

Jonathan Avis
45A Calthorpe Street
London WC1X0HG

16th February 2017

Kate Henry
Planning Officer
Camden Council

Dear Ms Henry,

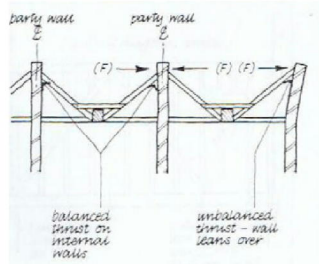
I am writing to object to the current planning application at 51 Calthorpe Street, application 2015/3049/P. I am a leasehold owner at 45A Calthorpe Street, a grade II listed terrace and I am very concerned about the impacts on basement and sub-basement construction at 51 Calthorpe Street could have on the building, which is already suffering from a pronounced lean in its exterior end wall (facing Pakenham Street). A structural appraisal report was carried out by Sketch Structural Engineering Ltd in 2012 which identified that the building is out of alignment, the foundations have suffered from settling, and that any further disturbance could damage the building by exacerbating the lean. This report has been submitted as evidence already, but the conclusion is quoted here:

"It would appear that there has been historical movement associated with the flanking wall in the form of both vertical settlement of its foundations, and lateral movement of the brickwork. This has manifested in the flanking wall exhibiting a slight out of vertical alignment, which is more pronounced higher up the wall."

The following photo illustrates the lean in relation to the nearby modern hotel building:



The report suggests that one contributory factor to the lean may be the 'butterfly roof' construction, exerting pressure on the end wall as shown in this illustrative diagram:



This is a design weakness in the terrace, common to this era of construction, leaving it vulnerable to disturbance of the type proposed at 51 Calthorpe Street (deep basement excavations and associated vibrations). It should be further noted by the Council that 45 Calthorpe Street is adjacent to the underground course of the River Fleet, culverted and covered in the Victorian era. The building at 45 Calthorpe Street suffers from damp at basement level, caused by moist exterior ground. The

proximity to the river suggests that damp ground is caused by moisture from this buried (but not watertight) watercourse, and the naturally damp ground could leave the building vulnerable to further movement. The report states:

“it is most likely that due to the unevenness of the Reception Room ground floor that there may have been historical differential settlement of the flanking wall foundations relative to the adjacent walls, as a consequence of moisture changes in the underlying London Clay.”

This wet ground has been a longstanding issue: as highlighted in a submission from 49 Calthorpe Street, soil tests in the 1980s by Camden engineers identified the soil around the property to be wet.

It is clear that the terrace 45-49 Calthorpe Street suffers from historical movement, tilting and settling of foundations and is vulnerable to further movement due to the nature of its construction, and the conditions of the surrounding ground. I note from submissions made by my neighbour at 49 Calthorpe Street that the end wall at the other end of the terrace (49) tilts in the opposite direction. Any further disturbance, such as the highly invasive deep-basement excavation proposed at 51 Calthorpe Street, will destabilise the listed terrace and threaten my property, and the council’s properties at 45 b, 47a and 47 b.

I urge Camden to reject the current application or seek substantial revisions to the basement plans. I would support a more sympathetic restoring of the building in a way that respects the neighbouring properties, responds to the need to create liveable residential space, and does not risk undermining a listed building.

Yours sincerely,

Jonathan Avis

Dike, Darlene

From: Umiak [REDACTED]
Sent: 15 February 2017 17:55
To: Henry, Kate
Subject: Fw: 2015/3049/P Jenkins Potter review of BIA
Attachments: Jenkins Potter Scan_20170210~130548.pdf; Point 9_Dave Harg SUMMARY.49
CALTHORPE ST pdf copy.pdf

Heres the attachments. ...

Regarding the above planning application, I now attach a report made by Andrew Hardy of Jenkins Potter Saffron Hill, a reputable structural engineering company.

When you send it off for comment to your advisors, campbell Reith, please do attach as well the Hargreaves condition report, which emphasises the fragility of the listed terrace, and the susceptibility of lime mortar to vibration (the bricks are laid with lime mortar not cement).

I think that Jonathan Avis's comments could go in at the same time. He owns the lower maisonette of 45 Calthorpe Street (the other end of terrace house)That should arrive tomorrow I would hope.

Yours
Umiak

thickness of coarse-grained soils overlying the stiff clay. CIRIA C580 states that “The relationship in Figure 2.16 should only be applied to excavations in comparable ground conditions with similar high support stiffness. Great caution should be exercised if this relationship is applied for situations that differ significantly from those applicable to the case histories upon which it is based”. As noted above the ground conditions are M Made Ground over London Clay and therefore the results from the analysis should be treated with great caution.

