



- ARBORICULTURAL METHOD STATEMENT**
- Important note:** It is essential that this method statement, the tree protection plan and any other documents that relate to tree protection matters are passed to the project manager prior to the commencement of any works on site. All personnel involved in this project should be made aware of the content of these documents and the importance of implementing and maintaining a robust policy towards the protection of retained trees. Failure to adhere to approved tree protection measures is likely to result in a breach of planning conditions.
- 1.0 Introduction**
- 1.1 This Arboricultural Method Statement (AMS) and the accompanying Tree Protection Plan (TPP) are prepared following the principles set out within British Standard 5837:2012 'Trees in relation to design, demolition and construction – Recommendations' [BS5837] and current best practice.
- 1.2 These documents are based on the following drawings prepared by Charles Doe Architects, dated March 2017:
- Lower Ground Floor Plan Options, drawing number 1435_SK-04
 - Upper Ground Floor Plan, drawing number 1435_SK-05
- 1.3 A site visit to inspect existing trees was carried out by N R Beardmore F.Arbor.A on 7 February 2017.
- 1.4 It is understood that the site lies within a Conservation Area but none of the trees are subject to a Tree Preservation Order.
- 2.0 Proposed Development**
- 2.1 The proposed development involves the demolition of an existing wall adjacent to the north elevation that separates the front and rear gardens and the construction of an attached garage with a lower ground floor below. The lower ground floor will comprise of living accommodation and will include a sunken patio area to the rear.
- 2.2 No information has been provided regarding any new underground services, such as a soak-way, that may be required.
- 3.0 Existing Trees**
- 3.1 Seven individual trees and one tree group were recorded during the survey. The positions of the trees are shown on the TPP together a schedule that provides brief details of their dimensions and condition. Each tree or tree group is assigned a retention category which has been assessed following the criteria provided within BS5837 Table 1. The tree schedule also provides preliminary recommendations for remedial works which should be considered irrespective of the current development proposals.
- 3.2 For those trees that are worthy of retention, BS5837 provides guidance relating to the ground area that should, ideally, be left undisturbed around them to ensure that they are safeguarded from the effects of construction. This 'root protection area' [RPA] is derived from a calculation based primarily on the stem diameter of the tree. The recommended RPA for each tree is detailed within the tree schedule and shown on the TPP as red dashed polygons. Where existing site conditions may have influenced the disposition of tree roots the RPA may be offset (but not reduced in area) to ensure adequate protection for trees is maintained.
- 4.0 Impact of Proposed Development**
- 4.1 The proposed development requires the removal of the sycamore, T5, the two small cherry trees that form G4 and an insignificant laurel, T2. In addition, a small amount of pruning to raise the canopy of T1 over the driveway will be required to ensure that it is not damaged during the movement of materials in and out of the site during construction.
- 4.2 Whilst the sycamore is a moderate quality tree with no major defects it is awkwardly placed on the boundary between two residential properties with the boundary fence constructed around it. Its proximity to both houses raises the need for regular pruning to contain its size. The sycamore does provide some amenity however it is obscured to some extent by other trees, to the front and rear of the site. There is scope for a replacement tree to be planted to the rear of the site where there will be less conflict with the nearby properties.
- 4.3 The extension will lie entirely outside the RPAs of all trees to be retained trees which can be safeguarded from the effects of construction activity by the use of suitable tree protection measures during site clearance and construction.
- 5.0 Arboricultural Supervision**
- 5.1 The successful integration of any development within or adjacent to existing trees relies on those trees being properly protected throughout all periods of the development process, from site clearance or demolition through to post development landscaping and completion. To ensure that this is achieved, BS5837 advocates the retention of an appropriately qualified Arboriculturist to oversee all matters relating to trees for the duration of the construction period.
- 5.2 In this case, where the proposed development is quite modest and, provided that tree protection measures are installed and maintained, there is minimal risk to trees and intensive arboricultural supervision should not be required.
- 5.3 As part of this process the Arboriculturist shall attend a pre-commencement site meeting with the Project Manager and the Site Manager prior to ANY works on site, including demolition or site clearance are undertaken. At this meeting the programme of works will be reviewed and an outline schedule of visits by the Arboriculturist will be determined and agreed. Site visits by the Arboriculturist should coincide with tree-related key stages of the development and in particular:
- Any preliminary arboricultural works or site clearance
 - The installation of tree protection measures
 - Any works within Root Protection Areas such as the removal of hard surfaces or installation of underground services or new hard surfaces.
 - Any change in site or project manager personnel
- 5.4 The schedule may be subject to later review and may be influenced by unforeseen events or where there has been a failure in the maintenance of approved tree protection measures. The LPA shall be informed by phone, email or in writing of any changes, variations or amendments.

