Dear Camden Planning

As a longtime leaseholder [redacted] and resident of Hampstead ([redacted], I am deeply concerned about the planning proposal submitted by 30 Grove Place, but ref 2024/2928/P.

For one, the Surveyor Ian Rock has written extensively about the hazards of basement excavations to Victorian buildings and surrounds, particularly on clay.

These can lead to structural changes and permanent damage to surrounding foundations, and effectively act as a dam, blocking natural drainage and inhibiting vital passage of water and in the case of 30 Grove Place, the backup of foul water and sewage, jeopardising the health of residents.

Noted the surveys submitted as part of the application are not by local firms familiar with the underground springs in Hampstead. Also the need for an underground gym seems superfluous given the availabilty of several superb gyms (namely The Armoury Gym, which is UCS Active, several yoga studios, the Royal Free Trust gym and pool, and of course, the proximity of Hampstead Heath.

For the indulgence of a wealthy young family, it seems disproportionate to disrupt the lives of families dependent on local schools for quick access, as well as water, electricity and essential services that are bound to be disrupted for the sake of a young family wishing to do a fitness session in the comfort of their own already substantial home.

At a time when Thames Water is struggling and the infrastructure is straining, it seems irresponsible to go ahead with a plan that will jeopardise sewer flow and water flow.

The basement cannot be "permeable" as recommended - it is bound to be made of concrete and tanked. The damp membranes used are impermeable and with climate change will cause the water to well up and try to escape, causing pressure on surrounding buildings. This will have a flooding effect as water will be trapped. The hawthorn trees lining Grove Place will suffer, as the roots will grow sodden and within the year, if last winter's constant rain returns this winter, these trees will collapse.

This has happened to many trees caught out by the concrete dams underground on Hampstead Heath.

The pollution and noise will be disturbing to residents and disruptive.

I would refer you to this excellent article by Surveyor Ian Rock on the hazards of excavations of basements, leading to movement/subsidence and instability as well as flooding.

This is a good example of bon-essential, superfluous extension work that will damage the envi, causing longterm risk and damage to surrounding buildings, at the cost of residents who respect and love the Conservation Area of Hampstead Village we all share as our peaceful home.

Please show you care and wish to protect our homes and environment by rejecting

2024/2928/P

Thank you

Martha Richler

Common defects surveyors encounter in Victorian and Edwardian properties

Ian Rock

Received: 27th January, 2017

Zennor Consultants Ltd, The Workshop, Kiln House, Duck Lane, Ludgershall, Buckinghamshire, HP18 9XZ, UK
E-mail: ian@zennorconsultants.co.uk

Ian Rock

***Ian Rock** is Director of Zennor Consultants Ltd and of the residential surveying website Rightsurvey.co.uk. He is the author of eight popular Haynes Manuals including* The Victorian and Edwardian House Manual *(first published 2007, second edition 2015) and is a regular contributor to property magazines such as* Period Living *and* Homebuilding and Renovating. *He began renovating Victorian houses in the late 1980s before qualifying as a chartered surveyor in 1993.*

Abstract

The case study chosen to illustrate this paper provides a clear example of the complexities involved in accurately assessing the causes of defects in buildings of the Victorian and Edwardian period. At a time when the surveying profession is evolving to make best use of IT tools, there is a danger that our understanding of survey fundamentals becomes overshadowed by the adoption of seductive technologies and widespread 'surveying by app' and use of pre-programmed text. There is a consequent danger that over-simplistic assessment will result in poor quality advice with increased potential for disputes and claims. This paper proposes that practitioners may benefit from the adoption of a simple 'root cause' system, both as an aid to identifying the true causes of defects and to enhance client communication.

Key words: Victorian houses, defects, conservation, damp, movement

Journal of Building Survey, Appraisal & Valuation
Vol. 5, No. 4, 2017, pp. 320–331
© Henry Stewart Publications
1746-9554

INTRODUCTION

Victorian and Edwardian properties account for the vast majority of the UK's pre-1919 'traditional' housing stock. In many towns and cities entire suburbs date from this era and comprise the bulk of local surveyors' workload. A good understanding of common defects found in properties of this age and type is essential for practitioners, not least because they account for a disproportionate level of PII claims.

In recent years the residential surveying profession has been subjected to increasing criticism for alleged misdiagnosis of defects, particularly those relating to damp and timber treatment.[1] Incorrect diagnosis will inevitably result in poor quality advice and misleading recommendations for remedial work, which at best will be wasteful and at worst damaging to the building.[2]

Failure to identify the true cause of defects can result in undue alarm and expense, worrying homeowners unnecessarily where, for example, an inactive historic outbreak of wood beetle is flagged up as in need of urgent treatment.[3]

As can be seen in the case study below, the insurance industry has also come in for criticism when assessing claims, with a tendency to attribute a single cause to complex defects, which can sometimes prove over-simplistic.

