



Engineer's Report

Our Reference	IFS-RBS-SUB-11-0031275
Claim Reference	61746755/01
Prepared for	Churchill Insurance Company

Claim Details:

Report Date	14 November 2011
Policyholder	Mr Wakeford
Address	21 Cavendish Drive, Waterlooville, Hampshire, PO7 7PJ

SITE PLAN NOT TO SCALE

This plan is diagrammatic only and has been prepared to illustrate the general position of the property and its relationship to nearby drains and trees etc. The boundaries are not accurate, and do not infer or confer any rights of ownership or right-of-way. OS images provided by Dotted Eyes. © Crown Copyright 2009. All rights reserved. Licence number 100019918

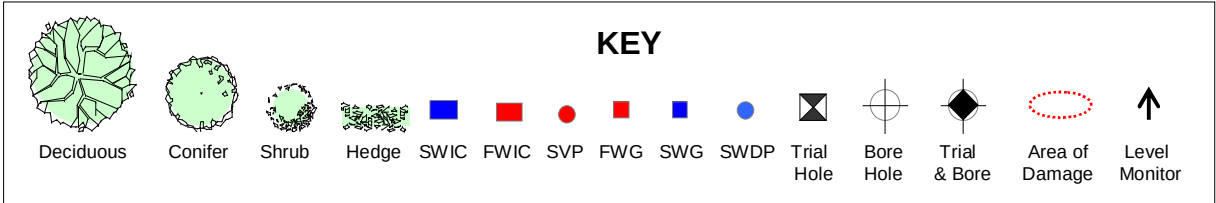
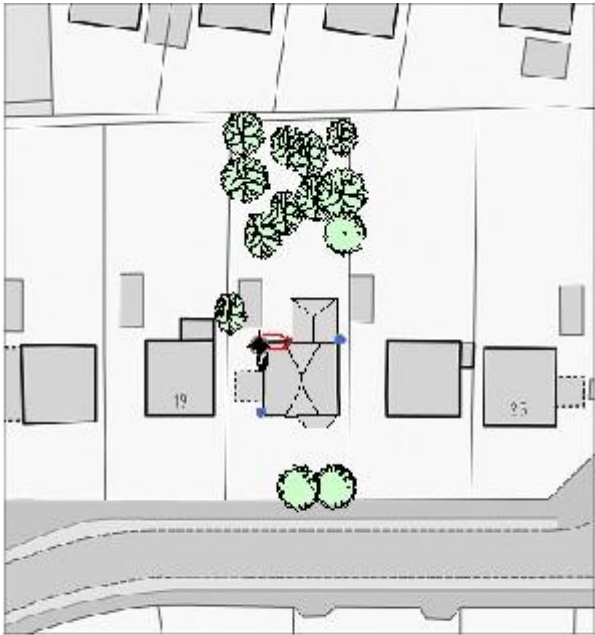


FIGURE 1 Site Plan

INTRODUCTION

We have been asked by your building Insurers to comment on suspected subsidence damage to the above property. Our report briefly describes the damage, identifies the cause and gives recommendations on the required remedial measures.

Our report should not be used in the same way as a pre-purchase survey. It has been prepared specifically in connection with the present insurance claim and should not be relied on as a statement of structural adequacy. It does not deal with the general condition of the building, decorations, services, timber rot or infestation etc.

Investigations have been carried out in accordance with the guidance issued by The Institution of Structural Engineers. All directions are given relative to an observer facing the front of the property. We have not commented on any part of the building that is covered or inaccessible.

CIRCUMSTANCES

The insured has recently inherited the property from his late mother and is in the process of renovating prior to taking occupation. The kitchen is in the process of being renewed when the kitchen fitters noticed a crack at low level around the rear left hand corner. They advised the insured to inform his insurers of a potential claim.

PROPERTY

The property is a two storey dormer bungalow of traditional construction with part rendered brickwork. walls surmounted by a hipped tile covered roof.

The property has 3 bedrooms. The property has a conservatory to the rear which was built prior to the insured's ownership and a detached re-fabricated garage to the rear left hand corner of the house



FIGURE 2 Front Elevation

HISTORY

Date of Construction	1960
Purchased	2011
Policy Inception Date	04 April 2011
Damage First Noticed	02 August 2011
Claim Notified To Insurer	03 October 2011
Date of our Inspection	07 November 2011

ADEQUACY OF BUILDING SUM INSURED

The current building sum insured is considered adequate

TOPOGRAPHY

The site is level with no adverse features.

