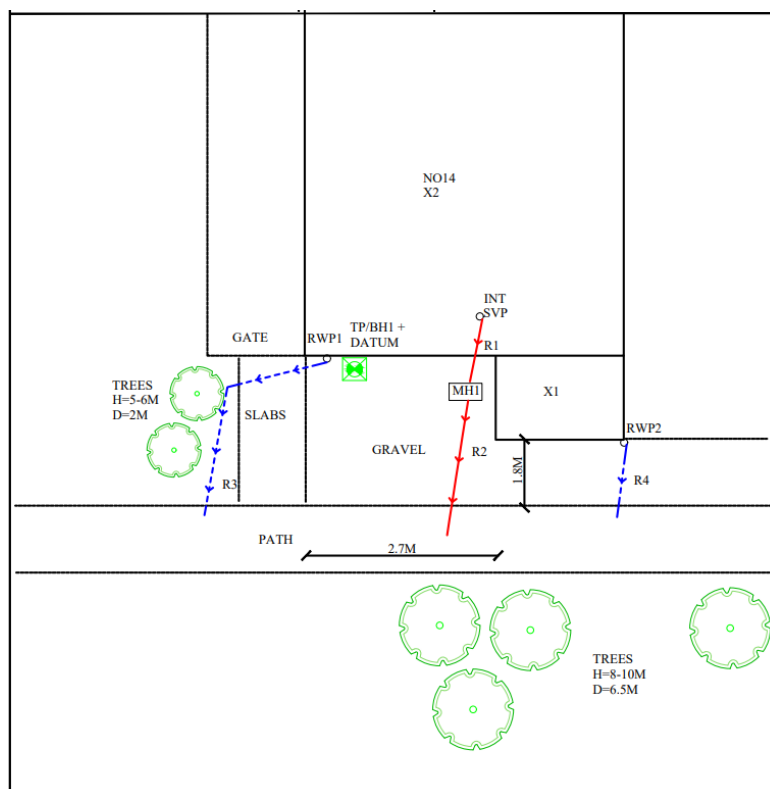
A 75 mm diameter hand auger was sunk through the base of the trial pit and a borehole extended to a target depth of 5000 mm below round level (BGL) where the soil became too hard to hand auger. Soil throughout the borehole was similar in composition to the that observed in the trial pit, being silty CLAY. Roots were observed to 2000 mm BGL.

The borehole remained dry and open on completion, and a deep datum was installed.

Laboratory analysis of soil samples confirm intermediate plasticity CLAY directly below the foundation underside, becoming high plasticity at 1100 mm BGL and through the borehole depth. The soil was confirmed as a pure CLAY (<5% retained in the 0.425 mm sieve). Using Driscoll's method ($LL \times 0.4$), onset desiccation was confirmed in the clay layers from 2000 to 4000 mm BGL, with elevated suctions observed at the same depths.

Roots retrieved at the underside of the foundation and within the borehole were identified as ‘probably *Quercus* spp. but possibly *Castanea* spp.’ (oak and sweet chestnut respectively), and *Pomoideae* gp. The roots at the underside had starch content, indicating activity at the time of retrieval. The roots in the borehole did not, albeit, the presence of starch in samples does not necessarily reflect the status of the parent tree.

The CCTV survey assessed 4 drainage runs, with defects only noted on the most remote, run 4.



CAUSE OF DAMAGE

Based on the information detailed above, we are of the opinion that foundation movement and the resultant damage has occurred due to clay shrinkage subsidence. . The properties of the clay below foundation level makes it susceptible to significant volume change dependent on moisture content, and water extraction by the proximate trees will be influencing this change. This is supported by the recorded onset desiccation and elevated soil suction values, coincident with the presence of tree roots. Whilst minor drainage defects were noted, water escaping into the soil is not considered contributory due to the remote nature of the damage relative to the focus of the foundation movement and that the soils below foundation level are dry and stiff, with no indication that excess water is present.

MITIGATION

We consider that tree work is a necessity to remove the excess influence on the clay soil below foundation level. We will appoint our mitigation team to commission an arborist report, to provide recommendations for

management of the causal vegetation, to address the current root nuisance. Our mitigation team will then engage the relevant owner/s to request tree work.

Whilst not considered a causal factor in the foundation movement, we will also instruct repair of the minor defect noted on run 4 out of an abundance of caution.

MONITORING

Level monitoring has been instructed and will be arranged now that the deep datum has been installed. Readings are planned on a bi-monthly basis to capture foundation movement and assist with mitigation measures and eventual progression to repair.

REPAIR RECOMMENDATIONS

We have not yet decided on the final type of repair required, but have produced an outline of the most likely requirements. This involves undertaking superstructure repairs and redecoration. This decision has been taken based on our knowledge and experience of dealing with similar claims.

PROJECT TEAM DETAILS

Sarah Granlund BSc (Hons) Grad IEMA Cert CIL A Cert CII- *Building Consultant Specialist Subsidence Team*

Michelle Mansell - *Claims Technician Specialist Subsidence Team*

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