In sum, in order to accurately define defects and hence prescribe appropriate solutions it is important to draw distinctions

between different root causes. Attempting to fully analyse all the main defects found in 18th and early 19th-century properties would be an overly ambitious task for a paper of this scope. Rather, this paper puts forward the proposition that it would be instructive for practitioners to consider defects in relation to five basic 'root cause' categories:

combination and it can sometimes be debatable which one is dominant. An extreme example might be where an inherent defect dating from the time of construction is compounded by gradual erosion of materials over time, long-term neglect of maintenance and subsequent structural alterations, given extra impetus by a sudden extreme weather event. The case study provides an

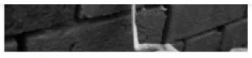


Figure 5: Repointing in traditional lime mortar

must be allowed sufficient time to dry out (the well-known rule of thumb being a month to dry out for each inch of masonry wall, depending on location, equating to

roughly nine months in a typical Victorian house). Salt contamination can be brushed or vacuumed off, but not washed, as this salts back into solution.

It's worth pointing out that the standard mortgage lender solution to damp — injecting chemical DPCs — is now regarded by many practitioners as ineffective and potentially damaging.[11] In theory, pumping silicone-based fluid into a wall forms a horizontal barrier to block any damp rising up. But in practice, most DPCs are injected at far too high a level to protect vulnerable floor timbers. Also, the fluid is commonly injected into the brick or stonework rather than the mortar joints, which means moisture can often work its way past the injected bricks. The 'guarantee' which mortgage lenders put so much store by is dependent upon the application of render tanking to the internal face of the wall, which has the effect of masking residual dampness and further hindering breathability while the critical hidden portion of sub-floor wall remains damp.

COMMON TYPES OF MOVEMENT

Victorian footings, being relatively shallow (almost invariably less than half a metre), transmit ground movement to the main walls. In order to accommodate such movement, structures need to be more flexible than in rigid modern buildings. Lime mortars have an inherent 'plasticity' which allows walls to react to minor seasonal stresses by subtly distorting, sharing the movement over a larger expanse of masonry, leading to localised deformation rather than cracking. Lime also has an inherent ability to 'self-seal' any fine cracks that develop because incoming rainwater can dissolve tiny particles which later coagulate as the water evaporates out.

Lime has its limitations, however, and in more severe cases surveyors need to be able to assess cracking in order to arrive at an informed opinion of the causes of movement. A useful guide to assessing crack widths is BRE Digest 251 (Assessment Of Damage In Low-Rise Buildings).

Nonetheless, this is rarely a straightforward task, hence the requirement by insurers assessing claims for monitoring over a period of time to collect data. According to Dickinson and Thornton: 'It is estimated that surveyors and engineers make more mistakes interpreting the significance of cracking in buildings than anything else.'[12]

There are numerous possible causes of cracking,[13] including:

- Foundation subsidence or settlement
- Structural instability
- Incompatibility of building materials
- Chemical reaction of materials
- Thermal movement
- Changes in moisture content

Once the cause of movement has been identified and rectified, the cracking can be repaired with due consideration for the aesthetics of Victorian buildings as well their stability. Cracks can be stitched to stabilise masonry with stainless 'helibars' bedded into horizontal mortar beds either side of the crack bonded in polyester resin to bind it together, or inserted vertically from underneath. Once pointed up, such repairs should be invisible.

Types of movement commonly found in Victorian houses include:

Bowing

Flank walls were commonly built with floor joists running parallel to them, hence very little lateral restraint was provided. Over time these unrestrained expanses of masonry have a tendency to bulge out, eventually requiring remedial work in the form of ties fixed through the wall to floor joists (assuming the wall is still stable). Similar problems can occur where the main front elevation walls on some terraces were not effectively tied to the party walls. Similarly, some apparently solid external walls were cheaply built as twin

openings adjacent to end walls need to be carefully inspected. Arch construction was also used for underground coal stores and shared tunnel passageways built into some terraces. Where there's a wall above an arch (eg a party wall) it may rely on internal walls and fireplaces in the houses either side to buttress it at right angles. Removal of these

react to minor seasonal stresses by subtly distorting, sharing the movement over a larger expanse of masonry, leading to localised deformation rather than cracking. Lime also has an inherent ability to 'self-seal' any fine cracks that develop because incoming rainwater can dissolve tiny particles which later coagulate as the water evaporates out.

Lime has its limitations, however, and in more severe cases surveyors need to be able to assess cracking in order to arrive at an informed opinion of the causes of movement. A useful guide to assessing crack

Figure 6: Traditional method restraint applied to bowing walls

adjoining single skins tied together with little more than a few 'bonding timbers', which were inevitably prone to decay, leaving the facing 'leaf' unrestrained.

Roof thrust

Where the connections between wall plates and ceiling joists or collars fail over time (often due to nail corrosion, timber decay, or structural alterations), the force exerted on the upper walls by the unrestrained rafters will tend to push them out. Once the roof slope spreads it is likely to sag as the supporting purlins deflect, potentially causing cracking to gable end walls in which they are bedded. This is sometimes accompanied by horizontal cracks on the leaning wall appearing a few courses down from the eaves.

