



QA

18-22 Haverstock Hill – BS5837 Tree Survey and Arboricultural Impact Assessment

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1.0 EXECUTIVE SUMMARY

- 1.1 Greengage Environmental Ltd ('Greengage') was commissioned by PPR Haverstock Hill LLP to undertake an appraisal of trees at 18-22 Haverstock Hill in the London Borough of Camden, in accordance with the *BS5837:2012 Trees in relation to design, demolition and construction - Recommendations*.
- 1.2 This document is a report of this survey and has been produced to support a planning submission for the site which seeks to demolish the existing buildings and construct a new building comprising ground plus basement and five upper floors for use as 29no. dwellings (Class C3) and flexible Class A1/A2/A3/A4 and associated works.
- 1.3 A visit was made to the site on the 13th February 2018. The crowns and stems were inspected from the ground using the 'Visual Tree Assessment' (VTA) method; no invasive techniques were used at this stage.
- 1.4 The survey focused on the trees, (and any hedges and vegetation) within and directly adjacent to the site, that would be directly or indirectly affected by any proposed development. The report also indicates any trees to be removed on the grounds of sound arboricultural management
- 1.5 During the survey a total of six trees located directly adjacent to the site were identified. All of which have the potential to be affected by the development and/or its construction. No trees were recorded within the site boundary.
- 1.6 Details of all surveyed trees are given in the Tree Schedule (Appendix 1.0).
- 1.7 The Tree Constraints Plan (Appendix 2.0), shows the RPAs and tree crowns of existing trees against the existing site layout, setting out any constraints to the development proposals.
- 1.8 An Arboricultural Impact Assessment (AIA) was then drawn up based on these constraints, detailing any loss of trees or required mitigation works to either the trees or the design proposals.

2.0 METHODOLOGY

Site Visit

- 2.1 The survey was undertaken on 13th February 2018 during cloudy and wet winter conditions, with deciduous trees in winter bud. A summary table of all the trees included in the Tree Schedule (detailing further information on each tree) is shown at Appendix 1.0.

Tree Categorisation

- 2.2 Trees, tree groups and woodlands have been considered following evaluation into one of four categories (U, A, B, C) based on tree quality as outlined in British Standard 5837 (2012) which has been followed.
- 2.3 Categorisation of trees, following the British Standard, gives an indication as to the trees' importance in relation to the site and the local landscape and also, the overall value and quality of the existing tree stock on site. This allows for informed decisions to be made concerning which trees should be removed or retained, should development occur.
- 2.4 For a tree to qualify under any given category it should fall within the scope of that category's definition. In the categories A, B, C which collectively deal with trees that should be a material consideration in the development process, there are three sub-categories which are intended to reflect arboricultural, landscape and cultural values respectively. Category U trees are those which would be lost in the short-term for reasons connected with their poor physiological or structural condition. They are, for this reason, not usually considered in the planning process.
- 2.5 In assigning trees to the A, B or C categories the presence of any serious disease or tree related hazards are taken into account. If the disease is considered fatal and / or irremediable, or likely to require sanitation for the protection of other trees it may be categorised as U, even if they are otherwise of considerable value.
- 2.6 **Category (A)** – trees whose retention is most desirable and is of high quality and value. These trees are considered to be in such a condition as to be able to make a lasting contribution (a minimum of 40 years) and may comprise:
- Trees which are particularly good examples of their species especially rare or unusual, or essential components of groups or of formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue);
 - Trees, groups or woodlands which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance (e.g. avenues or other arboricultural features assessed as groups); and
 - Trees or groups or woodlands of significant conservation, historical, commemorative or other value (e.g. Veteran or wood-pasture trees).

