Engineer's Report

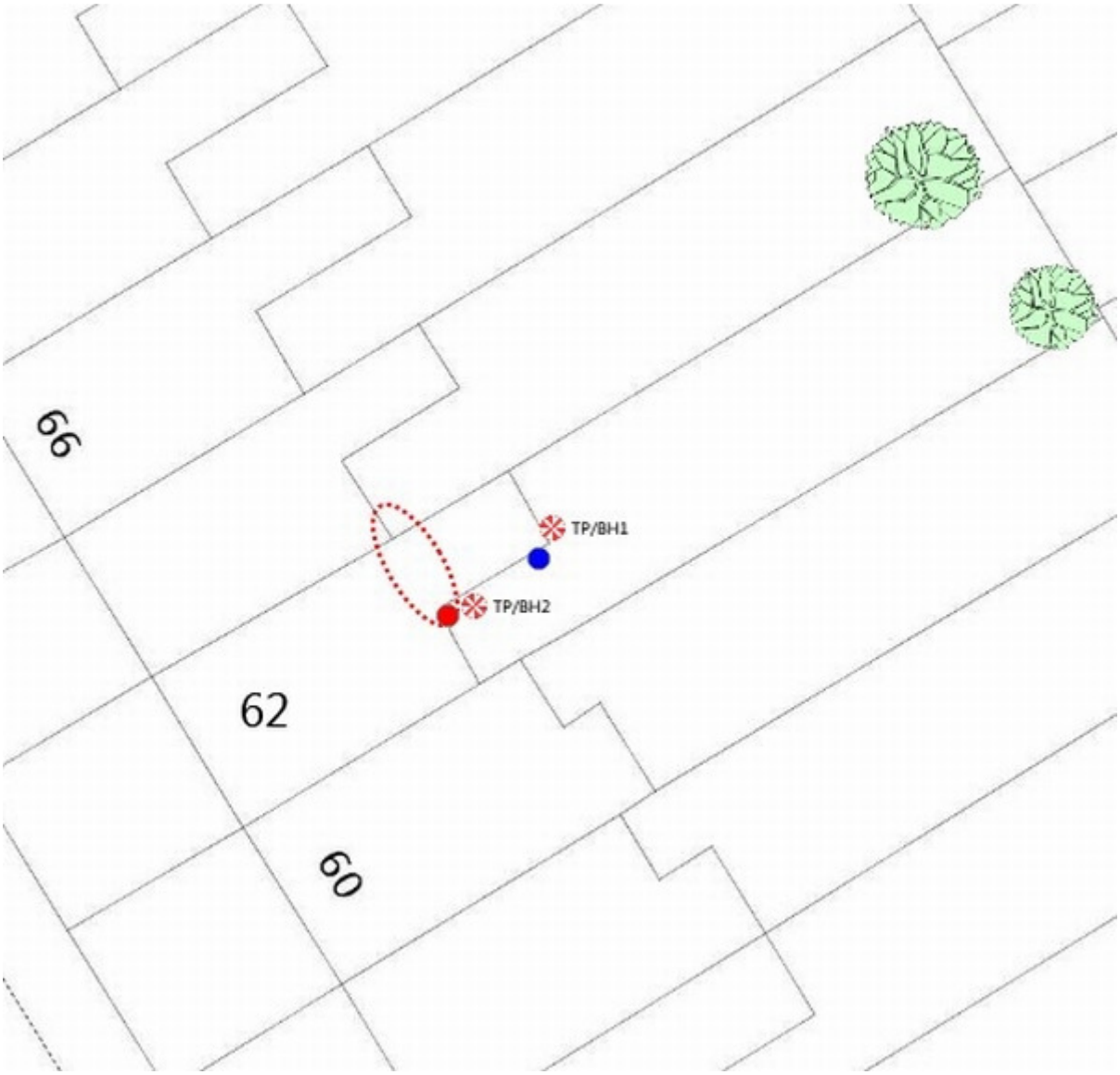
Our Reference	**IFS-AVI-SUB-14-0048840**
Claim Reference	**14WCI000251**
Prepared for	**Woolwich**

Claim Details:

Report Date	**23 January 2014**
Policyholder	**Mr A Dworkin**
Address	**62 Albert Street, London, NW1 7NR**

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 Marishal Thompson Group.



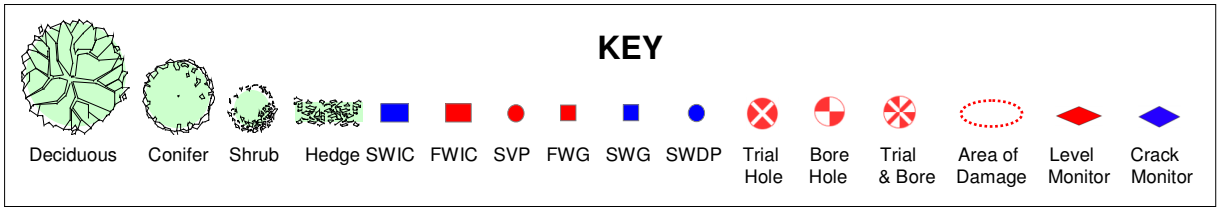


FIGURE 1 Site Plan

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 advised that he noticed cracking at the junction of his property with a rear 3 storey addition in September 2013. He further advised that he obtained a structural survey from Conisbee Structural Engineers in early December 2013. Their report (dated 16/12/13) was viewed during our survey and confirms subsidence to the rear addition.

PROPERTY

The property is a four storey mid-terrace house of traditional construction with solid brickwork walls surmounted by a mansard slate covered roof.

