Gerry Oxford
Tree and Landscape Officer
London Borough of Camden
Town Hall
Judd Street
London
WC1H 8ND

Your ref:

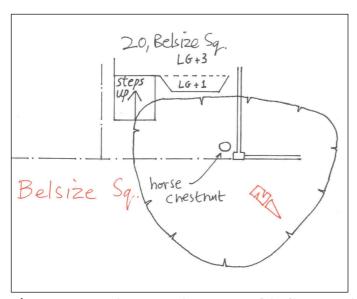
Our ref: 1-38-2779

3rd October 2016

Dear Mr. Oxford,

Re: 20, Belsize Square, London, NW3 4HT

I am instructed by my client to report, following attendance and inspection in connection with the above. I made a site visit initially on June 8th, 2011, subsequently, and most recently on September 13th 2016 and now report as follows.



1) OBSERVATIONS

The tree was in 2011 about 13m in height and then measured 850mm in trunk diameter at about 1.5m +GL. The tree now measures 1018mm at 1.5m +GL and is about 16m in height.

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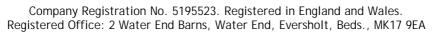
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2) The tree was once pollarded to around 2m above ground level (in excess of forty years ago) from which point two large stems have arisen which then sub-divide at around 3m above ground level and go on to form a crown of lower order branches in the usual way.

- 3) Tap tests, for sonority, a good indicator of decay, have indicated that there is no significant decay present in the base of the tree.
- 4) The limbs arising at the fork at around 3m above ground level are tightly appressed but there is no indication of current mechanical weakness at this major

Registered Consultant of the Arboricultural Association John Cromar, Dip. Arb. (RFS), F.Arbor A.





junction. It is typical of this species – somewhat prone to decay – that, after pollarding, decay becomes established at the old pruning points, thus rendering the crown unsafe.

- 5) There are signs of vehicle damage, probably when a vehicle was parked on the pavement close to one of the major limbs overhanging the road.
- 6) DISEASE The tree has now for several years been affected by *Cameraria ohridella* this pest typically causes serious disfigurement and leaf damage in the late summer. There is currently no Forestry Commission-approved treatment for this disease. Please note the pictures do not show normal autumn colouring:





- and note the drifts of prematurely fallen leaves. Thus, on aesthetic grounds the tree is a 'net-detractor' by late summer; and during winter is of very poor form.

7) SUBSIDENCE RISK

A consideration of the matter of trees and the subsidence of buildings requires some discussion of the processes involved. *Transpiration* is the process by which water is lost to the atmosphere from living plants. This process demands water uptake from the soil into the roots, from where it passes into the vessels of the plant, and is conducted to various parts of the plant and is finally lost to the plant mainly through pores in the leaves. This process can dry clay soils so that they shrink and allow foundations resting on them to sink or move. (This can be termed 'indirect damage'). There is a higher risk of this happening in very low rainfall periods. The buildings constructed on those footings may then crack. Removal of trees involved in subsidence almost always arrests further cracking, whereafter the previously dried clay will, usually fairly rapidly (i.e. within a season or two) return to its normal proportions by the natural action of rainfall, and consequently will lift the footings back to the position they were in prior to the damage, thus closing or nearly closing

the cracks. What may be termed 'direct damage' is caused by physical pressure of parts of a tree, such as roots or trunk, on a structure, and this can occur on any soil type. According to British Geological Survey data, the subsoil underlying the site is London clay. Early observations (2011) showed historic damage consistent with movement of the footings, probably relating to movements in one of the drought years, perhaps 2005 or 2006. These movements have apparently not yet recurred. It can be concluded that the conjunction of a very dry summer and an extensive crown would cause a recurrence of foundation movement and damage. It is likely that a heavy reduction of the tree would protect the structure to some degree but at the cost of loss of amenity and the rather onerous requirement to maintain the tree as a low pollard.

8) The tree is clearly causing massive disruption, via direct damage, to access steps to the basement as the photographs appended show. Disruption to the boundary street wall was also noted, the pillar being substantially out-of-true. Such damage



has worsened and will worsen further and require periodic repair. It will not be alleviated markedly by low pollarding. Please note that if the tree was suitable for the location I would be the first to be advocate an engineered solution, as you will recall was my position in defence of the fine London plane tree at Park Village West/ Albany Street.

- 9) The crown is also severely obstructing light to the building. An application to reduce the tree to a height (8m) whereat a reasonable penetration of daylight and sunlight would be enjoyed by the occupiers of the building was made and refused in 2014, a previous application to fell the tree having been made and refused in 2011.
- 10) A suitable tree of moderate stature at maturity and narrower crown shape would benefit public amenity and could, reasonably be planted and allowed to mature, more or less without pruning and certainly without heavy reduction. The front garden is not however suitable for a tree of ultimate stature as large as the presently existing tree, a horse chestnut.
- 11) Considerations regarding sustainability argue for prudence in species selection of any replacement. An individual replacement tree from one of the following is proposed:
- a) Fastigiate tulip tree (Liriodendron tulipifera 'Fastigiatum')
- b) Maidenhair tree (Ginkgo biloba 'Princeton')
- c) Malus trilobata
- d) Columnar hornbeam (Carpinus betulus 'Frans Fontaine')
- e) Parrotia persica 'Vanessa'
- f) Paper-bark maple (Acer griseum)

These have a low incidence of involvement in subsidence damage to buildings, and are either narrow-crowned, open in crown texture, or modest in height, or feature a combination of these virtues, *vis a vis* proximity to buildings.