- 2.7 **Category (B)** – are trees whose retention is considered desirable and are of moderate quality and value. These trees are considered to be in such a condition as to make a significant contribution (a minimum of 20 years) and may comprise:
- Trees that might be included in the high category but because of their numbers or slightly impaired condition (e.g. presence of remediable defects including unsympathetic past management and minor storm damage), are downgraded in favour of the best individuals;
 - Trees present in numbers such that they form distinct landscape features and attract a higher collective rating than they would as individuals. Individually these trees are not essential components of formal or semi-formal arboricultural features, or trees situated mainly internally to the site and have little visual impact beyond the site; and
 - Trees with clearly identifiable conservation or other cultural benefits.
- 2.8 **Category (C)** – are trees that could be retained and are considered to be of low quality and value. These trees are in an adequate condition to remain until new planting could be established (a minimum of ten years) or are young trees with a stem diameter below 150mm and may comprise:
- Trees not qualifying in higher categories;
 - Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value and or trees offering low or only temporary screening benefit; and
 - Trees with very limited conservation or other cultural benefits.
- 2.9 **Category (U)** – trees for removal are those trees in such a condition that any existing value would be lost within 10 years and which should in the current context be removed for reasons of sound arboricultural management. Trees within this category are:
- 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;
 - Trees that are dead or are showing signs of significant, immediate or irreversible overall decline; and
 - Trees infected with pathogens of significance to the health and or/safety of other trees nearby trees or very low-quality trees suppressing adjacent trees of better quality.
- 2.10 Species have been recorded by common name and recorded as such in the Tree Schedule in Appendix 1.0. Height has been estimated in metres and stem diameters have been measured at 1.5 metres above ground level and recorded in millimetres. Crown spreads have been measured in half metres and taken to the point of greatest spread unless the crown has presented a pronounced asymmetrical form and therefore

measurements have been taken for the four cardinal points. The measurements have always been considered in the following sequence, North, East, South, and West, and therefore appear as such within the Arboricultural Data Tables.

- 2.11 In the assessment, particular consideration has been given to the following when deciding the most appropriate British Standard Category and Sub-Category allocation:
- a. the health, vigour and condition of each tree;
 - b. the presence of any structural defects in each tree and its life expectancy;
 - c. the size and form of each tree and its suitability within the context of the proposed scheme; and
 - d. the location of each tree relative to existing site features, e.g. its value as a screen or as a skyline feature.

Age Class & Condition

- 2.12 Age class is assessed according to the age class categories referred to in BS 5837.
- **Y:** Young – trees up to five years of age;
 - **SM:** Semi-mature – trees less than 1/3 life expectancy;
 - **EM:** Early mature – trees 1/3 – 2/3 life expectancy;
 - **M:** Mature – trees over 2/3 life expectancy;
 - **OM:** Over mature – declining or moribund trees of low vigour; and
 - **V:** Veteran – characteristics have been noted where a tree exhibits certain distinctive features of veteran trees.
- 2.13 The overall condition of the tree, or group of trees, has been referred to as one of the following. A more detailed description of condition has been noted in the Arboricultural Data Tables and discussed in the Arboricultural Impact Assessment Report.
- **Good:** A sound tree, trees, needing little, if any, attention;
 - **Fair:** A tree, trees, with minor but rectifiable defects or in the early stages of stress, from which it may recover;
 - **Poor:** A tree, trees, with major structural and physiological defects or stressed such that it would be expensive and inappropriate to retain; and
 - **Dead:** A tree, trees, no longer alive. However, this could also apply to those trees that are dying and will be unlikely to recover, or are / have become dangerous.
- 2.14 Major defects or diseases and relevant observations have also been recorded under Structural Condition. The assessment for structural condition has included inspection of the following defects:

