

S342-J2-IA-1

# REPORT

on the impact on trees

of proposals for development

at

18 Adamson Road, London, NW3 3HR

(3rd August 2021)



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



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## 01

### Introduction and Instructions

I am instructed by Dawn Kravitz to make an assessment of tree amenity value and condition of trees at 18 Adamson Road, London, NW3 3HR and of the impact of a proposal for development (a garden building) on such trees. Accordingly, I visited the property on 24<sup>th</sup> November 2020 in order to carry out an inspection.

## 02

### Copyright

#### 02.01

Copyright is retained by the writer. This is a report for the sole use of the client(s) named above. It may be copied and used by the client in connection with the above instruction only. Its reproduction or use in whole or in part by anyone else without the written consent of the writer is expressly forbidden. **The appended schedule of tree work, and the plan, may, without the written consent of the writer, be reproduced to contractors for the sole purpose of tendering.**

## 03

### Notes

#### 03.01

##### PLANS

S342-J2-P1 gives an approximate representation (in plan) of actual crown form, and is intended to indicate the relationship of neighbouring trees to each other, and should be read with the comments on crown shape and tree value in TREE DETAILS appended. The plan gives a quick reference assessment of value as per section 4, table 1, of BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'. Assessment of value in the TREE DETAILS table appended is, in accordance with this British Standard related mainly but not exclusively to the criterion of *visual value to the general public*. The Standard recommends a way of classifying trees when assessing their potential value in relation to proposed development. Some surveys may not include any trees of one or more categories. Table 1 suggests categories 'U', 'C', 'B' and 'A', in ascending merit. 'U' (**RED crown outline on plan**) category trees are dangerous \ low value trees that could require removal for safety or arboricultural reasons. 'C' (**GREY or black/uncoloured crown outline on plan**) category trees are of no particular merit, but in adequate condition for retention. 'A' category trees (**GREEN crown outline on plan**) are trees of high vitality or good form, or of particular visual importance: 'B' (**BLUE crown outline on plan**) category are good trees but may be of slightly poorer form or be not sited as importantly as 'A' category trees. See TREE DETAILS appended. Category Assessment appears in column 10. This standard also provides a way of determining an area (see TREE DETAILS column 7) – the **RPA** – root protection area – around the trunk of the tree in which protective measures should be used in order to prevent significant damage to trees. There are various ways of achieving this. A simple way is to use exclusion fencing, but other methods have been shown by established use to be very effective.

### **03.02**

S342-J2-P2 shows proposed retained trees and is colour-coded to indicate where arboricentric methods are proposed during the construction process.

## **04**

### **Sources and Documents**

Ground level inspection.

Supplied plans:

Vivid Green drg. no.: 21225-01

## **05**

### **Appraisal**

#### **05.01**

##### AMENITY / SCREENING BY TREES AND SHRUBS

Two London planes (1 and 2) are of some significant general local, semi-public amenity value, as they are visible from several adjoining properties.

#### **05.02**

##### TREES AND LAYOUT - POTENTIAL FOR CONFLICT WITH ROOTS

(Details appear in the tree detail table appended.) The figures in columns 5 and 6 in the **Tree data** table appended indicate the root protection area ('RPA' below), and typically the basic exclusion fence position. New materials and methods have been developed and continue to be developed that assist in promoting the successful retention of trees in association with constructed features. It should be noted that BS 5837:2012 (section 7.4.2) supports 'up and over' methods of construction where appropriate. The design principle of this method is outlined within Arboricultural Practice Note 12 (Through the Trees to Development, - a revision of APN 1, 1996, published originally by AAIS / Tree Advice Trust). This method has been used for many years on the recommendation of John Cromar's Arboricultural Co. Ltd. and has successfully allowed the retention of mature trees very close to construction activities.

#### **05.03**

RPA is an abbreviation used in BS5837:2012, signifying the *root protection area*. An assessment as per BS5837:2012 section 4.6.2 has been carried out in connection with the plotting of all RPAs of all trees. This section requires that site conditions such as location of structures, tree mechanics, etc., are taken into account in determining the likely position of roots.

#### **05.04**

##### ROOTS and DESIGN

SRP is an abbreviation for *static root plate*, (after Mattheck, 1991, etc.) a radial dimension derived from trunk diameter based on studies of wind-thrown trees and thus a guide to where *structurally* significant roots are likely to be located. The RPA is a guide to where *systemically* significant roots are likely to be located.