GEOLOGY

Reference to the 1:50,000 scale British Geological Survey Map (Drift Edition) suggests the drift geology of the site is No drift geology recorded overlying a solid geology of London Clay.

VEGETATION

The following vegetation was recorded as being within potential influencing distance of the property:-

Type	Height	Distance	Owner
Oak	18m	15m	Policyholder
Apple	3m	4m	Policyholder
Climbers	3m	0m	Policyholder
Douglas	15m	13m	Policyholder

DAMAGE RELATING TO THE CLAIM

The following is a summary of the damage relating to the Insurance claim, including any damage noted in the same vicinity, with supporting photographs where appropriate. Our report and damage description should not be used in the same way as a pre-purchase survey and should not be relied on as a statement of structural adequacy or general condition of the property.

INTERNALLY

The insured has stripped wall paper throughout the main property and it is in general need of updating and modernisation. It is therefore difficult to ascertain the extent of any structural damage, however the property appears to be of sound construction and there is little evidence of any damage which is of structural significance with the cracks appearing to be minor plaster shrinkage cracks. The insured advises that the property has always been wall papered since his parents ownership from new.

There is a vertical crack at the bottom of the stairs on the left hand wall of the stairway which appears to be as a result of thermal movement associated with the chimney breast located behind the wall.

No other damage of any structural significance was noted from our inspection.

EXTERNALLY

On the rear elevation there is a diagonal tapering fracture which emanates from ground level and continues up to DPC where it continues along to the left hand elevation and is indicative of a localised dropping about the rear left hand corner.

Similar diagonal tapering fractures were noted along the left hand elevation continuing up to DPC and extending to the rear elevation.

Cracks were noted within the render over the kitchen door and window which are considered to result from thermal movement associated with the lintels over the windows.

No other damage of any structural significance was noted from our inspection.



FIGURE 3 Diagonal tapering fracture in the brickwork at low level



FIGURE 4 8mm Drop in brickwork on rear left hand corner



FIGURE 5 Thermal cracks around lintel bearing at the rear kitchen window



FIGURE 6 Thermal cracking around the end of the lintel bearing above the left hand kitchen door

DAMAGE CATEGORY

It is common practice to categorise the structural significance of the damage in accordance with the classification given in Table 1 of Digest 251 produced by the Building Research Establishment. In this instance, the damage falls into Category 3 (Moderate).

Category 0	Negligible	<0.1 mm
Category 1	Very Slight	0.1 - 2mm
Category 2	Slight	>2 but < 5mm
Category 3	Moderate	>5 but < 15mm
Category 4	Severe	>15 but < 25mm
Category 5	Very Severe	>25mm

Extract from Table 1. B.R.E Digest 251
Classification of damage based on crack widths

INVESTIGATIONS

SITE EXCAVATIONS

Site investigations will shortly be undertaken by a specialist contractor.

MONITORING

3 crack width visits will be undertaken at 8-week intervals.

DISCUSSION

The diagonal aspect of the cracks, together with the fact that they increase in width with height is indicative of subsidence as a result of shrinkage of the clay subsoil due to the moisture extracting influence of adjacent oak, apple and fir trees within the policyholders garden as well the honeysuckle immediately adjacent.

Site investigations are expected to confirm that the property is founded on a clay sub soil and as such, is vulnerable to the moisture extracting effects of adjacent vegetation. The insured advises that since the weather has become wetter, the ceramic tile placed within the crack has started to bind suggesting that rehydration within the ground is actually closing the crack.

REQUIREMENTS

In view that the damage to the property is considered to be as a result of an insured event, a valid claim arises under the terms of policy cover, subject to the applicable excess. In order to stabilise the property and prevent further damage occurring in the future, the cause of the movement needs to be addressed, with site investigations being required.

Following completion of tree management works, the property will then be monitored to reaffirm stability.

Provided the property stabilises as expected, no foundation stabilisation works are considered necessary, with structural repairs of the superstructure being required only.

In this particular instance, damage is confined to cracking within bed joints below DPC and is very localised. Repairs will take the form of raking the cracks out and cleaning the joints prior to wedging and repointing the affected areas. We would anticipate the repairs will fall within the policy excess.

Spencer Caizley
Engineer
Subsidence Management Services