



Subject Property Address:

16 Park Village West
LONDON
NW1 4AE

INSURANCE CLAIM

CONCERNING SUSPECTED SUBSIDENCE

ENGINEERING APPRAISAL REPORT

This report is prepared on behalf of Chubb European Group Ltd for the purpose of investigating a claim for subsidence. 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: 13/02/2020





INTRODUCTION

The technical aspects of this claim are being overseen by our Building Consultant Michael Whittington BSc(Hons) MCIQB AssocRICS, in accordance with our project managed service.

The claim is primarily concerned with damage to the front entrance steps. A sketch plan and photographs are attached and all references to the property are as observed facing the front of the building.

DESCRIPTION OF BUILDING

The subject property is a detached house constructed in circa 1900, in a residential estate on a plot that is level. The property is of traditional construction with a pitched slated roof and is located within a conservation area / Crown Estate.

SIGNIFICANT VEGETATION

T1 – Olive tree located within the policyholder's front garden, which is approximately 3m high and 1m distance from the front entrance steps / front elevation.

DISCOVERY OF DAMAGE

Insurer have requested for Sedgwick to attend and confirm if current damage is subsidence related
Policyholder noted cracking to external front entrance steps and reported damage to Insurer.

Policyholder has confirmed that very minor cracking was noticed to the front entrance steps approximately 18 months ago and has progressively got worse towards the end of summer (approximately August / September 2019).

Insurer have requested for Sedgwick to attend and confirm if current damage is subsidence related.

NATURE AND EXTENT OF DAMAGE

Description and Mechanism

The main area of damage is to the front entrance steps and takes the form of separation cracking.

Mechanism of movement to the entrance steps appears to be downwards towards foundations and rotational movement away from front elevation.

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 damage has occurred recently. It is likely that movement will be of a cyclical nature with cracks opening in the summer and closing in the winter.

SITE INVESTIGATIONS

Reference to the geological survey map shows the anticipated subsoil as London Clay.

The site investigation has been undertaken by CET Ltd on 2nd January 2020. For precise details of the trial pit and borehole location, together with test results, please refer to the attached CET 'Site Investigation Factual Report'.

A trial pit was excavated to the depth of 0.80m to the right hand side of the front entrance steps, which revealed a concrete foundation to a depth of 0.60m bearing on firm clay, which is classified as being shrinkable. A borehole was sunk within the trial pit to a depth of 3.00m, which confirmed firm clay (0.80m – 1.50m) and stiff clay (1.50m – 3.00m). The borehole was also noted as being dry and open upon completion with no roots observed below 1.80m.

In-situ testing was undertaken and a shear vane reading of 130 (Kpa) (which is the maximum reading for this type of vane tester) was measured at 2.00m, 2.50m and 3.00m. This would indicate that soil conditions at these levels are dry and very stiff.

Roots up to 1.5mm in diameter were noted at the underside of the foundations (0.60m). Four roots were analysed and found to be alive and originate from Olea spp. Further roots (1.5mm to 2mm in diameter) were also noted within the borehole down to a depth of 1.80m, originating from Platanus spp and Olea spp and found to be alive.

MONITORING

Crack width monitoring has been instructed and readings are to be taken at eight week intervals.

The first sets of readings have been reviewed (17/12/2019 – 05/02/2020) and has shown that the cracking to the right hand side of the front entrance steps has reduced by approximately 2mm.

CAUSE OF DAMAGE

Based on the information detailed above, we are of the opinion that damage has occurred due to clay shrinkage subsidence. This has been caused by moisture extraction by roots altering the moisture content of the clay subsoil, resulting in volume changes, which in turn have affected the foundations.

RECOMMENDATIONS

Mitigation

We consider the damage will not progress if appropriate measures are taken to remove the cause. In this instance it is likely that vegetation for which the policyholder is responsible is contributing toward the cause of damage.

An arborist report will now be obtained to assist with this.

Continuation / 4



Repair

We have not decided on the final type of repair required as our investigations have not yet been concluded. This involves undertaking superstructure repairs and redecoration.

This decision has been taken based on our knowledge and experience of dealing with similar claims. In addition the results of the Site Investigation and laboratory testing have been taken into account.

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Adjusting Executive