In this case a large void below the existing structure exists and the areas to left and right of the structure are bark-filled zones, retained by modern railway sleeper wall as per image below:



The contracted installer confirmed compliance with Method 5, viz:-

Re: 18 Adamson road rear outbuilding application




Luke Quinn <lukequinn@vividgreen.co.uk>

To ● John Cromar

Cc ○ Sally Whistance; ○ Dawn Kravitz

Retention Policy Default 4 Year Delete (4 years)

Expires

 You forwarded this message on 03/08/2021 15:39.

This message was sent with High importance.

If there are problems with how this message is displayed, click here to view it in a web browser.

Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

Hello John,

Thank you for the call back, we will be using galvanised screw piles, 1 x per m2 , each screw is 120mm diameter.

I trust all is on order and that is satisfactory for your report update.

If i can be of any further assistance please contact me,

Many thanks

Luke

Luke Quinn

Negligible encroachment on the RPA of the retained trees is thus entailed, as estimated in the table below:

Tree no.	Tree	RPA area (m <sup>2</sup> )	Area affected (m <sup>2</sup> )	% affected	Notes
1	London plane	313.91	0.50*	0.16%	Negligible encroachment: superstructure proposed suspended above original ground profile. *Estimated maximum screw pile area.
2	London plane	141.87	0.50*	0.35%	

Minor encroachment on the RPA is the case in respect of the existing structure, which is on unknown footings, albeit suspected to be either shallow and likely suspended above pre-existing landform.

In the writer's now extensive experience gained over more than a third of a century in arboriculture, the actually damaging construction operations are those that degrade or compact the ground surface within the RPA, for example by uncontrolled access by mechanical excavators, dumpers, etc.

In view of the above I conclude that special footings are needed from the arboricultural perspective. In this case all trees to be retained can be adequately protected by exclusion fencing and arboricentric methods as proposed below to reduce impacts on root systems of retained trees.

## 05.05

### PERCEPTION OF TREES

The proposed building is not continuously habited. In view of the above I conclude that shading by and perception of trees has been considered (as sections 5.3.4 and 5.6.2.6 of BS 5837:2012 recommend) and appear not to be negative factors.

## 05.06

### SUPERSTRUCTURE AND TREE APPRAISAL - TREE PRUNING

I note from the drawings supplied that no encroachment on the crowns of retained trees will occur. Tree surgery is proposed to be to British Standard 3998:2010 'Tree work – Recommendations'. A schedule for the use of a contractor appears below.

## 05.07

### TREE REMOVAL APPRAISAL and REPLACEMENT PLANTING

Please see section **08** for comments on the individual item (shrub) proposed for removal. Overall, appropriate replacement planting will play some role in providing for future local amenity. The British Geological Survey information for the area indicates that the underlying sub-soil is London clay. This places no significant constraint on species selection for tree and other planting. See plan for location:

A = Japanese maple (*Acer palmatum* 'Osakazuki') 2-2.5m 45L pot

It is typical for landscaping to be a reserved matter consequent to any grant of consent and for a full landscaping scheme to detail all planting, etc.

## 05.08

### PUBLISHED GUIDANCE IN RELATION TO TREES AND DEVELOPMENT

In conserving trees on development sites, expected best practice is as in B.S. 5837: 2012. Section 5.1.1 notes:

**“Certain trees are of such importance and sensitivity as to be major constraints on development or to justify its substantial modification: attempts to retain too many or unsuitable trees on a site can result in excessive pressure on the trees during demolition or construction work, or post-completion demands for their removal.”**

## 05.09

The above advice appears to have been considered in formulating proposals for development.

## 05.10

### CONCLUSION

**I conclude that the construction proposed, subject to precautionary measures as outlined above and as per the recommendations outlined below, will not be injurious to trees to be retained, nor will require any trees to be removed. Any shrub loss will be satisfactorily addressed by proposed planting.**

## 05.11

### SUPERVISION

Supervision by and regular communication with an arboriculturist is typically an essential element of site management where trees are present and to be retained. I propose that this takes place at key points in the construction process, and additionally whenever required by the architect or LPA. These key stages are as per **OVERVIEW** below.