- The presence of fungal fruiting bodies around the base of the tree or on the stem, as they could possibly indicate the presence of possible internal decay;
 - Soil cracks and any heaving of the soil around the base indicating possible root plate movement;
 - Any abrupt bends in branches and limbs resulting from past pruning, as it may be an indication of internal weakness and decay;
 - Tight or weak 'V' shaped unions and co-dominant stems;
 - Hazard beam formations and other such biomechanical related defects (as described by Claus Mattheck, Body Language of Trees HMSO Research for Amenity Trees No. 4 1994);
 - Cavities as a result of limb losses or previous pruning;
 - Broken branches;
 - Storm damage;
 - Canker formations;
 - Loose bark;
 - Damage to roots;
 - Basal, stem or branch / limb cavities;
 - Crown die-back;
 - Abnormal foliage size and colour;
 - Any changes to the timing of normal leaf flush and leaf fall patterns; and
 - Other pathological diseases affecting any part of the tree.
- 2.15 Major defects or diseases and relevant observations have also been recorded. Dead wood has been defined as the following:
- Twigs and small branch material up to 5cm in diameter;
 - Minor dead wood 5cm to 10cm in diameter; and
 - Major dead wood 10cm in diameter and above.
- 2.16 The survey was completed from ground level only, aerial inspection of trees was not undertaken. Investigations as to the internal condition of a tree have not been undertaken. Further investigations of this type can be made and have been recommended where it has been considered necessary, within the report although these investigations are beyond the scope of this report.
- 2.17 Evaluation of the trees' condition given within this assessment applies to the date of survey and cannot be assumed to remain unchanged. It may be necessary to review these within 12 months, in accordance with sound arboricultural practice.

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- 2.18 The position of the trees recorded in the Tree Schedule has been shown on the Tree Constraints Plan, in Appendix 2.0. The positions of the trees are based on a topographical survey supplied by the client for the purpose of plotting trees and from estimations during the site visit.

Root Protection Areas

- 2.19 The Root Protection Areas (RPA) for individual and groups of trees are indicated on the Tree Constraints Plan in Appendix 2.0. The Root Protection Areas are formulated as described below.
- 2.20 Below ground constraints to future development is represented by the area surrounding the tree that contains sufficient rooting volume to ensure survival of the tree. This area requires protection in order for the tree to be incorporated into any future scheme, without adverse harm to the tree or structural integrity of buildings. This is referred to as the RPA and is shown as a circle of a given radius.
- 2.21 The RPA circle may be modified in shape to maintain a similar total area depending on the presence of surrounding obstacles that are likely to have impeded root growth in a given direction. Details of these RPA modifications are given in the Tree Constraints Plan in Appendix 2.0.
- 2.22 Where groups of trees have been assessed, the RPA has been shown based on the maximum sized tree in any one group and so would automatically exceed the RPA's required for many of the individual specimens within the group. A RPA is equivalent to a circle with a radius 12x the stem diameter for single stem trees and 10x the basal diameter for trees with more than one stem arising less than 1.5 meters above ground level.

3.0 BACKGROUND

Site Description

- 3.1 The survey area extends to approximately 0.074ha and is centred on National Grid Reference TQ 28171 84439, OS coordinates 528171, 184439.
- 3.2 The site comprises 18-22 Haverstock Hill and surrounding land. The existing buildings are used as 11 self-contained residential flats, one Class A1 unit (a hairdressing salon) and one Class A5 unit (a hot food takeaway). Hardstanding parking bays and access are provided to the frontage and rear of the properties.
- 3.3 The site is bound by Haverstock School to the north and west, with a small area of trees and self-seeded understory shrub directly to the west of the site, within the school grounds. The Salvation Army to the east and Haverstock Hill A502 to the south, with Chalk Farm underground station immediately opposite.
- 3.4 The site context is typical of the Borough of Camden, with leafy green streets and mature residential gardens, and larger areas of open greenspace comprising Regents Park and Hampstead Heath, among other smaller urban parks and formal gardens.

The Proposals

- 3.5 The proposed scheme comprises demolition of existing buildings and ancillary structures (11 flats, A1 unit, A5 unit) and construction of a new building comprising ground plus basement and five upper floors for use as 29 no. dwellings (Class C3) and flexible Class A1/A2/A3/A4 together with cycle parking, landscaping refuse and associated works.

