Peter Brown Marek Wojciechowski Architects Ltd 66-68 Margaret Street London W1W 8SR

Your ref: Our ref: 1-38-4325/4

30th December 2019

Dear Mr. Brown,

Re: 42 Elsworthy Road, London, NW3 3DL

1) INTRODUCTION and BACKGROUND





The Old School Titley HR5 3RN at Jericho, Oxford & Harpenden, Herts.

TEL 01582 80 80 20 MOB 07860 453 072

admin@treescan.co.uk www.treescan.co.uk

Thank you for email of 10<sup>th</sup> December, 2019 from which I note, in connection with the air-source heat pump, is proposed to stand on a 'Big Foot' support system :

It is likely that a ground bearing precast slab will be needed, otherwise a porous grass paving grid if this supports our case ?

The formation of a service trench using "method 8" seems fine, and the requirement for arboricultural supervision is understandable.

A brief report is requested to summarize the arboricentric approach which should be adopted and is proposed.



## 2) APPRAISAL

Big Foot is essentially a rooftop support system using synthetic bases designed for acoustic enclosures, etc., and where spreading of load is important. Typical application illustrations from the company's website show slabs used, in turn, to support the bases. In this proposed application at the above address an apparently lightweight enclosure is needed on the northwest boundary.

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





I see no reason to consider that a very simple shallow foundation such as slabs bedded on a porous substrate entailing no excavation will be damaging to tree 4, the large and visually hiahly important London plane tree to the SW within the root protection area of which the enclosure is proposed. It is avoid significant root essential. to damage, that Method 8 is followed carefully.

For the avoidance of doubt, 'B' is a proposed tree and no negative impact on growth or establishment of this tree as a result of the proposals is envisaged.

## 3) PROPOSED ARBORICENTRIC METHODS

Method 8 (as proposed in my report 1-38-4325/3 13<sup>th</sup> August 2019) shall apply to the laying of connecting ducts and any services required to link the plant to the house :

## Method 8 : SERVICE TRENCHES

N.B. -This applies to ALL services : Electricity, gas, water, etc. Existing services shall be utilised wherever possible.

These methods shall apply generally within any RPA (orange shapes).

1) The trench shall be opened with an air-spade to required depth. Roots 20mm or more in diameter unearthed shall be temporarily protected with bubble-wrap and insulating or gaffer tape while rest of trench is dug. Services shall be worked under/over/around/ between roots so as not to cut or damage any larger than 20mm diameter.

OR

2) The trench shall be dug with hand tools only. Probes such as screwdrivers or steel rod <10mm diameter to determine root presence ahead of digging shall be used. The work shall proceed cautiously. No roots over 20mm diameter shall be cut. Roots 20mm or more in diameter unearthed shall be temporarily protected with bubble-wrap and insulating or gaffer tape while rest of trench is dug. Services shall be worked under/over/around/ between roots so as not to cut or damage any larger than 20mm diameter.

OR

3) Services shall be thrust-bored using trenchless techniques (compressed air-driven 'mole') at a depth of 700mm or more below ground level, entailing no surface excavation. Starter pits for rams shall be outside any RPA, or reception/starter pits shall be opened according to 1) or 2) above.

\* follows report numeration

## Method 17\* : ACOUSTIC ENCLOSURE

This method shall apply in the zone outlined red above on plan extract. Edge restraint shall be formed from tanalised timber pegged or pinned to substrate with 25mm dia. re-bar or similar. A geogrid such as Tensar 'TriAx' shall be laid directly on the ground surface within the timber edges (NO turf or soil stripping whatever shall take place), then a sub-base 75mm deep of 20-40mm clean stone -NO FINES-(typically sold as 'track ballast'), then a 2D geotextile such as 'Ekotex'. A blinding of granite chippings may be laid to correct levels, then the slabs. The slabs shall not be bedded on mortar or lean mix.

Big Foot support system shall be erected directly on the slabs over chippings and geotextile, or, if in accord with manufacturers' design, directly on the substrate of clean stone.

4) OUTLOOK

It is imperative that at site commencement the MC does not start work until liaison with the AC has taken place and a CMP agreed between the parties.

I trust the foregoing is of use to you.

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 <u>www.treescan.co.uk</u>

Yours sincerely,

John C. M. Cromar