## 05.12

Note to LPA: if the Authority is minded to grant consent, it is invited to consider the incorporation of the specific *order of implementation* of the arboricentric methods below into any Conditions applied. This measure is likely to maximise tree protection.



## 06

### TREE PROTECTION

#### 06.01

## OVERVIEW

It is highly important to tree health and vitality that construction activities are carried out strictly in accordance with the tree protection methods specified below. It is widely not understood that a **single** traverse of a root protection area by a mechanical excavator can cause SIGNIFICANT and PERMANENT (albeit temporarily invisible) damage to trees.

Any such machinery shall be subject to ARBORICENTRIC METHODS below.

Fences to protect trees shall be respected as TOTAL EXCLUSION fences. Hence, before any site activity the fence lines shall be complete.

Protective fencing and any temporary protection of ground surfaces will have to be removed in due course to allow finishing of landscaping, paving, etc., but this shall not take place until all need for vehicular access to the site has passed, and shall be agreed with arboriculturist / planners on site during progress of works.

Supervision by an arboriculturist appointed directly by the client (**not the main contractor**) should take place at key points in the construction process, and additionally whenever required by the architect, client, main contractor or LPA. These key stages are :

- 1) At site possession by contractor, outline all tree protection measures with site agent and resolve any issues arising.**
- 2) Ensure protective guide fencing is erected and completed as proposed.**
- 3) Supervise laying of temporary ground protection and sign off.**
- 4) Attend as required to supervise digging for and the laying of lighting cable ducts or services.**
- 5) Approve any removal or adjustment of tree protection and sign off.**

# PREPARATION / DEMOLITION

PLEASE READ WITH PLAN REFERENCE S342-J2-P2, APPENDED.

The Methods shall be implemented **in the order given** unless it is stated to the contrary.

## Method 1 : TREE WORK

Tree work shall be in accordance with the provided specification and good arboricultural practice, and to BS 3998:2010 'Tree Work - Recommendations'.

## Method 2 : ACCESS WAY DEFINITION

This method applies as per the layout shown on plans (**red dash-dot**



lines), and is to define the access route for foot operatives, to prevent straying into root protection areas other than for hand removal of existing garden room, and to minimise landscape and lawn disturbance. 100mm diameter tops fencing stakes placed at 4m intervals shall be driven at least 0.6m into ground. Plastic barrier material (see left) 1m in height shall be stapled to the stakes.

## Method 3 : GROUND SURFACE HANDLING and PROTECTION

This method shall apply in the zone hatched **blue** on plan. NO levels reduction shall take place. This includes no 'scraping up' with a mechanical excavator or otherwise. Any existing hard surfacing, any existing surface debris, light vegetation, etc., that lies within the zone shall be removed using hand tools only. A 2D geotextile membrane, such as 'Ekotex' shall be laid; 100mm of green-source woodchip; continuously abutted scaffold boards or manufactured boards so as to completely cover this area. This area shall be used for pedestrian access only.



# CONSTRUCTION

## Method 4 : SERVICE TRENCHES

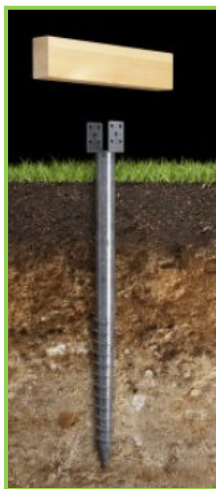
**N.B. -This applies to ALL services: Electricity, e.g. Existing services shall be utilised wherever possible.**

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

**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.**



## Method 5 : MICRO-PILE FOOTINGS FOR TIMBER STRUCTURES

**This method shall apply in the zones of green roundels on plan. The timber supporting structures shall be supported by micro-piles such as StopDigging proprietary type (see left) or similar micro-pile inserted with hand tools only. N.B. The precise location of piles is flexible. 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.**

**(All design subject to engineering approval, but used on other sites and known to be practicable and reliable).**

## 07

### **General**

If conflicts between any part of a tree and the building(s) arise in the course of development these can often be resolved quickly and at little cost if a qualified arboriculturist is consulted promptly. Lack of such care is often apparent quickly and decline and death of such trees can spoil design aims and can of course affect saleability, and reflect poorly on the construction and design personnel involved. Trees that have been the recipients of careful handling during construction add considerably to the appeal and value of the finished development.

