



ARBORICULTURAL PLANNING CONSULTANTS

17 CROSS ROAD  
TADWORTH  
SURREY KT20 5ST

Tel: (01737) 813058  
E-mail: [sja@sjatrees.co.uk](mailto:sja@sjatrees.co.uk)

Directors: Simon R. M. Jones Dip. Arb. (RFS), FArborA.,  
RCArborA. (Managing)  
Frank P. S. Spooner BSc (Hons), MArborA, TechCert  
(ArborA), RCArborA.

# Arboricultural Implications Report

## Proposed re-development at

### Coral Day Nursery

### Wootton Street

### Lambeth



**December 2020**

Ref. SJA air 19270-01b

## SUMMARY

S1. On the basis of our assessment, we conclude that the arboricultural impact of this scheme is of low magnitude, as defined according to the categories set out in **Table 1** of this report.

S2. Our assessment of the impacts of the proposals on the existing trees concludes that no mature trees, no category 'A' or 'B' trees, and no trees of high landscape or biodiversity value are to be removed. None of the main arboricultural features of the site are to be removed. The proposed removal of two small individual trees will represent no alteration to the main arboricultural features of the site, only an insignificant alteration to the overall arboricultural character of the site and will not have an adverse impact on the arboricultural character and appearance of the local landscape.

S3. The proposed pruning of the tree of heaven no. 5 is to provide temporary clearance to construct the ground floor; once completed the canopy will be able to regrow to similar dimensions, and will therefore not detract from the long-term appearance of the tree or its contribution to the local area.

S4. The incursions into the Root Protection Areas of trees to be retained are minor, and subject to implementation of the measures recommended on the Tree Protection Plan and set out at **Appendix 1**, no significant or long-term damage to their root systems or rooting environments will occur.

S5. None of the proposed apartments or amenity space are likely to be shaded by retained trees to the extent that this will interfere with their reasonable use or enjoyment by incoming occupiers, which might otherwise lead to pressure on the Local Planning Authority to permit felling or severe pruning that it could not reasonably resist.

S6. As the proposed development will not result in the removal of trees which are of significant amenity, historic or ecological/habitat value, ensures retained trees are appropriately protected from potential development pressures, and successfully integrates the retained and replacement trees into the proposed scheme, it complies with Policy Q10 of the London Borough Lambeth Council adopted Local Plan (September 2015).

S7. As the proposed landscape scheme incorporates new trees, it ensures that there will be a net gain of canopy volume and secures the Borough's tree stock for the future. As such, the development complies with Policy Q10 of the Draft Revised Lambeth Local Plan Proposed Submission Version (January 2020)

## CONTENTS

1. INTRODUCTION AND BACKGROUND INFORMATION .....	5
2. METHODOLOGY.....	8
3. THE TREES.....	17
4. TREES TO BE REMOVED .....	18
5. TREES TO BE PRUNED.....	20
6. ROOT PROTECTION AREA INCURSIONS.....	22
7. RELATIONSHIP OF RETAINED TREES TO NEW DWELLINGS.....	25
8. CONCLUSIONS.....	26

## APPENDICES

1. Outline arboricultural method statement
2. Tree survey schedule (SJA tss 19270-01)
3. Tree protection plan (SJA TPP 19270-042b)

© Simon Jones Associates Ltd. 2020

All rights in this document are reserved. No part of it may be amended or altered, reproduced or transmitted, in any form or by any means, or stored in any retrieval system of any nature, without our written permission. Its content and format are for the exclusive use of Homes for Lambeth in dealing with this site. It may not be sold, lent, hired out or divulged to any third party not directly involved with this site without the written consent of Simon Jones Associates Ltd. However, it may be reproduced, without amendment, by the Local Planning Authority (LPA), and be posted on the LPA website, to assist in consideration of an application for the proposed development referred to in Section 1.

# 1. INTRODUCTION AND BACKGROUND INFORMATION

## 1.1. Instructions

1.1.1. SJAtrees has been instructed by Homes for Lambeth to visit a site at Coral Day Nursery, Wootton Street, Lambeth and to survey the trees growing on or immediately adjacent to this site.

1.1.2. We are further asked to identify which trees are worthy of retention within a proposed re-development of the site, to assess the implications of development on these specimens, and to advise how they might be protected from unacceptable damage during demolition and construction.

## 1.2. Scope of report

1.2.1. This report and its appendices reflect the scope of our instructions, as set out above. It is intended to accompany a planning application to be submitted to London Borough of Lambeth (LBL), and complies with local validation requirement no. 48 (Local Applications Requirements, July 2016), and with the recommendations of British Standard BS 5837:2012, *Trees in relation to design, demolition and construction – Recommendations* ('BS 5837').

1.2.2. The proposed development seeks demolition of the existing vacant building and comprises the erection of a mixed-use block containing ground floor 379 sqm of D1 use, and residential at upper levels. The development will rise to 9 storeys above the ground floor with 36 new residential units above. The proposed development will be 10 storeys in total, and will comprise a mix of 1 bed, 2 beds, and 3 beds. The proposed development will provide 50% of the residential units as affordable housing on a habitable room basis.

1.2.3. This report summarises and sets out the main conclusions of the baseline data collected during the tree survey and identifies those trees or groups of trees whose removal could result in a significant adverse impact on the character or appearance of the local area (Section 3). It then details and assesses the impacts of the proposed development individual trees and groups of trees, including those to be removed (Section 4), those to be pruned (Section 5), those which might incur root damage that

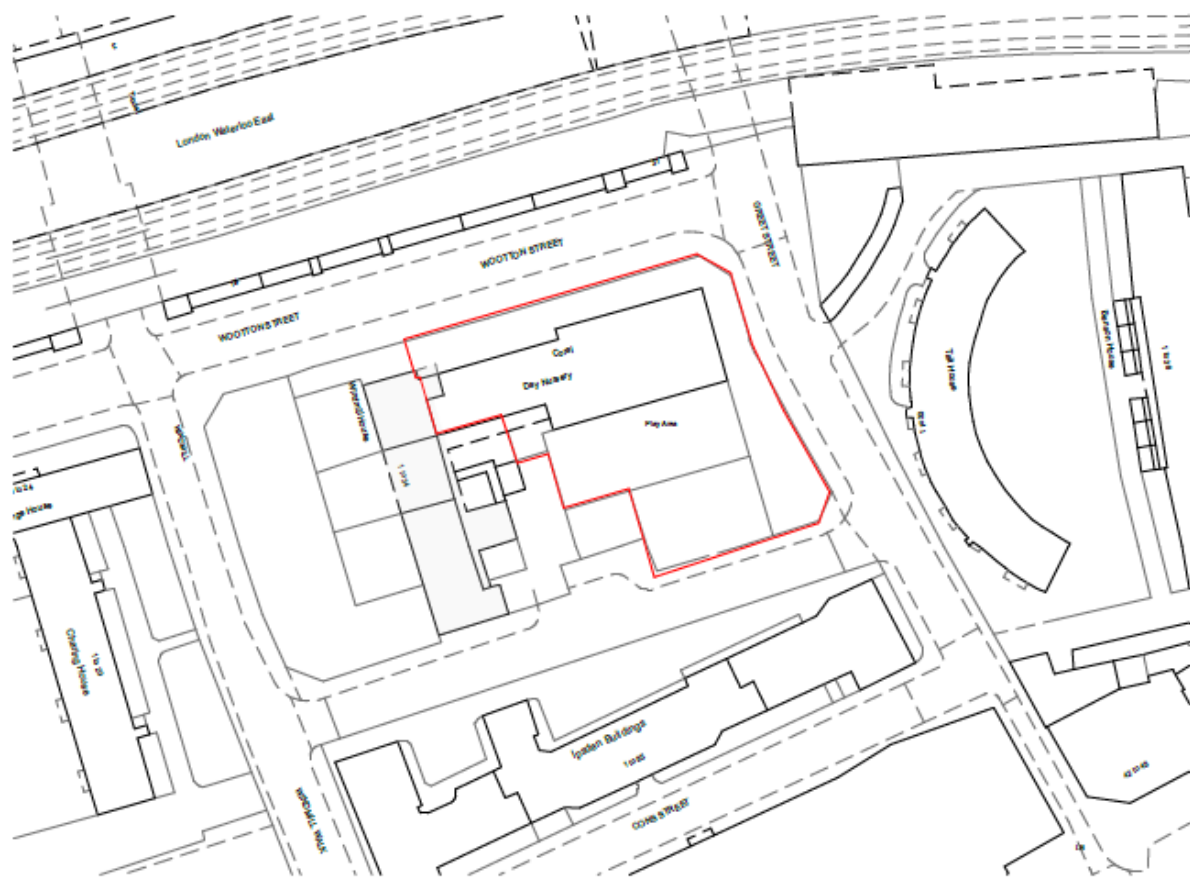
might threaten their viability (Section 6) and those that might become under pressure for removal after occupation as a result of shading (Section 7). A summary and conclusions, with regard to local planning policy, are presented in Section 8.