4.0 THE TREES

- 4.1 In line with the BS5837 guidelines, all trees under assessment have either been considered individually or as groups, with a total of 6 trees identified, all off-site directly adjacent to the site boundary, to the north and west. These trees have been included as they have the potential to be affected by the development and its construction.
- 4.2 Full details are located in the appended Tree Schedule (Appendix 1.0).
- 4.3 The trees to the west of the site are growing within a small triangular soft landscaped area, within the grounds of Haverstock School. This area is behind the brick retaining wall on the site side and a metal railing fence on the school side. The trees, which include T1 Cherry (*Prunus* sp.) (Category B) and T2-T4 Goat Willow (Category C), are all growing within 1m of the site retaining wall, and in the case of T1 Cherry, are starting to compromise the structural integrity of the wall.
- 4.4 In addition, there are a number of more recent semi-mature plantings of Silver Birch and Field Maple, however these are located sufficiently far enough away from the site boundary so as not to be impacted by any development plans. One key observation of these semimature trees, is that that are all showing significant phototropic growth away from the larger adjacent T1-T4 trees, which will likely impact their future structural development.
- 4.5 Within this area, T1 is a multi-stem tree from 1.5m with good stem and crown structure, despite having no leader, showing no significant defects. It is though growing very close to the site boundary retaining wall, with ground level stem and buttress growth now pushing against the wall, resulting in recent, temporary remedial repairs. In terms of the crown, it has a history of crown raises over the site (up to 7 m), with further limb shortening above, to maintain clearance. Despite this, it was noted that the nearest sweeping stem to site is overhanging the site boundary line, as well as the top section of the upper crown on this eastern side.
- 4.6 The remaining trees in this area included within the scope of the survey, include a group of three Goat Willows (T2-T4), all closely planted with a shared asymmetrical crown space. Overall these trees are of a similar description and condition, being lapsed pollards in declining structural and physiological health. As with T1, the crowns of all three also overhang the site, as shown on the Tree Constraints Plan, Appendix 2.0.
- 4.7 Notable ground conditions here include the observed level change between the site and the landscaped area (with the site being approximately 0.75-1m lower), and the hard-standing concrete surface on site, compared to the soil and vegetation layer on the school side. In the absence of exploratory digs and knowledge of subterranean construction, it is therefore concluded that whilst root spread from T1 (and to a lesser extent T2-T4) will likely be impeded, some roots beyond the site boundary must be assumed.

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- 4.8 The remaining trees adjacent to the site are T5 Hazel and T6 Willow, just beyond the northern perimeter wall. Both are self-seeded, growing between the site wall and school fenceline within a very restricted growth space that will ultimately result in declining health over time. Both are shown to overhang the site.

Tree Preservation Orders and Statutory Designations

- 4.9 Trees within the London Borough of Camden can be protected by Tree Preservation Orders (TPOs) or by virtue of being in a Conservation Area, with the council generally requiring the retention of trees that contribute to the area's character and appearance.
- 4.10 Through a desktop review of the Local Planning Authority's website, with additional email confirmation (Darlene Dike, Planning Assistant, 6th July 2017), it was identified that none of the trees covered within the survey are designated under a TPO or within a conservation area.

5.0 ARBORICULTURAL IMPACT ASSESSMENT

INTRODUCTION

- 5.1 The purpose of this Arboricultural Impact Assessment (AIA) is to assess the potential impacts to existing trees from the proposed development, and to highlight the need for the retention or removal of specific trees during construction.
- 5.2 Works associated with development of this type can damage trees, threatening the survival of those that are to be retained. The following actions can have negative impacts upon tree health:
- Soil compaction;
 - Root damage (e.g. severance);
 - Soil coverage with impermeable material;
 - Alterations in ground level;
 - Leaks and spillages from stored materials; and
 - Vehicle and heavy plant collision.
- 5.3 As such, where possible, the RPAs and canopies that are defined in Appendix 2 should be protected and considered throughout works to prevent risks to the health of the trees