---

Dated: 3rd August 2021

Signed:

A handwritten signature in black ink, appearing to read 'John Cromar', with a stylized flourish extending from the end.

John C. M. Cromar, Dip.Arb.(RFS) F.Arbor A.

01582 808020 / 07860 453072

## APPENDICES

### 08

#### Tree Data

Tree number	Tree type	Height	Stem diameters	Radius of RPA if circle (mm)	RPA (m <sup>2</sup> )	Comments	Life expectancy (years)	Assessed BS5837 value category
1	London plane	20	833	9996	313.9	Pollarded circa 2014 to 16 m in height	40+	B2
2	London plane	20	560	6720	141.9	Pollarded circa 2014 to 16 m in height	40+	B2
S3	pyracantha	5	<90, <50, <50, <50, <50	1614	8.2	Shrub	20+	C1

In all cases, in the absence of negative comment on health/vitality and structure, normal physiological and structural condition should be considered to apply.

## 09 Schedule

### ***Trees at 18 Adamson Road, London, NW3 3HR***

Please read in conjunction with plan S342-J2-P2. Trees outside the curtilage of the property may be included. Boundaries where marked should always be treated as notional, and no statement either implied or explicit as to the ownership of trees should be taken as definitive or precise.

Tree number	Tree type	Height	Stem diameters	Comments
S3	pyracantha	5	<90, <50, <50, <50, <50	Remove; grub out or treat stumps to prevent growth.

#### NOTES:

**This schedule notifies the LPA, where such notification is required, of intention to prune or remove trees in accordance with TCP Act 1990 Section 211.** 42 days after notification should be allowed before proceeding with the work, during which time (and after) the LPA may place a Tree Preservation Order on the tree(s), thus requiring a formal application for any works to living wood.

All tree work should be carried out to BS 3998 : 2010 'Tree Work - Recommendations'. The Wildlife and Countryside Act 1981 protects with certain exceptions all birds and their nests. It is an offence to destroy such nests or take or injure such birds in the course of tree works operations. If a tree is a bat-roost, a licence to work on the tree must first be obtained from the relevant Statutory Nature Conservation Organization (in England : Natural England 0845 601 4523.) Acting without a licence is likely to be justifiable only in acute emergencies threatening human life and where all other legally available option such as footpath diversion, fencing and warning signs cannot be applied.

## **10**

### **Plans**

S342-J2-P1 v1

S342-J2-P2 v1



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KEY TO COLOURS /  
LINETYPES USED IN  
RELATION TO TREES

GREEN - High Value (A)  
BLUE - Moderate Value (B)  
BLACK - Low Value (C)  
RED - Remove/Very short  
life expectancy (U)  
ORANGE SHAPES: Root  
Protection Areas

Spread and trunk colours  
correspond directly to  
those used in British  
Standard 5837:2012,  
Table 2.

TOOTHED LINE: Tree spread line

NOTES

Do not use for setting out purposes.  
All dimensions to be checked on site.