Schedule of trees

No	Species	No of Stems	SD* (mm)	Hgt	N	E	S	W	CRH	Age	PC	Comments	Life Exp	BS Cat	Sub Cat	RPA m2	RPA Rad (m)
T1	Ash	1	300	11	5	4	6	4	3	EM	Fair	Off-site. Lower stem leans 10 degrees east	20+	C	1,2	41	3.6
T2	Laurel	1	100	5	3	2.5	2.5	2.5	1.75	SM	Fair	Insignificant	20+	C	1	5	1.2
T3	Magnolia	1	100	5	2.5	2.5	2.5	2.5	1.75	SM	Good		20+	C	1	5	1.2
G4	Cherry	1	140	6	2	2	2	2	2	SM	Fair	Two trees 1.5m apart. Reduced within last 2 years. Insignificant	20+	C	2	9	1.7
T5	Sycamore	1	650	17	5	6	5	5	6	M	Fair	On boundary, stem leans 5 degrees north. Reduced within last 2 years. Multiple old pruning wounds, all appear less than 15cm diameter	20+	B	1,2	191	7.8
T6	Lime	1	580	16	6	4	4	4	6	M	Fair	Topped at 9m with approximately 7m of regrowth	40+	B	1,2	152	7.0
T7	Lime	1	560	16	2	4.5	6	4	6	M	Fair	Topped at 9m with approximately 7m of regrowth. Lower stem leans 15 degrees south	40+	B	1,2	142	6.7
T8	Beech	1	460	12	1	4	7	5	3	M	Poor	Stem is grafted, possibly purple variety. Dominated by adjacent lime.	20+	C	2	96	5.5

All dimensions in metres unless otherwise stated. Dimensions of trees growing outside the site may be estimated. Root protection areas (RPA) calculated following guidance provided in BS5837:2012. *Stem diameters of multi-stem trees are calculated in accordance with BS5837 section 4.6. Age categories: Y=Young, SM=Semi-Mature, EM=Early Mature, M=Mature, LM=Late Mature, V=Veteran. PC=Physiological Condition: D=Dead, P=Poor, F=Fair, G=Good.