- 12) My client is patiently seeking a long-term resolution to this long-running problem. As you may recall, I checked the matter of the tree work at no.12 Belsize Square, and I note that (following due notification) works were carried out the horse chestnut in 2002. It appears that similar works repeating the implicitly consented works in or around 2002 were, possibly without authorisation, carried out in 2014, to judge by the tree in winter 2014/2015 when you and I saw it during our site visit to no.20. During that visit you indicated that a consent to reduce the tree to about 13m in height would likely be granted. However this would still leave the tree much taller than the house, and is unacceptable as it does next to nothing to resolve the problem of light penetration, etc. On that basis, as previously reported, my client is aggrieved that the Council's consent to reduce to a similar extent the horse chestnut at no.20 was refused in 2014. It is considered rather inconsistent that the tree outside no.20, which is of no better form than that outside no.12, enjoys the protection of a TPO whereas that outside no.12 does not. Nonetheless, Conservation Area protection exists, and consent has been given for heavy reduction to the latter. The needs of the occupiers of both properties are the same with regard to daylight and sunlight, and accordingly my client considers he is suffering an injustice due to this distortion.
- 13) I accept that the tree outside no.20 makes a contribution to public amenity, but this amenity is very much at the expense of the local amenity of reasonable daylighting to the property concerned.
- 14) There are now good data to show that large trees have a significant cooling effect in cities, and in the capital play a considerable part in controlling the 'heat island' effect within the greater London area. Sizeable sectors of our population (the very old, the very young and the infirm) are particularly sensitive to the effects of high summer temperatures. As an arboricultural consultant with over thirty years of experience behind me, I am fully in favour of retaining as much tree canopy in urban

areas as is practically possible, in the interests of human health. The retention of large trees is certainly a human health issue, and deserves wider recognition. It also calls strongly for a flexibility of approach in resolving issues such as the case at 20 Belsize Square. It urgently requires local authorities and central government to find wider strategies for increasing canopy cover in our large towns and cities. Town planners are tasked by central government to deliver needed housing densities. To make this work in our cities, I believe we need a form of development-trading that would include:

- a strategy of using public open space more efficiently in this respect rather than to count on, for example, tiny front gardens in urban squares to carry the tree cover:
- developers funding placement and maintenance of large trees in those public open spaces;
- also on brownfield sites purchased for this purpose where they can grow optimally.
- 15) It is likely that several planning provisions already exist on which the envisaged scheme could largely sit. I ask you to give not only the specific case very careful and fair-minded consideration but to consider the value and opportunities inherent in the wider suggestion. I will copy this to your Chief Executive.
- 16) Accordingly the application to which this report relates is, in pursuit of a final resolution, to :

FELL the tree and remove the stump.

REPLACE with an agreed tree.

If I can be of further assistance, or any point needs clarification, please do not hesitate to contact me. For a brief overview of our small company please visit www.treescan.co.uk

Yours sincerely,

John C. M. Cromar

Enc

TREE DATA

EXCERPTS FROM 2011 application

EXCERPTS FROM 2015 letter

TREE DATA

Tree number	Tree type	Height	Stem diameters	Comments
1	horse chestnut	16	1018	Strongly affected by Cameraria ohridella

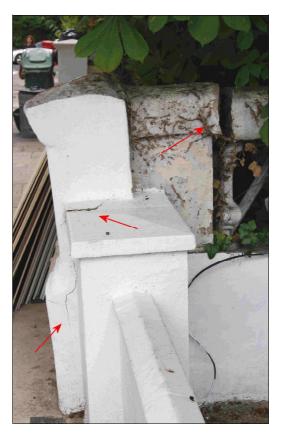
Photos—horse chestnut tree tree and damage to no.20, Belsize Square, NW3 Ref: TC/1-38-2779/pho June 2011



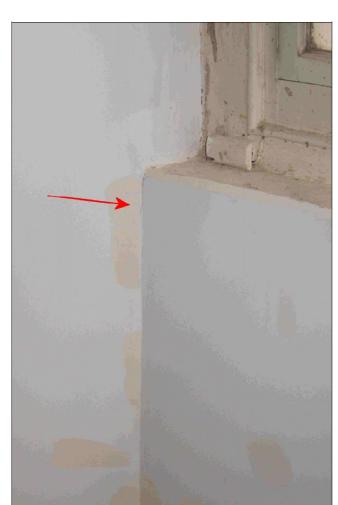


Damage arrowed red





Photos—horse chestnut tree tree and damage to no.20, Belsize Square, NW3 Ref: TC/1-38-2779/pho 2 June 2011





Cracks L and R side of access door to lower ground floor, front elevation

June 2011



