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29 October 2015

Mr R Osborne
Whymark and Moulton
20 North Street
Sudbury
CO10 1RB

our ref
your ref

Dear Mr Osborne

Re **Denyer House, London NW5**
Boundary wall reconstruction

I refer to our recent conversations about this matter. I have also spoken to Mr O'Driscoll of SD Installations and called by the site earlier this week.

The current situation is that demolition of the original wall has exposed an array of very large roots from the adjacent tree growing hard against and along the wall immediately below upper ground level. Tree conservation issues preclude the proposed piled foundation in this immediate area because of the roots. In the circumstances I am asked me to explore options for a possible solution.

The options appear to be these:

1 Fell the tree and proceed with the scheme as planned.

2 Re-align the boundary wall away from the base of the tree towards the LB Camden side (by about say one metre) to simply circumvent the tree root obstacle.

3 Redesign the wall foundation with piles on the current boundary line but displaced say four metres each side of the bole supporting a flying foundation beam spanning say eight metres over the root system. The exposed roots beneath this high level beam could then be buried and the boundary made secure by re-profiling the ground surface on the Denyer House side, i.e. by heaping soil against the base of the rebuilt wall beneath which the roots will be able to pass.

Option 1 has obvious problem in relation to the tree conservation issue. Option 2 would have a relatively minor design and construction cost impact but carries similarly obvious freehold and associated political issues. Option 3 would carry a significant construction cost penalty.

There is a further factor which I think supports the option 1 tree removal option. The pattern of structural root growth has clearly been heavily influence by the old boundary wall - indeed this very probably accounts for a good deal of the damage that the old wall suffered. It appears that the roots on this side of the tree have been consequently diverted from their natural radial habit and instead occupy a very narrow margin along the wall. I am not an arboroculturalist but I could not see any obvious sign of structural roots growing vertically down to potentially compensate for this unnaturally constricted of the root system. Thus, instead of developing a natural 360 degree root system this tree has developed a seriously curtained asymmetric root system rendering it particularly prone to southerly gales. Thus, if it is to be retained it would be particularly important to ensure the crown remains heavily pollarded to help reduce the risk of storm collapse when the wind direction is from the South. In short, I favour and recommend Option 1 on both economic and safety grounds.

Yours sincerely

Michael Smith BSC CEng MICE

For **LESLIEDREW**