DIRECT TREE LOSS

- 5.4 Whilst T2-T6 are of limited arboricultural and amenity value, T1 Cherry is considered to be of greater value (Category B), as it shows generally good structural and physiological health and provides good visual prominence and screening in this location.
- 5.5 Therefore, given mature trees cannot be replaced in the short to medium term, it was considered by the design team (through pre-application discussions with LB Camden), that retention options as part of the development would be sort, if practically feasible. The challenges here being the constraints to site development from the close proximity of both the tree crown and possible roots.
- 5.6 Through early design considerations, it became clear that the existing retaining wall currently being pushed out by T1 (as described in Section 4.5 and Appendix 1.0), would need to be replaced regardless of the nature of any site development proposals. With the identified need to undertake this infrastructure work, it was shown that the tree could not therefore be retained as the conflict with the retaining wall would be to great.
- 5.7 Given the desire to originally retain T1, a subsequent meeting (22nd March 2018) was attended by the design team and the council Tree Officer (Tom Little), to discuss the removal of T1, from which it was agreed that the tree should be removed.

- 5.8 With the proposal to then remove T1 long with the other remaining Category C trees (with the agreement of Haverstock School and LB Camden Tree and Landscape Department email [ref. Tom Little dated 23rd March 2018]), the mitigation of these losses will be met through additional tree planting as detailed within the proposed re-landscaping of this adjacent area.

DEVELOPMENT FACILITATION PRUNING

- 5.9 With the proposal to remove all adjacent site trees (as detailed in this report), the need for facilitation pruning has not been identified.

DEVELOPMENT WITHIN ROOT PROTECTION AREAS

- 5.10 With the proposal to remove all adjacent site trees (as detailed in this report), the need for development with the RPA of trees to be retained has not been identified.

SERVICES AND UTILITIES

- 2.1 Not applicable as no trees retained.

LANDSCAPING AND TREE PLANTING

- 5.11 It is proposed to remove the existing trees within adjacent land to the west due to impacts on the retaining wall, ongoing maintenance and tree health concerns. This area will be re-landscaped to provide three new trees as compensation for this loss. The species mix has been selected through discussions with the council Tree Officers, alongside recommendations from the landscape architects to minimise maintenance and optimise seasonal interest. One new red Cappadocium maple and two new fastigate hornbeams will be planted with sufficient space to reach full maturity. Together these trees will provide a prominent landscape feature and green screen between the proposed development and existing school.
- 5.12 See Appendix 3 for Arboricultural Implications Plan (Macfarlane Associates).

6.0 CONCLUSIONS

- 6.1 In line with the BS5837 guidelines, six trees were noted within close vicinity to the proposed development site, all of which have the potential to be affected by the development or its construction. No trees were noted within the site boundary itself.
- 6.2 The category mix of the surveyed trees includes one Category B and five Category C trees, with no Category A or U trees identified within the scope of the survey.
- 6.3 Leading on from the tree survey, the Arboricultural Impact Assessment for the proposed development was drawn up based on the detailed design for the site.
- 6.4 To improve the quality of the adjacent tree stock, T2-T6 (Category C) trees are proposed for removal, whilst the final tree T1 (Category B) was originally proposed for possible retention. The necessity though to reconstruct the site retaining wall (currently pushed over by T1), has resulted in this too needing to be removed.
- 6.5 Compensation for these losses will be met through additional tree planting as detailed within the proposed re-landscaping of this adjacent area. This includes 1 no. *Acer cappadocium* 'Rubrum' 20-25cm and 2 no. *Carpinus betulus* 'Frans Fontaine' 20-25cm specimens planted with sufficient space to grow to maturity. Accordingly, no detrimental residual impacts on arboriculture or the amenity value of the local area are predicted through redevelopment of the site. Re-landscaping of the adjacent land will deliver a positive contribution to the landscape.

Limitations

- 6.6 This report includes information on only the trees that were inspected and the condition they were observed in at the time of survey. The condition of trees can change, and as such any findings from this report should be held valid to inform for purposes of development for no longer than 12 months from the survey date.
- 6.7 No guarantee can be given for the structural integrity of any trees on the site as a full hazard assessment has not been made. Inaccessible trees will have best estimates made about location, physical dimensions and characteristics.

