

TREE PROJECTS

PROFESSIONAL & TECHNICAL ARBORICULTURE

25th April 2018

Re: 13 St Augustine's Road, London NW1 9RL – Camden Council & Front Boundary Wall Issues

1.0 INTRODUCTION

Further to my planning report of 23rd September 2013, I returned to 13 St Augustines Road on the 25th April 2018 to inspect the Ash tree (*Fraxinus excelsior*) located within the front garden of the property.

2.0 PURPOSE

The purpose of my visit was to visually assess the condition of the tree and to make recommendations for replacement of railing between piers, newly installed and regarding which the LPA, Camden Council, has advised is incongruous with the street scene. At the time of my earlier visit and as reported at the time, the pavement boundary was defined by a white-painted timber picket fence between brick piers. The council now require the existing boundary to be altered to one more favourable to their idea of what is acceptable along the street, namely a low brick wall with copings.

3.0 CONDITION OF TREE

At the time of recent inspection the trees' leaves were emerging, a somewhat tricky time to assess condition due to the transition from the bareness of winter dormancy to being in full leaf. Some bark damage was noted to the underside of limbs to the south west side of the tree, damage evident in photos taken in 2013, reported upon at the time, and which therefore cannot be attributed to recent development activity. There was no significant/ observable alteration in tree condition between now and 2013. In terms of growth, in 2013 tree stem diameter breast height (DBH) was measured at 570mm whereas early spring 2018, following 4 seasons of growth, this had increased to 610mm. Notwithstanding potential for slight difference in the height of measurement, an increase of 40mm represents 20mm of radial growth, an average of 5mm of expansion of the trunk in one direction per year. It is recommended that the tree is re-reduced in late summer 2018 and thereafter on a three year cycle, subject to having obtaining necessary consents.

4.0 OPTIONS FOR REBUILDING THE BOUNDARY

- 4.1 In all probability there was once a 9inch /225mm (double width brick) wall topped with coping stones, defining the boundary of the property, similar to what can be seen elsewhere within St. Augustines Road. There is little doubt that the incremental growth of the roots and lower trunk of the Ash overtime, have given rise to damage to this wall, culminating in its removal and replacement with the picket fence as seen in 2013. At the time of recent inspection, the remnants of the wall appear visible at ground level over which the bulge of the tree extends such that there is approximately 100mm remaining before the base of the tree will have fully bridged the entire width of the original wall (towards the back of the pavement). Re-building the wall to match the original is completely impossible whilst the tree remains. An allowance for future growth should be made in any repair. See Photos 1 and 2, attached.
- 4.2 Given the statement above, the best that can be achieved whilst using conventional masonry is to bridge the bulge at the lower part of the tree, to create separation, which will leave a gap. To do anything less would render new construction pointless as further growth, which is inevitable while the tree remains, would very rapidly be damaged and deformed. This has to be accepted by the LPA. There is no gain to be had in cutting away wood at the base of the tree as this would induce rapid reaction growth, and is contrary to best arboricultural practice. There are alternatives to bridging

such as introducing part timber panels or sections of wrought iron however these are discounted given the brief to which these notes have been produced. This report therefore recommends an objective of 30 years of serviceable life is sought as a principal in the design and construction method to be applied. Therefore, on the basis of 5mm radial growth per year, a minimum clear separation between new masonry and the tree of 150mm is suggested. In expressing this recommendation, no warranty is expressed or implied as to the sustainability of a new wall for several reasons which include, firstly, the fact that whilst the author is an experienced arboriculturist familiar with such matters, he is not an engineer and secondly, previous patterns of growth cannot be guaranteed to be a reflection of future growth.

4.3 Attached to these notes, Tree Projects have prepared design sketches which outline the principles to be followed. It has to be accepted that without intricate and detailed 3D modeling, site work should prevail to ensure the separation required is achieved. In design terms a new foundation structure is proposed associated with three brick panels formed such that future damage, should it occur, is localised. In brief the principles advised are summarised:

- 4.3.1 A new, localised hand dug foundation, constructed so as to form a mini-pile, should be installed each side of the tree as close to it as is reasonably practical. Existing footings are to be removed with hand power tools (SDS drill) and a 250-300mm diameter reinforced concrete mini-pile formed with a post hole digger to a minimum of 1200mm depth or to 300mm beneath visible roots whichever is greater. Any roots greater than 25mm in diameter are to be retained and the position of the hole(s) altered. The mini-piles are to support lintels and masonry above and help provide resistance from uplift arising from tree root action.
- 4.3.2 Remove all remaining brickwork and footings and backfill with soil to within 50mm of pavement level.
- 4.3.3 Install two Catnic lintels between mini-piles to be cut into piers. Construct two sections of 9" walls with copings to height to match front walls of adjacent properties. Install expansion gap filler-board up exposed inner face of two new walls where facing tree to top level of brickwork. Lay bricks on top of remaining half of each pile to height such that one 100 x 60mm pre-stressed concrete lintel can be placed to span on the outer face of the wall and bridge the bulge of tree to give 150mm clearance.
- 4.3.4 Raise height of supporting brickwork for a second inner lintel (pre-stressed concrete 100 x 60mm) such that lintel can be laid to provide 150mm clearance from the tree. Lay bricks to required height, maintaining expansion gap filler. Lay coping on top of panel of bricks in front of tree with a mortar joint to outer sections. Render wall where necessary subject to type of brick utilised.