### 1.3. Site inspection

1.3.1. A site visit and tree inspection were undertaken by Finn Cullerne of SJAtrees on 13<sup>th</sup> November 2019 and the trees were reviewed by Simon Jones of SJAtrees on the 24<sup>th</sup> January 2020. On both occasions, weather conditions were clear, dry and bright. Deciduous trees were in partial leaf in November, and out of leaf in January.

### 1.4. Site description

1.4.1. The site is located on the south side of Wootton Street, adjacent to Windmill House, as shown at **Figure 1** below, and currently it contains a single-storey nursery building and associated play area, plus a car park.



**Figure 1: Site location plan**

## **1.5. Soil type**

1.5.1. The British Geological Survey Solid and Drift Geology map of the area indicates the site lies on superficial deposits of Alluvium (Clay, Silt, Sand and Peat) of above a bedrock of London clay.

1.5.2. Whilst no site investigation or soil analysis has been undertaken, the British Geological Survey map suggests that that the soil is likely to be susceptible to compaction.

## **1.6. Statutory controls**

1.6.1. At the time of writing none of these trees are covered by a tree preservation order (TPO).

1.6.2. The site is not within a conservation area, and therefore there are no constraints relating to existing trees in this regard.

## **1.7. Non-statutory designations**

1.7.1. There are no woodlands within or abutting the site that are classified as 'Ancient'. Ancient woodland is defined as "any area that's been wooded continuously since at least 1600 AD" and is considered an important and irreplaceable habitat.

1.7.2. There are no trees within or abutting the site that can be classified as 'Ancient' or 'Veteran'. Ancient and veteran trees are also considered to be irreplaceable habitats, and contribute to a site's biodiversity, cultural and heritage value, and the National Planning Policy Framework (see below) states that development resulting in the loss or deterioration of ancient or veteran trees should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.

## 2. METHODOLOGY

### 2.1. National policy context

2.1.1. Under Section 197 of the Town and Country Planning Act 1990, local authorities have a statutory duty to consider the protection and planting of trees when considering planning applications. The effects of proposed development on trees are therefore a material consideration, and this is normally reflected in local planning policies.

2.1.2. The National Planning Policy Framework (NPPF) (June 2019) sets out the Government's planning policies for England and how these should be applied in both plan and decision-making. Paragraph 2 makes it clear that the NPPF is itself a material consideration in the determination of planning application. Paragraph 11 states that **"Plans and decisions should apply a presumption in favour of sustainable development."**

2.1.3. In paragraph 127, within Section 12 "Achieving well-designed places" the NPPF states: **"Planning policies and decisions should ensure that developments:**

**a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;**

**b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;**

**c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);**

**d) establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;**

**e) optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and**



**f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.”**

2.1.4. In paragraph 170, within Section 15 “Conserving and enhancing the natural environment” the NPPF states: **“Planning policies and decisions should contribute to and enhance the natural and local environment by:**

**a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);**

**b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland...”**

2.1.5. In paragraph 175 the NPPF states: **“When determining planning applications, local planning authorities should apply the following principles:**

**c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists....”**

## **2.2. Regional policy context**

2.2.1. The London Plan Policy 7.21 Trees and woodlands states:

**“Trees and woodlands should be protected, maintained, and enhanced, following the guidance of the London Tree and Woodland Framework (or any successor strategy). In collaboration with the Forestry Commission the Mayor has produced supplementary guidance on Tree Strategies to guide each borough’s production of a Tree Strategy covering the audit, protection, planting and management of trees and woodland. This should be linked to a green infrastructure strategy.”**

**“Existing trees of value should be retained and any loss as the result of development should be replaced following the principle of ‘right place, right tree’<sup>1</sup>. Wherever appropriate, the planting of additional trees should be included in new developments, particularly large-canopied species.”**

2.2.2. Policy G7 Trees and Woodlands of the draft London Plan – ‘Intend to Publish’ version – December 2019, states:

**“A - London’s urban forest and woodlands should be protected and maintained, and new trees and woodlands should be planted in appropriate locations in order to increase the extent of London’s urban forest – the area of London under the canopy of trees.**

**B - In their Development Plans, boroughs should**

**1) protect ‘veteran’ trees and ancient woodland where these are not already part of a protected site**

**C - Development proposals should ensure that, wherever possible, existing trees of value are retained.<sup>144</sup> If planning permission is granted that necessitates the removal of trees, there should be adequate replacement based on the existing value of the benefits of the trees removed, determined by, for example, i-tree or CAVAT or other appropriate valuation system. The planting of additional trees should generally be included in new developments – particularly large-canopied species which provide a wider range of benefits because of the larger surface area of their canopy.**

<sup>144</sup> **Category A, B and lesser category trees where these are considered by the local planning authority to be of importance to amenity and biodiversity, as defined by BS 5837:2012”**

## **2.3. Local policy context**

2.3.1. Local planning policies are contained in the Lambeth Local Plan, adopted September 2015.

2.3.2. Policy Q10 of the Local Plan states:

**“(a) Proposals for new development will be required to take particular account of existing trees on the site and on adjoining land.**

**(b) Development will not be permitted that would result in the loss of trees of significant amenity, historic or ecological/habitat conservation value, or give rise to a threat, immediate or long term, to the continued wellbeing of such trees.**

**(c) Where trees are located within a development site, the proposal will be supported only where it has been demonstrated that:**

**(i) trees of significant amenity, historic or ecological/habitat conservation value have been retained as part of the site layout;**

**(ii) the retained trees can be satisfactorily protected from construction impacts and site works during the development stage; and**

**(iii) the retained trees have been positively integrated, on a sustainable basis, as part of the site layout...”**

2.3.3. Policy Q10 of the Draft Revised Lambeth Local Plan Proposed Submission Version (January 2020) contains much the same wording as the 2015 version, except for sub-section b), which now also specifies veteran trees, sub-section f) which has been extended, and sub-section g) which has been added:

**“a) Proposals for new development will be required to take particular account of existing trees on the site and on adjoining land.**

**b) Development will not be permitted that would result in the loss of trees of significant amenity, historic or ecological/habitat conservation value (including veteran trees), or give rise to a threat, immediate or long term, to the continued wellbeing of such trees.**

**c) Where trees are located within a development site, the proposal will be supported only where it has been demonstrated that:**

**i) trees of significant amenity, historic or ecological/habitat conservation value have been retained as part of the site layout;**

**ii) the retained trees can be satisfactorily protected from construction impacts and site works during the development stage; and**

**iii) the retained trees have been positively integrated, on a sustainable basis, as part of the site layout.**

**d) The council will continue to protect trees in new development by making tree preservation orders and/or by the use of appropriate planning conditions.**

**e) The council will continue to protect trees, by the use of tree preservation orders, that contribute to the amenity of an area or that are under threat from inappropriate pruning works or removal.**

f) Wherever appropriate, the planting of additional trees should be included in new developments in a coordinated way to maximise the green infrastructure network.

g) Where it is imperative to remove trees, adequate replacement planting will be secured. The amount and nature of the replacement planting will be based on the existing value of the benefits of the trees removed, calculated using cost/benefit tools such as i-tree or CAVAT as set out in London Plan policy G7 C.”