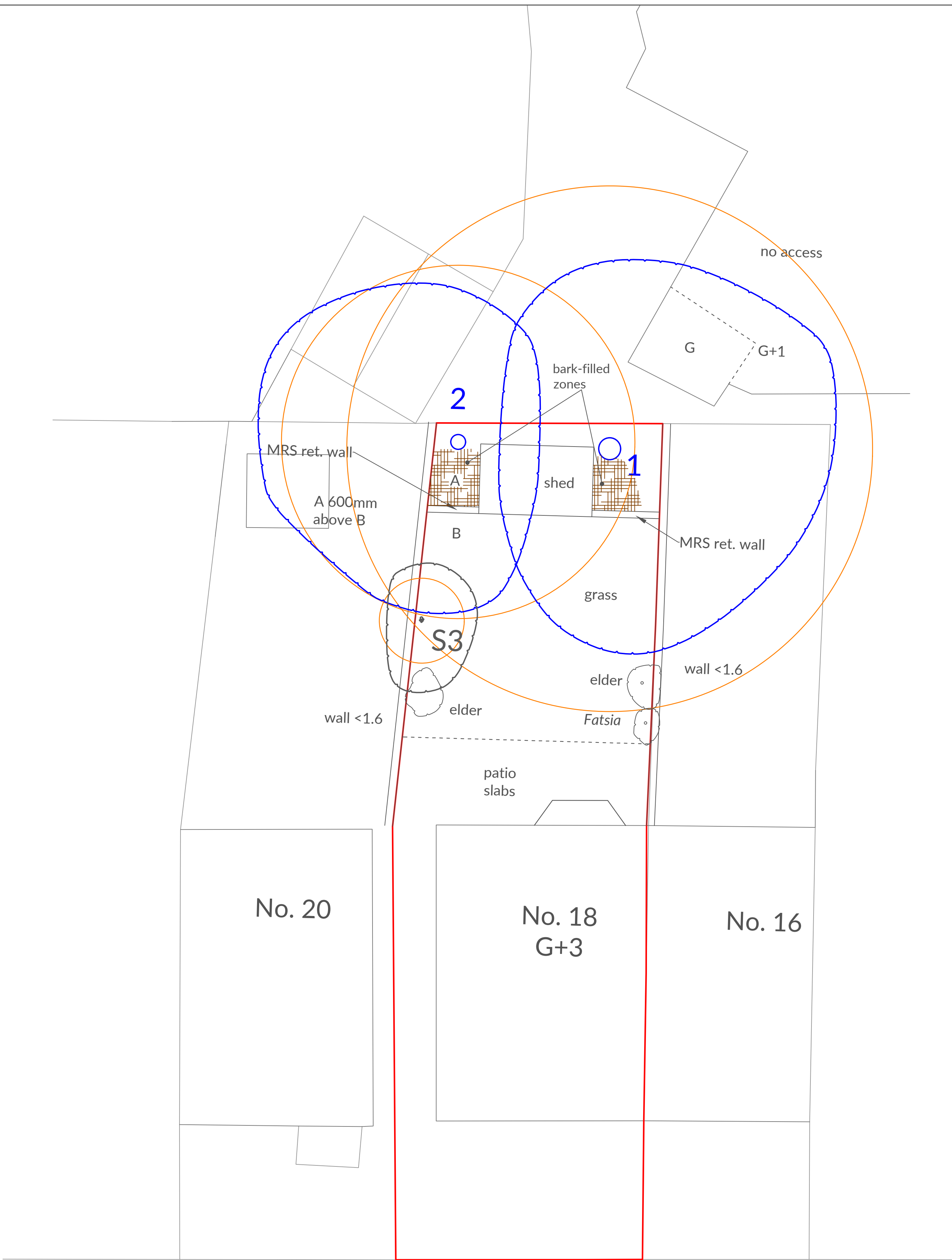
DRG. NAME  
TREE VALUE ASSESSMENT AS PER  
BS 5837:2012 & ROOT PROTECTION  
AREAS

TEXT  
FOR FULL DETAILS OF TREE VALUE  
PLEASE SEE REPORT

BASED ON  
LOCATION PLAN SUPPLIED and JCAC  
SITE SURVEY

SITE ADDRESS  
18 Adamson Road, London, NW3 3HR

DRG. REF. S342-J2-P1	REV. NO. v1
SCALE & SIZE 1:100 @ A1	DATE 3-Aug-21
0	5



Adamson Road



**Method 1 : TREE WORK**  
Tree work shall be in accordance with the provided specification and good arboricultural practice, and to BS 3998:2010 'Tree Work - Recommendations'.

This method applies as per the layout shown on plans (**red dash-dot** lines), and is to define the access route for foot operatives, to prevent straying into root protection areas other than for hand removal of existing garden room, and to minimise landscape and lawn disturbance. 100mm diameter tops fencing stakes placed at 4m intervals shall be driven at least 0.6m into ground. Plastic barrier material (see report) 1m in height shall be stapled to the stakes.

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**N.B. -This applies to ALL services: Electricity, e.g. Existing services shall be utilised wherever possible.**