APPENDIX 1.0: TREE SCHEDULE

a

Tree No	Species	Height (m)	Stem Diameter (mm)	Crown Spread				Crown Clearance (m)	Age Class	Condition		General Notes	Estimated years remaining	Grade Category
				N	E	S	W			P	S			
1	Cherry sp.	12	650	7	4.5	4	7	7	M	G	F	Multi-stem tree from 1.5 m (likely formatively pollarded as a single stem). Good stem and crown structure from this point with no significant defects. Growing very close to boundary retaining wall, with mature stem showing around 15 cm clearance. Ground level stem and buttress growth is now pushing against wall and has resulted in the need for remedial works to split the wall and provide a wooded support structure. History (on the site side) of crown raise (up to 6/7 m), with further limb shortening above to maintain clearance. Only very top crown on Site side remains. Nearest sweeping stem to site is just overhanging boundary line.	>10 (cherry species often have relatively short life spans).	B1
2	Goat willow	11	320, 190	3.5	2.5	3	5	6	M	F	P	Sweeping twin stem structure (away from site) gradually straightening up (phototropically). Pollarded at approximately 3.5 m with asymmetrical crown formed from regrowth at this point. Large old semi occluded wound on the main stem. Some of lapsed pollard regrowth now in decline, with decay areas.	>10	C2
3	Goat willow	11	160, 200, 160	4	2.5	3	5	6	M	P	P	Multi-stem tree from 1 m and Pollarded at approximately 3.5 m with asymmetrical crown formed from regrowth at this point. Some of lapsed pollard regrowth now in decline, with decay areas. Smothered by adjacent T2 and T4.	>10	C2
4	Goat willow	11	470	6	2.5	4	7	6	M	F	P	Originally pollarded at around 2 m, from which a multi-stem structure has developed. Re-pollarded at 3.5 m with asymmetrical crown formed from regrowth at this point. Some of lapsed pollard regrowth now in decline, with decay areas.	>10	C2

Project: Haverstock Hill
 Client: PPR Haverstock Hill LLP
 Project Number: 551027
 Greengage Environmental