## 2.4. Tree survey and baseline information

2.4.1. We surveyed individual trees with trunk diameters of 75mm and above<sup>1</sup>, trees with trunk diameters of 150mm and above growing in groups or woodlands, and shrub masses, hedges and hedgerows<sup>2</sup> growing within or immediately adjacent to the site; and recorded their locations, species, dimensions, ages, condition, and visual importance in accordance with BS 5837 recommendations.

2.4.2. The baseline information collected during the site survey was recorded on site using a hand-held digital device. This information was then imported into an Excel spreadsheet and used to produce the tree survey schedule at **Appendix 2**. The numbers assigned to the trees in the tree survey schedule correspond with those shown on the appended tree protection plan.

2.4.3. We surveyed trees as groups where they have grown together to form cohesive arboricultural features, either aerodynamically (trees that provide companion shelter), visually (e.g. avenues or screens) or culturally<sup>3</sup>. However, where it might be necessary to differentiate between specific trees within these groups, we also surveyed these individually.

2.4.4. We inspected the trees from the ground only, aided by binoculars as appropriate, but did not climb them. We took no samples of wood, roots or fungi. We did not undertake a full hazard or risk assessment of the trees, and therefore can give no guarantee, either expressed or implied, of their safety or stability.

---

<sup>1</sup> BS 5837, paragraph 4.2.4 b), recommends that all trees over 75mm stem diameter should be included in a pre-planning land and tree survey.

<sup>2</sup> Ibid, 4.4.2.7

<sup>3</sup> Ibid, 4.4.2.3

2.4.5. We have categorised the trees in accordance with BS 5837, and details of the criteria used for this process can be found in the notes that accompany the tree survey schedule.

2.4.6. We have applied this methodology in line with the NPPF's presumption in favour of sustainable development, giving greater weighting to the contribution of a tree to the character and appearance of the local landscape, to amenity, or to biodiversity, where its removal might have a significant adverse impact on these factors.

## 2.5. Tree constraints

2.5.1. In line with the NPPF's presumption in favour of sustainable development, we have assessed whether any trees should be retained in the context of a proposed re-development. To do this, we identified the main arboricultural features within or immediately adjacent to the site, whose removal we considered could have an adverse impact on the character and appearance of the local landscape, on amenity or on biodiversity.

2.5.2. Whilst BS 5837 states that trees in categories 'A', 'B' and 'C' are all a material consideration in the development process, the retention of category 'C' trees, being of low quality or of only limited or short-term potential, will not normally be considered necessary should they impose a significant constraint on development.

2.5.3. Furthermore, BS 5837 makes it clear that young trees, even those of good form and vitality, which have the potential to develop into quality specimens when mature **"need not necessarily be a significant constraint on the site's potential"**<sup>4</sup>.

2.5.4. Moreover, BS 5837 states that **"... care should be taken to avoid misplaced tree retention; 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"**<sup>5</sup>.

---

<sup>4</sup> Ibid. 4.5.10.

<sup>5</sup> Ibid. 5.1.1.

2.5.5. The 'Root Protection Areas' (RPAs)<sup>6</sup> of the trees identified for retention were calculated in accordance with Section 4.6 of BS 5837; and were assessed taking account of factors such as the likely tolerance of a tree to root disturbance or damage, the morphology and disposition of roots as influenced by existing site conditions (including the presence of existing roads or structures), as well as soil type, topography and drainage. Where considered appropriate, the shapes of the RPAs (although not their areas) were modified based on these considerations, so that they reflect more accurately the likely root distribution of the relevant trees.

2.5.6. To assess whether the trees identified for retention would be in a sustainable relationship with the proposed development (without casting excessive shade or otherwise unreasonably interfering with incoming residents' prospects of enjoying their properties, and thereby leading inevitably to requests for consents to fell), we plotted a segment or "shading arc" from each trunk, with a radius equal to the current height of the tree concerned, from due north-west to due east. This gave an indication of potential direct obstruction of sunlight and the shadow pattern cast through the main part of the day<sup>7</sup>.

2.5.7. Based on these principles and recommendations, the tree survey and assessment of suitability for retention informed the production of a tree constraints plan (TCP) which indicates the most suitable trees for retention, and their associated below-ground and above-ground constraints.

2.5.8. As a design tool, the TCP also indicates how close to those trees selected for retention the proposed development could be positioned, in terms of three key criteria:

- a). avoidance of unacceptable root damage;
- b). avoidance of the necessity for unacceptable pruning works; and

---

<sup>6</sup> The minimum area around a retained tree "deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority." BS 5837, paragraph 3.7.

<sup>7</sup> BS 5837, paragraph 5.2.2 Note 1.

c). avoidance of future felling or pruning works to prevent unacceptable shading or apprehension on behalf of the occupants.

2.5.9. The TCP was then used to inform the siting of the proposed buildings and areas of hard surfacing, about both of which we were consulted on several occasions during the design process. In this way, it has been ensured that the existing trees have made a significant contribution to the design of the proposed development, rather than the design having dictated which trees are to be removed.

## **2.6. Arboricultural impact assessment and tree protection plan**

2.6.1. Once finalised, we assessed the arboricultural impacts of the proposed layout, by overlaying it onto the TCP, and produced the tree protection plan (TPP) presented at **Appendix 3**. This is based on the proposed site layout by Stockwool Architects, drawing no. 3496W\_PL(90)102 PROPOSED SITE PLAN - GROUND LEVEL.

2.6.2. The TPP identifies the trees which will be removed to accommodate the proposed development, either because they are situated within the footprints of proposed structures or surfaces, or because in our judgment they are too close to these structures or surfaces to enable them to be retained. These are shown by means of **red crosses** on the TPP.

2.6.3. The TPP also shows how trees to be retained will be protected from damage during demolition and construction, and the measures identified are set out and described at **Appendix 1** to this report. The implementation of, and adherence to, these measures can readily be secured by the imposition of appropriate planning conditions.

2.6.4. For the trees shown to be retained, all measurements for pruning specifications, percentage estimates of RPA incursions and shading issues have been calculated using AutoCAD software.

2.6.5. Details of the impacts identified within these categories, and our assessment of their respective significance, are analysed in Sections 4 to 7 below.

2.6.6. Based on these findings, we have assessed the magnitude of the overall arboricultural impact of the proposals according to the categories defined in Table 1 below.