4.4 CONCLUSION

The local planning authority require the reinstatement of a wall to match the original construction contemporary to the property and those elsewhere within the road. This is not entirely possible due to the encroachment of the Ash tree into the space where brickwork would be formed. To comply with the requirements of the council and commit expenditure and resources it is reasonable to seek to build in such a manner that the new structure has a reasonable prospect of lasting for around 30 years.

By applying relatively straight-forward techniques which improve the nature of the footings and maintain separation distance between the tree and component parts of the wall, a fair and reasonable balance can be achieved.

Nick Bentley,

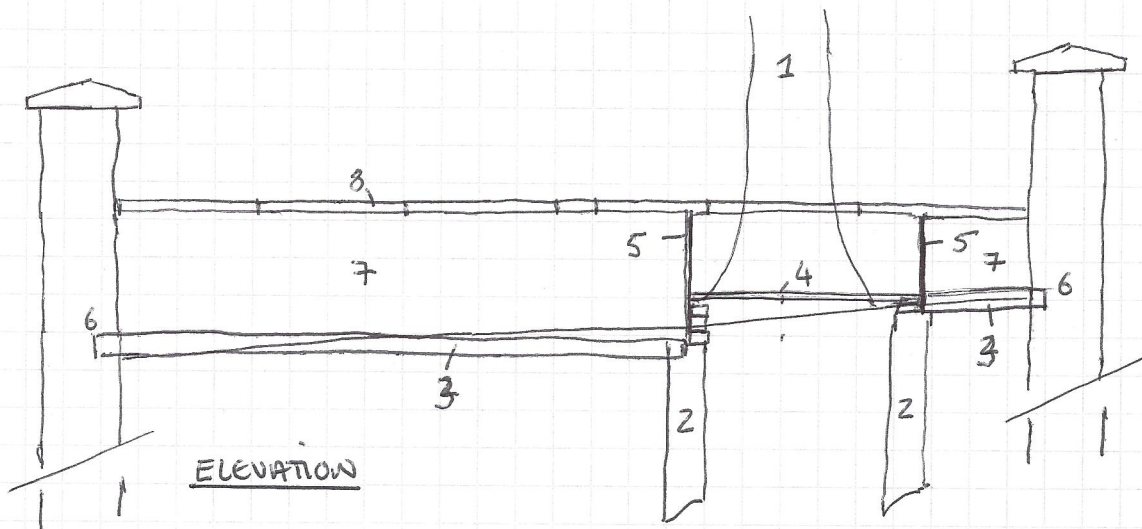
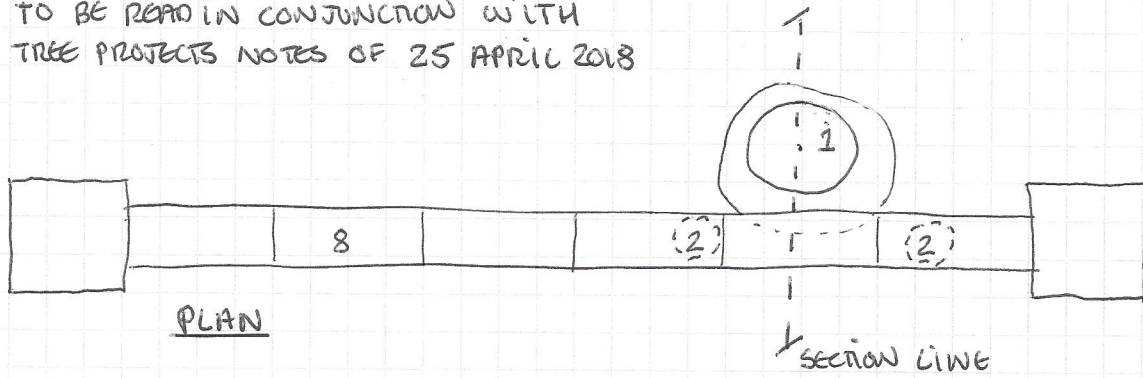
HNDH, RFS Cert Arb

Enc: photos and sketch design 1

13 ST AUGUSTINE'S ROAD NW1 9RL

TREE PROJECTS
25 APRIL 2018

SKETCH DESIGN 1: NEW BOUNDARY WALL
TO BE READ IN CONJUNCTION WITH
TREE PROJECTS NOTES OF 25 APRIL 2018



- 1 TREE
- 2 MINI-PILE POSITIONED TO AVOID ROOTS >25mm
- 3 CATNIC LINTEL
- 4 PCC LINTEL 100 x 65mm
- 5 EXPANSION GAP / FILLER BOARD
- 6 REBATE INTO EXISTING PILE
- 7 NEW MASONRY
- 8 COPING STONE

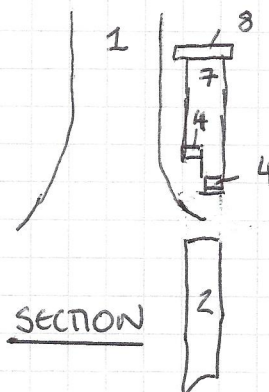




photo 1



photo 2