The property has 4 bedrooms. The property also benefits from an attic conversion constructed prior to purchase.

FIGURE 2 Front Elevation

HISTORY

Date of Construction	1840
Purchased	2004
Policy Inception Date	29 March 2006
Damage First Noticed	01 September 2013
Claim Notified To Insurer	16 December 2013
Date of our Inspection	21 January 2014

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 unrecorded 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
Broadleaf	10m	12m	Policyholder
Broadleaf	14m	10m	Neighbour

DAMAGE RELATING TO THE CLAIM

The following is a summary of the damage relating to the Insurance claim, including any unrelated damage in the same vicinity, with supporting photographs where appropriate.

INTERNALLY

There is a 5-10mm separation crack at the rear wall/ceiling junction in the first floor study together with a full-height 15mm crack to the left-hand wall junction with the main property.

On the ground floor, there is a full-height vertical tapering crack (3mm) to the left-hand wall of the rear study lobby and a further full-height vertical tapering crack (4mm) on the right-hand wall in the same area. Both cracks are at the junction of the main property/rear addition and the crack traverses across the lobby ceiling in a similar manner to the first floor study directly above.

Finally, there is a full-height vertical tapering crack (3mm) to the right-hand wall at the junction of the main property/rear addition in the rear bedroom in lower ground floor flat.

EXTERNALLY

There is approximately 15mm separation between the main property and the parapet wall to the roof of the 3 storey rear addition.

No other damage was noted externally, although the right-hand junction of the property with the rear addition is obscured by the SVP and the left-hand junction is only accessible via the rear garden of the neighbouring property.

FIGURE 03 Rear Elevation

FIGURE 04 Lower ground floor rear bedroom

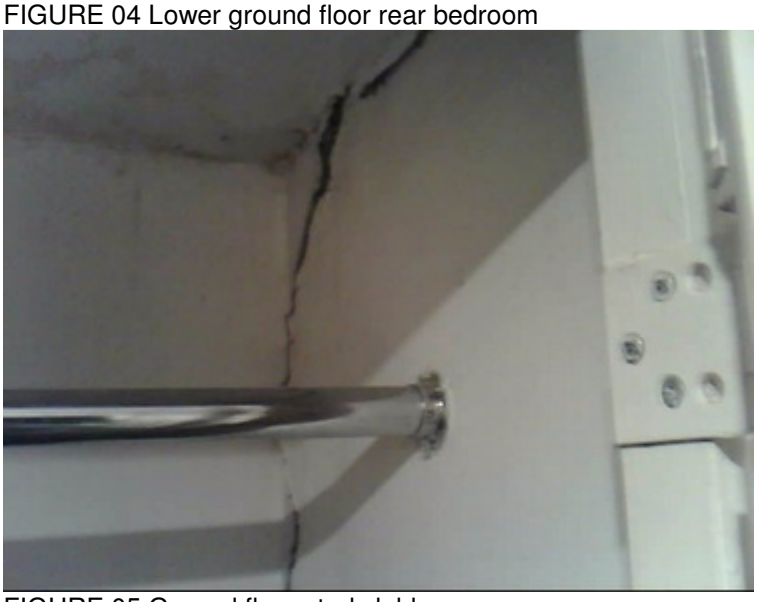


FIGURE 05 Ground floor study lobby

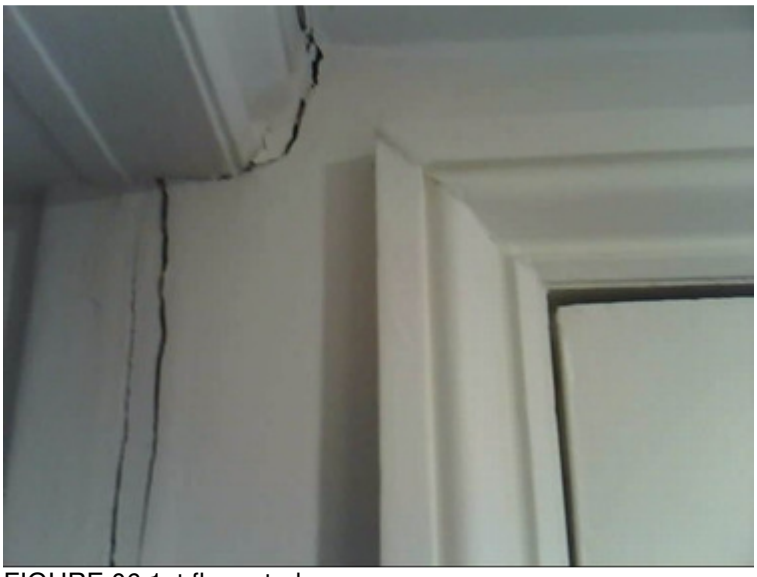


FIGURE 06 1st floor study

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.

DRAINS

Drainage investigations in the vicinity of damage will shortly be undertaken by a specialist contractor.

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 the large tree in the left-hand neighbour's rear garden.

However, as the foul/storm drains are adjacent to the area of movement, we will also survey these to ascertain their integrity.

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 confirm stability.

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

Generally cracks 3mm wide or less will be filled (internal) or re-pointed (external). Internally, where the cracks are wider than 3mm, but less than 5mm the underlying brickwork or blockwork will be exposed and prior to making good the plaster finishes the cracking will be covered with expanded metal lathe. Where cracks are 5mm across or wider, some form of bed joint reinforcement will be introduced.

Mark Hollidge
Engineer
InFront Innovation Subsidence Management Services