Category	Description
High	Total loss of or major alteration to main elements/ features/ characteristics of the baseline, post-development situation fundamentally different
Medium	Partial loss of or alteration to main elements/ features/ characteristics of the baseline, post-development situation will be partially changed
Low	Minor loss of or alteration to main elements/ features/ characteristics of the baseline, post-development changes will be discernible but the underlying situation will remain similar to the baseline
Negligible	Very minor loss of or alteration to main elements/ features/ characteristics of the baseline, post-development changes will be barely discernible, approximating to the 'no change' situation

**Table 1: Magnitude of impacts<sup>8</sup>**

---

<sup>8</sup> Determination of magnitude based on DETR (2000) Guidance on the Methodology for Multi-Modal Studies, as modified and extended.



## 3. THE TREES

### 3.1. Survey findings

3.1.1. We surveyed twelve individual trees growing within or immediately adjacent to the site. Their details can be found in the tree survey schedule at **Appendix 2**.

3.1.2. The trees on site are all deciduous and comprise a mix of exotic and semi-naturalised species. The majority of the trees are located on or adjacent to the street pavements around the periphery of the site with an additional grouping of trees adjacent to the south-west corner of the site. The arboricultural character is consistent with the surrounding urban character.

### 3.2. Assessment of suitability for retention

3.2.1. As noted above in Section 2.3, local planning policies require the retention of trees that are “**of significant amenity, historic or ecological/habitat conservation value**”. The individuals and groups of trees within or adjacent to the site, whose attributes we consider meet these criteria, are as follows:

- the tree of heaven (no. 5) growing on the north site boundary, adjacent to Wootton Street; and
- the grouping of individual trees (nos. 9 to 11) growing in the south-west corner of the site.

3.2.2. There are no category ‘A’ trees but one category ‘B’ specimen (tree of heaven no. 5). The remaining eleven trees are assessed as category ‘C’ trees, being either of low quality, very limited merit, only low landscape benefits, no material cultural or conservation value, or only limited or short-term potential; or young trees with trunk diameters below 150mm; or a combination of these.

## 4. TREES TO BE REMOVED

### 4.1. Details

4.1.1. To accommodate the proposed development, as shown on the proposed layout plan, two individual trees (nos. 4 and 12) are to be removed, because they are too close to the proposals to be retained. The specimens to be removed are assessed as category 'C'.

### 4.2. Assessment

4.2.1. All those trees or groups of trees that constitute the main arboricultural features of the site and which make the greatest contribution to the character and appearance of the local landscape, to amenity or to biodiversity (see paragraph 3.2.1), will be retained.

4.2.2. One of the specimens to be removed is a small young ornamental pittosporum, 3m in height with a trunk diameter of 70mm, which because of its age, BS 5837 states "**need not necessarily be a significant constraint on the site's potential**".

4.2.3. The other is a semi-mature sweet gum, at the time of the survey there was no access to this specimen, so all measurements were estimated; however, the tree is small (no more than 7m in height) and only the upper 3m of its canopy is visible from the access road to Windmill Court but is screened in views from the north, east and west by the existing building. As such, the removal of this tree will not result in a significant loss of amenity and its removal is readily mitigated through the soft landscaping plans.

4.2.4. Furthermore, the proposals incorporate replacement tree planting of nineteen trees on the ground floor and a further 14 on the roof gardens. Of these, six are large canopy trees. The proposed planting will mitigate the proposed removals, improve the age class balance of the trees on site, enhance the local landscape, and re-establish a framework for the ongoing and long-term character of the site.

4.2.5. In the light of these considerations, and taking account of the numbers, sizes and locations of the trees to be retained, including those that are off-site, the felling of

the trees and groups identified for removal will represent no alteration to the main arboricultural features of the site.

## 5. TREES TO BE PRUNED

### 5.1. Details

5.1.1. The tree of heaven (no. 5) adjacent to Wootton Street is to be pruned to facilitate implementation of the proposals.

### 5.2. Assessment

5.2.1. The dimensions of the proposed site pose a constraint which limits the available options for building locations, shown in **Figure 1** above. The south boundary is only 25m in length whereas the north boundary is 45m long. The irregular boundary shape also provides a constraint along the west boundary as the boundary narrows from north to south. Analysis of these dimensions show that the location and orientation that optimise the available space is either a building along the north boundary (as utilised by the existing nursery) or along the east boundary (as with the proposed scheme).

5.2.2. A tall building cited on the north boundary would lead to the removal of the tree of heaven (no. 5), which would require large areas of its RPA excavated and the south canopy entirely removed.

5.2.3. A building located along the east boundary is a better alternative as the building leads to a lesser extent of foundation excavation within the tree's RPA and less canopy pruning to facilitate construction. The design of the building has been further adapted to accommodate the existing canopy, as the proposed structure will be limited to a single storey ground floor building in close proximity to the tree canopy, which will give the canopy future space to grow into.

5.2.4. However, despite the design solutions, the east canopy will need to be reduced to 4.2m from the trunk, or 4m from the branch tips, to facilitate the construction of the proposed structure and to give 1.8m of clearance for working space.

5.2.5. The pruning is likely to require one or two pruning cuts of no more than 150mm diameter on the branch growing to the east in the lower canopy and five to six smaller cuts of 50mm diameter or less in the upper canopy. Considering this species tolerance

to pruning, the retained high volume of small branches and twigs and the tree's average physiological condition (highest accreditation of physiological condition under SJA survey methodology), there is no reason to suggest this specimen will not tolerate these cuts. As such, there will be no long term significant negative effect on the health and physiological condition of the tree and the pruning complies with the recommendations of British Standard BS 3998:2010, *Tree work – Recommendations*.

5.2.6. As the proposed pruning is only to facilitate the construction of the single storey ground floor, once construction is completed, the canopy will be able to exploit the space above the building and regrow to similar dimensions as the existing canopy. So, the proposed pruning will cause only a temporary reduction in canopy volume; in time it will recover and as such, the effect on the character and appearance of the local area will also be only temporary.

5.2.7. Following the pruning specified, none of the proposed apartments will lie within 2.5m of the extents of the canopies of trees to be retained, thereby providing adequate working space for construction, and a reasonable margin of clearance for future growth.

## 6. ROOT PROTECTION AREA INCURSIONS

### 6.1. Details

6.1.1. Parts of the proposed buildings and hard surfacing will encroach within the RPAs of three of the trees to be retained. These are shown in **Table 2** below.

Tree no.	Species	Incursion	Extent of incursion	% of RPA	Incursion - currently unsurfaced ground	% of RPA
5	Tree of heaven	Proposed building foundations	22.9m <sup>2</sup>	11.4%	n/a	n/a
		Proposed hard surface	14m <sup>2</sup>	7%	14m <sup>2</sup>	7%
9	Sycamore	Proposed hard surface	9.1m <sup>2</sup>	14.7%	0m <sup>2</sup>	0%
10	Sycamore	Proposed hard surface	18.4m <sup>2</sup>	20%	0m <sup>2</sup>	0%

**Table 2: Proposed incursions within RPAs**

### 6.2. Assessment

6.2.1. The incursion by part of the proposed building foundations into the RPA of the tree of heaven no. 5 extends no closer than 5.9m to the trunk, and equates to 22.9m<sup>2</sup> or 11.4% of its RPA. The requirement of the building to be located in this specific locality is outlined in Section 4 above. Any potential adverse impacts can be satisfactorily mitigated as set out below.

6.2.2. To minimise impacts on this specimen, the foundations design should be of a 'pile and beam' design to avoid excavation deeper than 500mm (see the Fluent Floor Plan & Elevations drawing at **Appendix 3**). Studies have shown that typically as much as 90% of tree root length occurs in the upper metre of the soil<sup>9</sup> and so it is highly unlikely that this incursion into the RPA will result in all the roots in this area being severed. For example, as only the upper 500mm of the upper metre of soil will be removed, the 11.4% incursion into the RPA may result in a reduction of only 5.7% of roots within the RPA.