Arch spread

Arches channel vertical loadings into horizontal thrust, so arched door or window openings adjacent to end walls need to be carefully inspected. Arch construction was also used for underground coal stores and shared tunnel passageways built into some terraces. Where there's a wall above an arch (eg a party wall) it may rely on internal walls and fireplaces in the houses either side to buttress it at right angles. Removal of these fireplaces or internal walls can cause the arch to start spreading.[14]

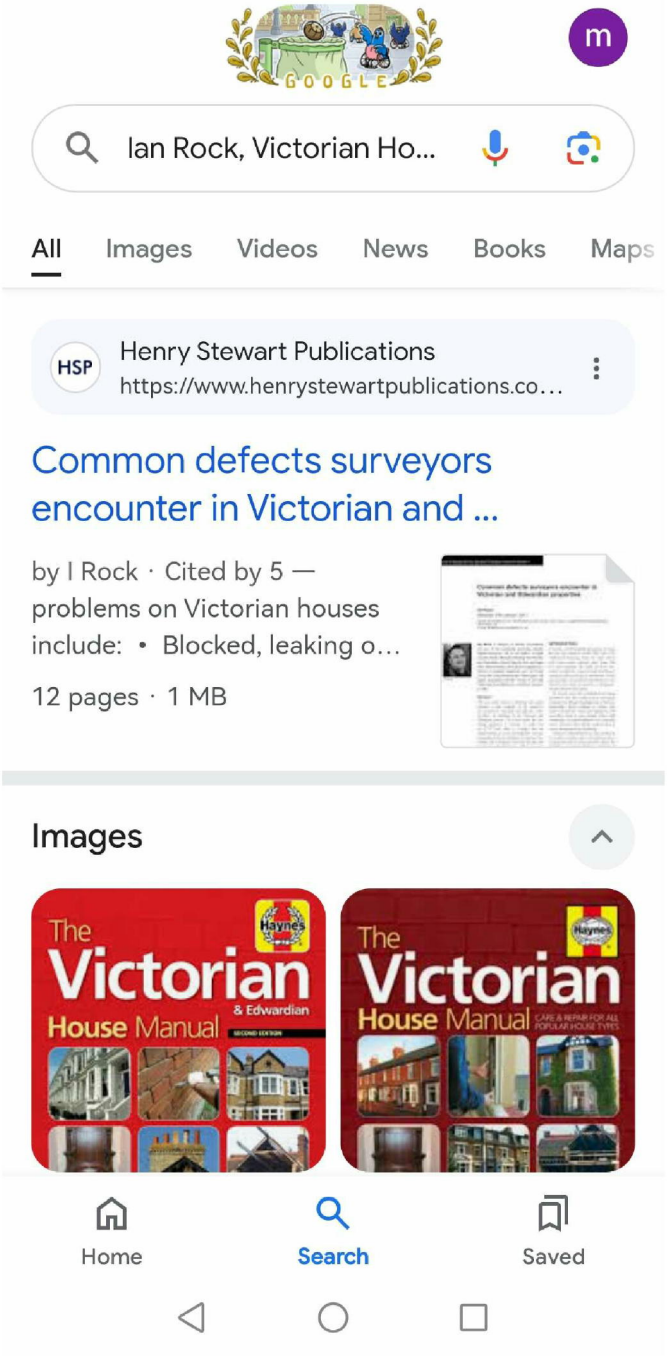
Deflection

Deflection of structures is common in older buildings, although such movement is not always 'progressive'. One potentially serious example can be seen in some Victorian flat-roofed bays where ponding water soaking into the adjoining front wall over time can result in fungal decay to large 'bressummer' timber beams spanning the bay opening. Replacement of bressummers is a major structural undertaking. Similarly decay to floor joists, or movement to sub-floor piers or sleeper walls may result in deflection to floors. Sloping floors are, however, often a result of longstanding settlement to supporting internal walls originally built with little in the way of foundations, and in many cases a state of stability will have been achieved over time as the ground has been compressed (although clearly this is far from ideal).[8]

Differential movement

Houses with shallower footings to bays and sometimes to rear additions can be prone to differential movement due to varying foundation depths. Similarly, where part of the ground floor footprint comprises a relatively deep cellar or basement alongside conventional footings elsewhere, this can be another potential source of differential movement, in some cases exacerbated where the movement damages adjacent drain runs resulting in marshy ground yielding further.

Where home extensions have been built onto Victorian houses, stresses often develop at the junction between the two structures


GOOGLE
m
Ian Rock, Victorian Ho...
All
Images
Videos
News
Books
Maps
HSP
Henry Stewart Publications
https://www.henrystewartpublications.co...
Common defects surveyors encounter in Victorian and ...
by I Rock · Cited by 5 — problems on Victorian houses include: • Blocked, leaking o...
12 pages · 1 MB
Images
The Victorian & Edwardian House Manual
The Victorian House Manual
Home
Search
Saved