- 5.5 Particular attention must be given to any works of any nature that have to be undertaken within CEZs. These must be carried out under the direct supervision of the Arboriculturist.
- 5.6 The Arboriculturist should be available to attend any site meetings at the request of the LPA.
- 5.7 In addition, the Arboriculturist should be available in the event that any unexpected conflicts with trees arise.
- 5.8 The Arboriculturist should keep a written log of the results of all site inspections and note any changes to the schedule of site visits. Any contraventions of the tree protection measures or other incident that may prejudice the well-being of retained trees shall be brought to the attention of the site manager in the form of a written report. Copies of the inspection log and any contravention reports will be available at the site for inspection by the Local Planning Authority at all times.
- 6.0 Facilitation Tree Works**
- 6.1 Prior to the commencement of any demolition or construction works, trees T2, G4 and T5 shall be removed.
- 6.2 In addition, that part of the canopy of T1 that overhangs the drive shall be raised to provide a ground clearance of approximately 5.5m. This shall be achieved by removing branches of 5cm or less.
- 6.3 All tree works shall be carried out in accordance with BS3998:2010 'Tree works – Recommendations' and by an appropriately qualified tree contractor.
- 6.4 No other tree works shall be undertaken without further consultation with the local planning authority.
- 7.0 Tree Protection Barriers**
- 7.1 To safeguard the trees adjacent to the drive and those in the rear garden, vertical protective barriers shall be erected in the positions indicated on the Tree Protection Plan (TPP).
- 7.2 All barriers shall be formed from a system of 'heras' style weldmesh panels securely fixed to scaffold poles driven firmly into the ground and braced as illustrated on the TPP. Note this specification is modified from that shown in BS5837 Figure 2 and is suitable only where there will be very limited access for vehicles or machinery.
- 7.3 In addition, robust ground protection boards shall be installed to reinforce the existing drive as indicated by the purple striped block on the TPP. Ground protection boards shall be of sufficient strength and rigidity to bear the weight of any expected loads without causing disturbance to the driveway surface or compaction of the underlying soils.
- 7.4 Tree protection barriers shall be installed prior to the commencement of any site clearance or construction works.
- 7.5 These protective barriers demarcate the 'construction exclusion zone' [CEZ], the area of ground around trees which is to be protected from unnecessary excavation, surface compaction or other disturbance that may prejudice tree retention with the exception of those works that are previously agreed and carried out in an approved manner.
- 7.6 All tree protection measures shall remain in place until completion of the main construction works and only removed to facilitate post-development landscaping.
- 8.0 Site Access and Storage of Materials**
- 8.1 All access to the site and the delivery of materials will be via the existing driveway.
- 8.2 There is scope for the temporary storage of materials in the driveway directly in front of the house.
- 8.3 No construction machinery shall enter and no materials shall be stored within the construction exclusion zone to the rear of the house as indicated on the TPP.
- 8.4 Under no circumstances shall machinery operate from or traverse across unprotected soils within RPAs.
- 8.5 Great care shall be taken to ensure that the booms of excavators and all machinery used in the delivery or movement of materials do not damage the crowns or stems of retained trees. All activities close to trees shall be carefully planned and controlled.
- 8.6 Great care shall be taken to prevent the spillage of toxic chemicals such as cement and oils in any part of the site so that any future planting is not compromised by substances that may prejudice their establishment. All such substances shall be stored (and mixed where necessary) on robust plastic sheeting. Contaminated water from the washing of tools and equipment shall not be permitted to leach into the soils in or adjacent to the RPA or any area designated for future planting.
- 9.0 Underground Services**
- 9.1 In the event that a new soak-away is required, there is ample scope for this to be installed outside the RPAs of all retained trees.
- 9.2 Where the routing of services through RPAs is unavoidable, all excavations shall be carried out by hand. All works shall be in accordance with National Joint Utilities Group Guidelines (2007) Volume 4 'Guidance for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees' [NJUG].
- 10.0 Replacement Tree Planting**
- 10.1 As part of any post-development landscaping it is recommended that a replacement tree is planted in the position shown on the TPP. Suitable species would include field maple (*Acer campestre* 'Elsrijk'), sweet gum (*Liquidambar styraciflua* 'Lane Roberts') and river birch (*Betula nigra*). The tree should be container grown 14-16cm girth extra heavy standard.

- Key**
- T7 Tree to be retained, colour coded in according to retention category as defined in BS5837 Table 1.
 - Notional Root protection area, derived from guidance within BS5837, where RPAs have been modified, original RPAs are shown dashed grey
 - Structures to be demolished
 - Footprint of proposed buildings and other structures
 - Position of protective barriers
 - Distance between protective barriers and tree stems or other feature
 - Areas where ground protection is required
 - Construction access route
 - Notes
 - Areas of particular care refer to Arboricultural Method Statement
 - Suggested position of replacement tree

- BS 5837 Tree Categorisation (from BS5837: 2012, Table 1)**
- Category U:** Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years
 - Category A:** Trees of high quality with an estimated life expectancy of at least 40 years
 - Category B:** Trees of moderate quality with an estimated life expectancy of at least 20 years
 - Category C:** Trees of low quality with an estimated life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

Site:
**5 Oval Road
London
NW1 7EA**

Title:
**Tree Protection Plan and
Arboricultural Method Statement**

Please check all dimensions on site and notify us of any discrepancies. This drawing was prepared in colour, do not rely on monochrome copies.
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Scale: 0m 1m 2m 3m 4m 5m
1: 100 @ A1

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