<sup>9</sup> Roberts J., Jackson N., & Smith M. (2006). Tree Roots in the Built Environment. TSO.

6.2.3. Within the RPA of the tree, excavation of the upper 750mm of the soil to enable construction of the foundations will be undertaken manually, under the direct supervision of an appointed arboricultural consultant to ensure there is no over dig, to appropriately deal with any exposed roots and if utilised, determine the locations of the piles to minimise the impact on significant tree roots.

6.2.4. As a species tree of heaven has been identified as good at tolerating root pruning and disturbance<sup>10</sup>. As this specimen is of average physiological condition, there is no reason to suggest that it will not be able to tolerate the cutting of roots within a small section of its RPA.

6.2.5. Trees 9 and 10 are all growing off-site within the grounds of Windmill House and are separated from the site by a 2.2m high brick wall. Whilst the depth of foundations of this wall are unknown, they will be acting as some kind of a barrier to rooting, which in view of the soft landscape in which these trees are growing, are likely to have reduced the extent of root growth into the site.

6.2.6. The incursions into the RPAs of trees nos. 5, 9 and 10 are by areas of proposed hard surfacing. The areas of proposed hard surface into currently unsurfaced areas extend to no more than 7% of individual RPAs, and do not exceed the 20% maximum incursion into currently unsurfaced ground recommended in BS 5837<sup>11</sup>.

6.2.7. Taking account of the relationship between existing ground levels and the likely proposed levels of these areas will allow for design and construction of the replacement surfaces to be entirely above existing soil level, and accordingly no excavation will be required. However, where new surfaces meet the levels of existing surfaces, some degree of excavation will be necessary. This is likely to be no more than 200mm in depth and the design can be altered to incorporate any significant roots exposed during excavation to ensure the roots are not severed. All excavation will be undertaken manually under the direct supervision of an appointed arboricultural consultant.

---

<sup>10</sup> MATHENY, N. P. and CLARK, J. R. (1998). Trees and Development. International Society of Arboriculture.

<sup>11</sup> BS 5837, paragraph 7.4.2.3.

6.2.8. Furthermore, where appropriate, new and replacement surfaces could incorporate an appropriate cellular confinement system, filled and finished with suitable porous materials, to minimise soil compaction. To ensure no damage occurs to the roots or rooting environments of the relevant trees, installation will be undertaken under the control and supervision of the arboricultural consultant. Implementation of measures to prevent other incursions into the RPAs of retained trees and to protect them during demolition and construction can be assured by the erection of appropriate protective fencing, as shown on the TPP at **Appendix 3**.

6.2.9. Accordingly, subject to implementation of the above measures, and considering the ages, current physiological condition and tolerance of disturbance of these retained trees, no significant or long-term damage to their root systems or environments will occur as a result of the proposed development.



## 7. RELATIONSHIP OF RETAINED TREES TO NEW DWELLINGS

### 7.1. Details

7.1.1. In none of the proposed new apartments do the primary window of their main habitable rooms (living rooms, kitchens) exclusively and directly face trees within the shadow patterns<sup>12</sup> of which they are situated; that is, where proposed dwellings or apartments are sited in an arc between the north-west and the east of retained trees and are closer to them than the current heights of these specimens.

### 7.2. Assessment

7.2.1. As the ground floor level is reserved for non-residential use, there are therefore no issues relating to shading from the retained tree canopies. Floors 1 to 9 are comprised of residential apartments; however, as the largest retained tree is 17.5m in height, only apartments in the bottom four floors could potentially be shaded by the retained trees.

7.2.2. Our assessment of the proposed apartments within floors 1 to 4 find that none lie within the shadow patterns of any retained trees and so will not be shaded by retained trees to the extent that this will interfere with their reasonable use or enjoyment by incoming occupiers; which might otherwise lead to pressure to permit felling or severe pruning that the LPA could not reasonably resist.

7.2.3. As this scheme comprises apartments rather than houses, areas of communal amenity space rather than individual gardens are proposed; and therefore, incoming occupiers will not be restricted in finding areas of sunlight or shade when they require them. Use of these areas is thus unlikely to lead to demands for felling or severe pruning of trees that the LPA would find difficult to resist.

---

<sup>12</sup> BS 5837, 5.2.2, Note 1: "An indication of potential direct obstruction of sunlight can be illustrated by plotting a segment, with a radius from the centre of the stem equal to the height of the tree, drawn from due north-west to due east, indicating the shadow pattern through the main part of the day."

## 8. CONCLUSIONS

### 8.1. Summary

8.1.1. Our assessment of the impacts of the proposals on the existing trees concludes that no mature trees, no category 'A' or 'B' trees, and no trees of high landscape or biodiversity value are to be removed. None of the main arboricultural features of the site are to be removed. The proposed removal of two small individual trees will represent no alteration to the main arboricultural features of the site, only an insignificant alteration to the overall arboricultural character of the site and will not have an adverse impact on the arboricultural character and appearance of the local landscape.

8.1.2. The proposed pruning of the tree of heaven no. 5 is to provide temporary clearance to construct the ground floor; once completed the canopy will be able to regrow to similar dimensions, and will therefore not detract from the long-term appearance of the tree or its contribution to the local area.

8.1.3. The incursions into the Root Protection Areas of trees to be retained are minor, and subject to implementation of the measures recommended on the Tree Protection Plan and set out at **Appendix 1**, no significant or long-term damage to their root systems or rooting environments will occur.

8.1.4. None of the proposed apartments or amenity space are likely to be shaded by retained trees to the extent that this will interfere with their reasonable use or enjoyment by incoming occupiers, which might otherwise lead to pressure on the Local Planning Authority to permit felling or severe pruning that it could not reasonably resist.

### 8.2. Compliance with national planning policy

8.2.1. As the proposals will retain all the main arboricultural features of the site, its arboricultural attractiveness, history and landscape character and setting will be maintained, thereby complying with Paragraph 127 of the National Planning Policy Framework.

8.2.2. As the proposals will not result in the loss or deterioration of any ancient woodland or any ancient or veteran trees, they comply with paragraph 175 of the NPPF.

### **8.3. Compliance with regional planning policy**

8.3.1. As all the existing trees assessed as being of particular value within the landscape will be retained, and space exists within the proposed layout for replacement planting, including of large-canopied trees, the proposed development will protect, maintain and enhance the main arboricultural features of the site. As such, it complies with Policy 7.21 of the London Plan.

### **8.4. Compliance with local planning policy**

8.4.1. As the proposed development will not result in the removal of trees which are of significant amenity, historic or ecological/habitat value, ensures retained trees are appropriately protected from potential development pressures, and successfully integrates the retained and replacement trees into the proposed scheme, it complies with Policy Q10 of the London Borough Lambeth Council adopted Local Plan (September 2015).

8.4.2. As the proposed landscape scheme incorporates new trees, it ensures that there will be a net gain of canopy volume and secures the Borough's tree stock for the future. As such, the development complies with Policy Q10 of the Draft Revised Lambeth Local Plan Proposed Submission Version (January 2020)

### **8.5. Conclusion**

8.5.1. On the basis of our assessment, we conclude that the arboricultural impact of this scheme is of low magnitude, as defined according to the categories set out in **Table 1** of this report.

**APPENDIX 1**  
**Outline Arboricultural Method Statement**

# Outline Arboricultural Method Statement

## A1.1. Tree Protection Plan

A1.1.1. The TPP at **Appendix 3** shows the general and specific provisions to be taken during construction of the proposed development, to ensure that no unacceptable damage is caused to the root systems, trunks or crowns of the trees identified for retention. These measures are indicated by coloured notations in areas where construction activities are to occur either within, or in proximity to, retained trees, as described in the relevant panels on the drawing.