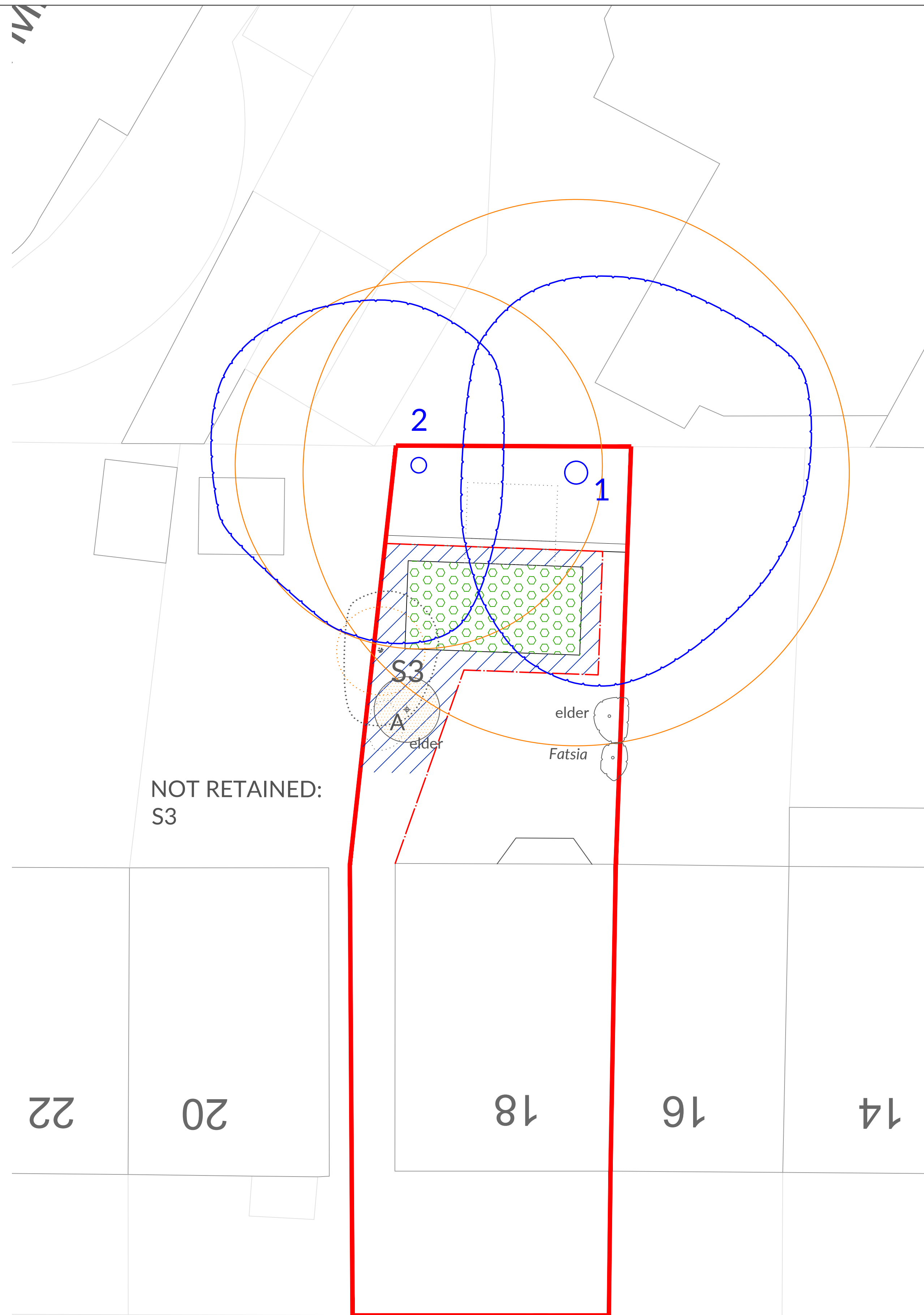
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OR

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.

This method shall apply in the zones of **green roundels** on plan. The timber supporting structures shall be supported by micro-piles such as StopDigging proprietary type (see report) or similar micro-pile inserted with hand tools only. N.B. The precise location of piles is flexible. 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.

NOT RETAINED:  
S3



# ADAMSON ROA



THE OLD SCHOOL,  
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- GREEN - High Value (A)
- BLUE - Moderate Value (B)
- BLACK - Low Value (C)
- RED - Remove/Very short life expectancy (U)
- ORANGE SHAPES: Root Protection Areas

**Spread and trunk colours correspond directly to those used in British Standard 5837:2012, Table 2.**

Do not use for setting out purposes.  
All dimensions to be checked on site.

TEXT  
FOR FULL METHOD DETAILS  
PLEASE SEE REPORT

SITE ADDRESS  
18 Adamson Road, London, NW3 3HR

DRG. REF.	REV. NO.
S342-J2-P2	v2
SCALE & SIZE	DATE
1:100 @ A1	3-Aug-21
0	5