- 3.0 Section 8.0 of the BIA states that “The design and Construction methodology aims to limit damage to the existing building on the site and to all adjoining buildings to Category 1” (Clause 8.205). It further states that the calculated ground movement and anticipated cracking falls within Category 1 (8.208). This is despite calculations P14 – P16 stating that damage will be within the ‘slight’ category (Category 2)
- 4.0 Clause 3.30 of Camden Planning Guidance CPG4 “Basements and Lightwells” states that ; The ‘Council will expect BIAs to provide mitigation measures where any risk of damage is identified as Category 1 or higher’.
- 5.0 N° 49 Calthorpe Street has already suffered from historic movement evidenced by the distortion to brickwork and window and door openings. This historic movement has created weakness within the structure which are more susceptible to any further movement than un-damaged brickwork would be. The effects of ground movement are likely to exacerbated by the defects caused by historic movement possibly resulting in damage greater than that which would normally be expected from the Burland Scale.
- 6.0 It is noted that the BIA Audit revision F1 dated August 2016 refers to the damage potential to the neighbouring listed terrace of properties being very slight. However, as noted above, both my own calculations and those included within the BIA assess the damage potential as at least “slight”. In view of this additional information the conclusions in the BIA Audit are expected to change.

Based on the above, I consider that further mitigation measures are required to limit any potential damage to N° 49 Calthorpe Street to an acceptable level (negligible or, at worse, very slight). Such mitigation could involve omitting the basement entirely or reducing its footprint so that it is located sufficiently far away from the wall of N° 49.

Yours sincerely



A J Hardy
For JENKINS & POTTER

EXECUTIVE SUMMARY

- This is a summary of the report dated July 2016 which has been prepared by David A Hargreaves MA CEng MIStructE MRICS IHBC PGDip (Bldg. Cons.) who has over 45 years structural and building conservation experience.
- This building (No.49) has suffered historic structural damage (minor settlement) and undergone localised repairs in the past but is now in a state of structural equilibrium.
- Inspection of the building indicates that this has been the situation for some years in the past and no current defects are apparent.
- Consequently the property is considered to be in a sound structural condition for its age and construction and fit for purpose as domestic accommodation.
- However the type of construction of this historic and listed building is vulnerable to ground movements and vibration.
- The proposed construction works on the adjacent site (No.51) are of concern to the writer and will require the preparation of careful and detailed structural design and method statements which will ensure that the effects on No.49 are eliminated or kept to a minimum if the application (No. 2015/3049/P) is approved and construction permitted.
- The documents submitted with planning application No. 2015/3049/P are considered to be insufficient in their present forms to ensure adequate protection of No.49 if the works proceed.
- Consideration must also be given to the effects of the works on the other properties forming this terrace which although most likely not to be as detrimental must be taken into consideration in the design submitted.

The Ramifications of Proposed Construction Activities at No.51 on No.49		
Reference	Activity	Effect on No.49
a)	Structural Structure borne vibration	Structural damage
b)	Structural Ground borne vibration	Structural damage
c)	Structural Ground movement induced by excavations close to flank wall of No.49	Structural damage
d)	Structural Piling operations close to flank wall of No.49	Structural damage
e)	Conservation Alterations to fenestration and building profile to the Calthorpe Street elevation	These are alterations to the streetscape that will affect the setting of the terrace (No.45 to No.49)

STRUCTURAL ISSUES

- The structural damage is likely to have most effect on the flank wall of No.49 and in particular vertical movements although some lateral displacement of the foundation could occur during any excavations.
- The ground investigations carried out so far by A F Howland Associates have not been able to establish whether there is a common foundation to the flank wall of No.49 and No.51.
- Such movements could aggravate the historic defects in the property which have reached a state of equilibrium and do not require conservation works to be carried out at present.
- Lime mortar has many good qualities but it does not react well to vibration. Vibration causes lime mortar to break down and weaken and to migrate from the mortar joints.
- Structure borne vibrations could crack and displace the cementitious pointing which has been carried out to the brickwork in recent years and if this were to happen then migration of the damaged lime mortar could occur with the consequential weakening of the structural integrity of the walls.

CONSERVATION ISSUES

- The alterations to fenestration and building profile of the Calthorpe Street elevation of No.51 must be considered to have a detrimental effect on the listed status of the terrace of which No.49 is part.
- It is acknowledged that design of the modern hotel to the east of No.51 is not in sympathy with the historic buildings on the north side of Calthorpe Street but further erosion of the streetscape is not acceptable.
- Although No.51 is not a listed building it is within the Bloomsbury Conservation Area and considered to "make a positive contribution to the streetscape in terms of its physical presence and social history" (Bloomsbury Conservation Area Appraisal and Management Strategy).
- A Design and Access Statement together with a Heritage Statement have been submitted and are of a minimum standard for submission for a planning application and do not give additional information for consideration.

OBJECTIONS

- Various objections have been submitted to the planning authority by local residents which can be viewed on the Camden Council planning website.

NOTE: Copies of the full report can be obtained by request from Miss Mahoupe.