## A1.2. Pre-start meeting

A1.2.1. Prior to the commencement of any site clearance, demolition or construction works the developer will convene a pre-start site meeting. This shall be attended by the developer's contract manager or site manager, the demolition contractor, the fencing/boarding contractor, the groundwork contractor(s) and the arboricultural consultant. The LPA tree officer will be invited to attend. If appropriate, the tree felling/surgery contractor should also attend. At that meeting contact numbers will be exchanged, and the methods of tree protection shall be fully discussed, so that all aspects of their implementation and sequencing are made clear to all parties. Any clarifications or modifications to the TPP required as a result of the meeting shall be circulated to all attendees.

## A1.3. Protective fencing

A1.3.1. Construction exclusion zones (CEZs) will be formed by erecting protective fencing around the RPAs of all on-site trees to the specification recommended in BS 5837, Section 6.2, prior to the commencement of construction. This will consist of a scaffold framework comprising a vertical and horizontal framework, well braced to resist impacts, with vertical tubes spaced at maximum intervals of 3.5m. Onto this, welded mesh panels should be securely fixed with wire or scaffold clamps, as shown in **Figure 2** of that document. "**TREE PROTECTION ZONE - KEEP OUT**" or similar notices will be attached with cable ties to every third panel.

A1.3.2. The RPAs of the off-site trees will also be enforced by the erection of protective fencing to the same specification, prior to the commencement of construction, thereby safeguarding them from incursions by plant or machinery, storage and mixing of materials, or other construction-related activities which could have a detrimental effect on their root systems.

A1.3.3. The recommended positions of the protective fencing are shown by **bold blue lines** on the TPP. The precise positioning of the fencing around the trees will be considered in conjunction with any other protective hoarding/fencing which may be required around the site boundary.

A1.3.4. Within the CEZs safeguarded by the protective fencing, there will be no changes in ground levels, **no soil stripping**, and no plant, equipment, or materials will be stored. Oil, bitumen, diesel, and cement will not be stored or discharged within 10m of any trees. Areas for the storage or mixing of such materials will be agreed in advance and be clearly marked. No notice boards, or power or telephone cables, will be attached to any of the trees. No fires will be lit within 10m of any part of any tree.

#### **A1.4. Manual excavation within RPAs**

A1.4.1. The first 750mm depth of excavations required within the RPAs of the trees to be retained (as shown by **bold orange lines** on the TPP) will be dug by hand, using a compressed air soil pick if appropriate, and under on-site arboricultural supervision, in order to safeguard against the possibility of unacceptable root damage being caused to these specimens. Any roots encountered of over 25mm diameter will be cut back cleanly to the face of the dig nearest to the tree, using a sharp hand saw or secateurs, and their cut ends covered with hessian to prevent desiccation.

#### **A1.5. Proposed hard surfaces within RPAs**

A1.5.1. Unacceptable damage to the roots and rooting environments of the trees to be retained during the construction of proposed hard surfaces that encroach within RPAs will be avoided by building them above existing soil level, to avoid digging and thus severing of roots; and an appropriate ground covering will be used beneath the sub-base, to prevent or minimise compaction of the soil. This will be done in

accordance with Section 7.4 of BS 5837. The locations where these measures will be required are marked by red **cross-hatching** on the TPP.

## **A1.6. Demolition**

A1.6.1. Demolition of existing buildings and removal of existing areas of hard surfacing that abut or overlie RPAs will be undertaken with care, under the control and supervision of an appointed arboricultural consultant, to ensure that the adjacent soil is not unacceptably excavated, disturbed or compacted.

**APPENDIX 2**  
**Tree survey schedule**





**ARBORICULTURAL PLANNING CONSULTANTS**

17 CROSS ROAD  
TADWORTH  
SURREY KT20 5ST

Tel: (01737) 813058  
E-mail: [sja@sjatrees.co.uk](mailto:sja@sjatrees.co.uk)

Principal: Simon R. M. Jones Dip. Arb. (RFS), F. Arbor. A.,  
Arboricultural Association Registered Consultant  
Frank P. S. Spooner BSc (Hons), MArborA, TechCert (ArborA)

## **Tree Survey Schedule**

**Coral Day Nursery, Wootton Street, Lambeth**

**November 2019**

# Tree Survey Schedule: Explanatory Notes

## Coral Day Nursery, Wootton Street, Lambeth

This schedule is based on a tree inspection undertaken by Finn Cullerne of SJAtrees (the trading name of Simon Jones Associates Ltd.), on Wednesday the 13th November 2019. Weather conditions at the time were clear, dry and bright. Deciduous trees were in partial leaf.

The information contained in this schedule covers only those trees that were examined, and reflects the condition of these specimens at the time of inspection. We did not have access to the trees from any adjacent properties; observations are thus confined to what was visible from within the site and from surrounding public areas.

The trees were inspected from the ground only and were not climbed, and no samples of wood, roots or fungi were taken. A full hazard or risk assessment of the trees was not undertaken, and therefore no guarantee, either expressed or implied, of their safety or stability can be given.

Trees are dynamic organisms and are subject to continual growth and change; therefore the dimensions and assessments presented in this schedule should not be relied upon in relation to any development of the site for more than twelve months from the survey date.

### 1. Tree no.

Given in sequential order, commencing at "1".

### 2. Species.

'Common names' are given, taken from MITCHELL, A. (1978) A Field Guide to the Trees of Britain and Northern Europe.

### 3. Height.

Estimated with the aid of a hypsometer, given in metres.

### 4. Trunk diameter.

Trunk diameter measured at approx. 1.5m above ground level; or where the trunk forks into separate stems between ground level and 1.5m, measured at the narrowest point beneath the fork. Given in millimetres.

### 5. Radial crown spread.

The linear extent of branches from the base of the trunk to the main cardinal points, rounded up to the closest half metre, unless shown otherwise. For small trees with reasonably symmetrical crowns, a single averaged figure is quoted.

### 6. Crown break.

Height above ground and direction of growth of first significant live branch.

### 7. Crown clearance.

Distance from adjacent ground level to lowest part of lowest branch, in metres.

### 8. Age class.

Young: Seedling, sapling or recently planted tree; not yet producing flowers or seeds; strong apical dominance.

Semi-mature: Trunk often still smooth-barked; producing flowers and/or seeds; strong apical dominance, not yet achieved ultimate height.

Mature: Apical dominance lost, tree close to ultimate height.

Over-mature: Mature, but in decline, no crown retrenchment

Veteran: Mature, with a large trunk diameter for species; but showing signs of veteranisation, irrespective of actual age, with decay or hollowing, and a crown showing retrenchment and a structure characteristic of the latter stages of life.

Ancient: Beyond the typical age range and with a very large trunk diameter for species; with extensive decay or hollowing; and a crown that has undergone retrenchment and has a structure characteristic of the latter stages of life.

### 9. Physiology.

Health, condition and function of the tree, in comparison to a normal specimen of its species and age.

### 10. Structure.

Structural condition of the tree – based on both the structure of its roots, trunk and major stems and branches, and on the presence of any structural defects or decay.

Very good: No significant physiological or structural defects, an upright and reasonably symmetrical structure; a particularly good example of its species.

Good: No significant physiological or structural defects, and an upright and reasonably symmetrical structure.

Moderate: No significant pathological defects, but a slightly impaired physiological structure; however, not to the extent that the tree is at immediate or early risk of collapse.

Indifferent: Significant physiological or pathological defects; but these are either remediable or do not put the tree at immediate or early risk of collapse.

Poor: Significant and irremediable physiological or pathological defects, such that there may be a risk of collapse.

Hazardous: Significant and irremediable physiological or pathological defects, with a risk of imminent collapse.

### 11. Comments.

Where appropriate comments have been made relating to:

- Health and condition
- Safety, particularly close to areas of public access
- Structure and form

### 12. Category.

Based on the British Standard "Trees in relation to design, demolition and construction - Recommendations", BS 5837: 2012, Table 1, adjusted to give a greater weighting to trees that contribute to the character and appearance of the local landscape, to amenity, or to biodiversity.

**Category U:** Trees 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.

- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category 'U' trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning).
- Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.
- Trees infested with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality.

**Category A:** Trees of high quality with an estimated remaining life expectancy of at least 40 years.

- (1) Trees that are particularly good examples of their species, especially if rare or unusual.
- (2) Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.
- (3) Trees, groups or woodlands of significant conservation, historical, commemorative or other value.

**Category B:** Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

- (1) Trees that might be included in category 'A', but are downgraded because of impaired condition (e.g. presence of significant though remediable defects including unsympathetic past management and minor storm damage) such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category 'A' designation.
- (2) Trees present in numbers, usually growing as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals; or trees present in numbers but situated so as to make little visual contribution to the wider locality.
- (3) Trees with material conservation or other cultural value.

**Category C:** Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

- (1) Unremarkable trees of very limited merit or of such impaired condition that they do not qualify in higher categories.
- (2) Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value, and/or trees offering low or only temporary landscape benefits.
- (3) Trees with no material limited conservation or other cultural value.

## TREE SURVEY SCHEDULE

### Coral Day Nursery, Wootton Street, Lambeth

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
1-3	Chanticleer pear	10m	#T1 260mm #T2 280mm #T3 265mm	3m	4m	4m	Semi-mature	Average	Moderate	Off-site row of three street trees; of moderate quality, but currently of low value due to small size.	C (12)
4	Pittosporum	3m	70mm	1m	0.5m	0m	Young	Average	Moderate	Small ornamental tree; of moderate quality, but currently of low value due to small size.	C (1)
5	Tree of Heaven	17.5m	450mm 490mm	N 7.6m E 8.8m S 8m W 8.6m	1m	5m	Mature	Average	Moderate	Root system significantly restricted by building foundations to the S of the road, to the N and then there are electric surfaces underneath the pavement; there is also hard surfacing in the pavement which goes up to 1m from the trunk. Prominent buttress roots. Twin-stemmed at 1m with a U-shaped tensile union. Remaining unions of the canopy are tensile; crown lifted to 5m; historic pruning wounds have fully occluded. No further visible defects; canopy extends over adjacent building; large canopy specimen is readily visible within Wootton Street and contributes to its streetscape character.	B (12)
6-8	Chanticleer pear	11m	#T6 270mm #T7 280mm #T8 280mm	2.5m	3m	3m	Semi-mature	Average	Moderate	Off-site trees; row of three Chanticleer pear along the street. Street trees of moderate quality with no observable defects but of limited value due to their small size however they do contribute to the streetscape character of Greet Street and help soften the densely urban area.	C (12)
9	Sycamore	13m	370mm	NE 0.5m E 4m SE 5m SW 6m NW 1m	3.5m	5m	Semi-mature	Average	Moderate	Single-stemmed to 3.5m where it is co-dominant with a tight compression fork. Sub-dominant canopy, suppressed by adjacent sycamore. Visible from Greet Street but of limited visibility from other areas of the public realm.	C (12)
10	Sycamore	14m	450mm	N 6.2m E 6m S 1m W 4m	3.5m	6m	Semi-mature	Average	Moderate	Single-stemmed specimen to 3m where it becomes co-dominant with a tight compression fork. No further visible defects; dominant canopy. Readily visible from Greet Street but of limited landscape impact from adjacent areas.	C (12)
11	Red oak	13m	430mm	4.8m	7m	5m	Semi-mature	Average	Indifferent	Located in the courtyard of Windmill House in a raised platform; no defects at the base. Single-stemmed; historically 'topped' at 7m forming a dense, congested crown with multiple tight forks; canopy constrained by adjacent trees and buildings; of limited quality and value; visible from the public realm only in glimpses.	C (2)
12	Sweet gum	7m	200mm	2.5m	3m	2m	Semi-mature	Average	Moderate	Off-site tree; of moderate quality, but currently of low value due to small size.	C (1)

## Root Protection Areas (RPAs)

Root Protection Areas have been calculated in accordance with paragraph 4.6.1 of the British Standard 'Trees in relation to design, demolition and construction – Recommendations', BS 5837:2012. This is the minimum area which should be left undisturbed around each retained tree. RPAs are portrayed initially as a circle of a fixed radius from the centre of the trunk; but where there appear to be restrictions to root growth the circle is modified to reflect more accurately the likely distribution of roots.

<b>Tree No.</b>	<b>Species</b>	<b>RPA</b>	<b>RPA Radius</b>
1-3	Chanticleer pear	35.5m <sup>2</sup> 31.8m <sup>2</sup>	3.4m 3.2m
4	Pittosporum	2.5m <sup>2</sup>	0.9m
5	Tree of Heaven	200.2m <sup>2</sup>	8.0m
6-8	Chanticleer pear	33.0m <sup>2</sup> 35.5m <sup>2</sup> 35.5m <sup>2</sup>	3.2m 3.4m 3.4m
9	Sycamore	61.9m <sup>2</sup>	4.4m
10	Sycamore	91.6m <sup>2</sup>	5.4m
11	Red oak	83.6m <sup>2</sup>	5.2m
12	Sweet gum	18.1m <sup>2</sup>	2.4m

**APPENDIX 3**  
**TREE PROTECTION PLAN**

**Arboricultural Impacts: Summary**  
(For details, see below)

Impact	No. of Trees
Trees to be removed	2
Groups of trees to be removed	0
TPO trees to be removed	0
Trees to be pruned	1
Trees where manual excavation needed within RPAs	1
Trees where above soil surfacing needed within RPAs	3
Trees with proposed underground services within RPAs	0

**Trees to be Removed**

No.	Species	Category
4	Pittosporum	C (1)
12	Sweet gum	C (1)

**Total numbers of trees to be removed**

Category	No. of trees	Category	No. of trees
A	0	B	0
C	2	U	0

**Trees to be pruned**

No.	Species	Works
5	Tree of heaven	Reduce east canopy to 4.2m from trunk (4m from branch tips) to give 1.3m clearance from proposed ground floor

Pruning is to be undertaken in accordance with the British Standard Recommendations for Tree work, BS3998: 2010. Climbing irons or spikes are not to be used whilst pruning trees.

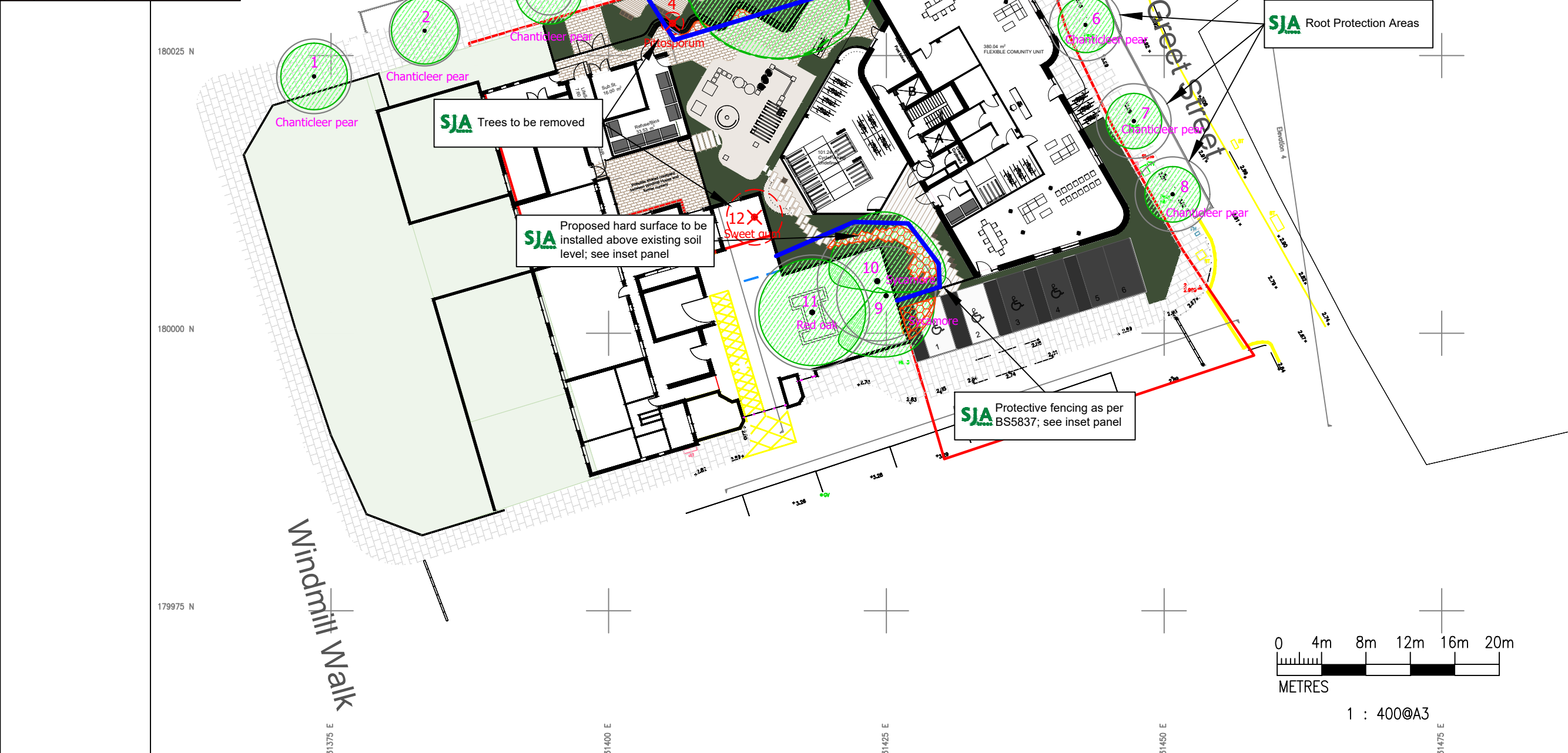
**Trees that require manual excavation within RPAs**

No.	Species	Type of structure
5	Tree of heaven	Proposed building foundations

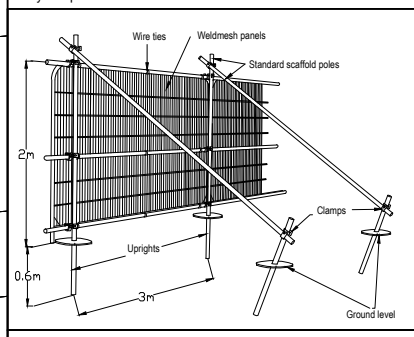
**Trees that require above soil surfacing within RPAs**

No.	Species	Type of structure
5	Tree of heaven	Proposed hard surfacing
9	Sycamore	Proposed hard surfacing
10	Sycamore	Proposed hard surfacing



**Protective Fencing**

To be erected prior to the commencement of all works on site, and retained in place throughout construction. To comprise either 2.4m wooden site hoarding; or a 2m high scaffolding framework, with uprights at maximum 3m spacings, every other one braced to the ground with 45 degree struts; supporting standard anti-climb 'Heras' welded mesh fence panels secured with anti-lift devices to concrete or plastic bases pinned to the ground by scaffold uprights sunk to a minimum depth of 600mm; individual panels fixed to each other with at least 2 clamps and to scaffolding with heavy-duty cable ties. 'TREE PROTECTION ZONE - KEEP OUT' or similar notices to be attached to every fifth panel.



TREE PROTECTION FENCING as shown in BS 5837: 2012, Section 6.2.2 & Figure 2.

**Manual Excavation**

Within the root protection area (RPA) of tree no. 5 the first 750mm depth of any excavation, whether for proposed foundations or underground services shall be undertaken by hand under arboricultural supervision. The soil will be loosened with a pick or fork, and then will be cleared from roots with a compressed air soil pick. All roots will be cut cleanly with a hand saw or secateurs. The edge of the excavation closest to the trees will be covered with hessian sacking to prevent drying out, and if necessary be shuttered with an appropriate material to prevent soil collapse. Where appropriate, deeper excavation may be undertaken by a machine provided it works from outside the RPA.

**Above Soil Surfacing**

Proposed hard surfacing within root protection areas (RPAs) of trees nos. 5, 9 & 10 to be constructed in accordance with section 7.4 of BS 5837: 2012. Trees in relation to design, demolition and construction - Recommendations. Other than the careful removal, using hand tools, of any turf layer, surfaces will be installed above existing soil level, or no deeper than the base of any existing surfacing it is replacing, so that the soil is not disturbed and no roots are severed, and an appropriate ground covering, possibly using a geogrid, a geoweb, or a combination of the two will be placed beneath the sub-base to minimise compaction of the soil in which tree roots are growing. Edge supports will also be installed above existing soil level.

**Arboricultural Supervision**

The arboricultural consultant will directly supervise all construction works that have to be undertaken within root protection areas. These include:

1. Location of protective fencing.
2. Lifting/excavation of existing hard surfaces.
3. Excavation/demolition of existing foundations.
4. Construction of above-ground hard surfacing.
5. All excavations, whether for proposed foundations, hard surfacing, or underground services.

**SJA ARBORICULTURAL PLANNING CONSULTANTS**

Project:	Coral Day Nursery, Wootton St, Lambeth		
Client:	Homes for Lambeth		
Drawing:	TREE PROTECTION PLAN		
Drawing no:	SJA TPP 19270-042b		
Based on:	3496W_PL(20)100		
Drawn by:	Date of Issue:	Scale:	
FJC	Dec 2020	1: 400 @ A3	
Checked by:	Tel: (01737) 813058	sja@sjatrees.co.uk	
SRMJ			
Tree nos.:	● 5	Canopies of trees to be retained:	Trees to be removed:
Category 'A' RPA:		Category 'B' RPA:	Category 'C' RPA:
Manual excavation:		Above soil surface:	Indicative pruning line:

For further information refer to the SJA Trees Tree Survey Schedule. Do not scale from this drawing; please check all dimensions on site, and notify us of any discrepancies. SJA Trees (the trading name of Simon Jones Associates Ltd.) cannot be held responsible for inaccuracies in the topographical plan on which this drawing is based. © Simon Jones Associates Ltd. 2020. This drawing is copyright and may not be used or changed without the written consent of SJA Trees. This drawing is based on the proposed layout plan shown and referred to above. SJA Trees authorises its reproduction, without amendment, by the Local Planning Authority (LPA), and to its posting on the LPA website, to assist in consideration of this application only. This drawing is designed to reflect only the principles of layout and/or design insofar as these relate to the protection of trees to be retained, and should NOT be read as a definitive engineering or construction method statement. Reference should be made to the architect or structural engineer, as appropriate, over any matters of construction detail or specification, or any engineering standards or regulatory requirements relating to proposed structures, hard surfaces or underground services.