G: Good
F: Fair
P: Poor
SM: Semi mature
EM: Early mature
M: Mature

b

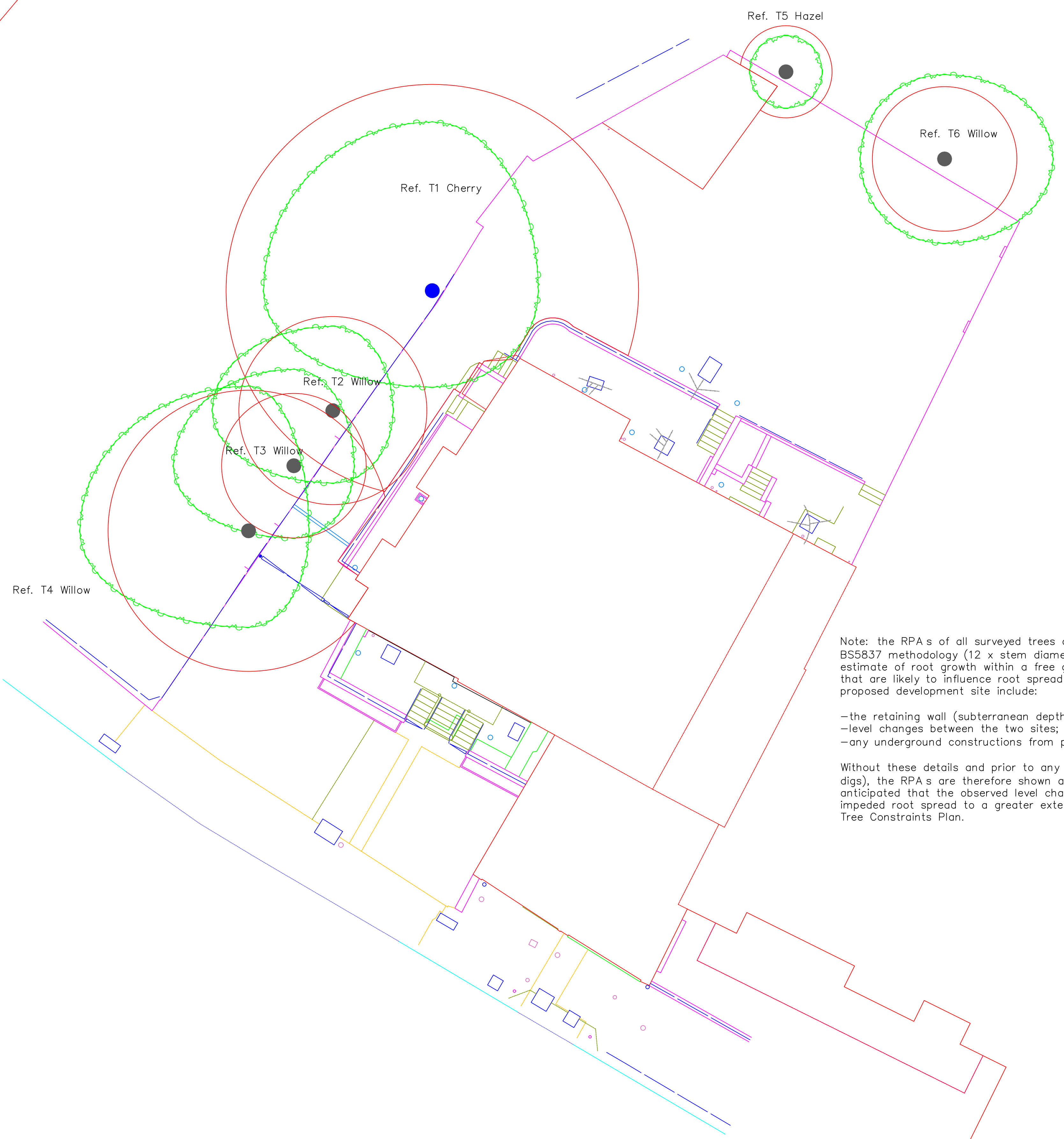
Tree No	Species	Height (m)	Stem Diameter (mm)	Crown Spread				Crown Clearance (m)	Age Class	Condition		General Notes	Estimated years remaining	Grade Category
				N	E	S	W			P	S			
5	Hazel	4	#150	1.5	1.5	1.5	1.5	2	SM	G	F	Self-seeded tree growing between wall and fence just beyond the rear perimeter of the site, overhanging the existing wooden shed construction. Stem growing in very restricted growth space. Will ultimately result in decline of tree health over time.	>10	C1
6	Goat willow	7	#250	3.5	4.5	3.5	3.5	2	SM	G	F	Self-seeded tree growing between wall and fence just beyond the rear perimeter of the site. Good crown structure, although stem growing in very restricted growth space. Will ultimately result in decline of tree health over time.	>10	C1

Project: Haverstock Hill
 Client: PPR Haverstock Hill LLP
 Project Number: 551027
 Greengage Environmental

G: Good
F: Fair
P: Poor
SM: Semi mature
EM: Early mature
M: Mature

APPENDIX 2.0: TREE CONSTRAINTS PLAN

Tree Constraints Plan showing existing layout against BS5837:2012 tree categories & Root Protection Areas



Note: the RPA's of all surveyed trees are as calculated via the BS5837 methodology (12 x stem diameter at 1.5 m), which is an estimate of root growth within a free growing environment. Factors that are likely to influence root spread from T1-T6, on to the proposed development site include:

- the retaining wall (subterranean depth);
- level changes between the two sites; and
- any underground constructions from previous site/land use.

Without these details and prior to any on site investigations (trial digs), the RPA's are therefore shown as described. It is though anticipated that the observed level change and retaining wall will have impeded root spread to a greater extent than that shown on this Tree Constraints Plan.

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

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

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

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.

RPA Incursion BS5837:2012 calculated root protection area with line showing root incursion from existing site buildings.

1	551027_jrMar18_exTCP_DV.02	23/03/18
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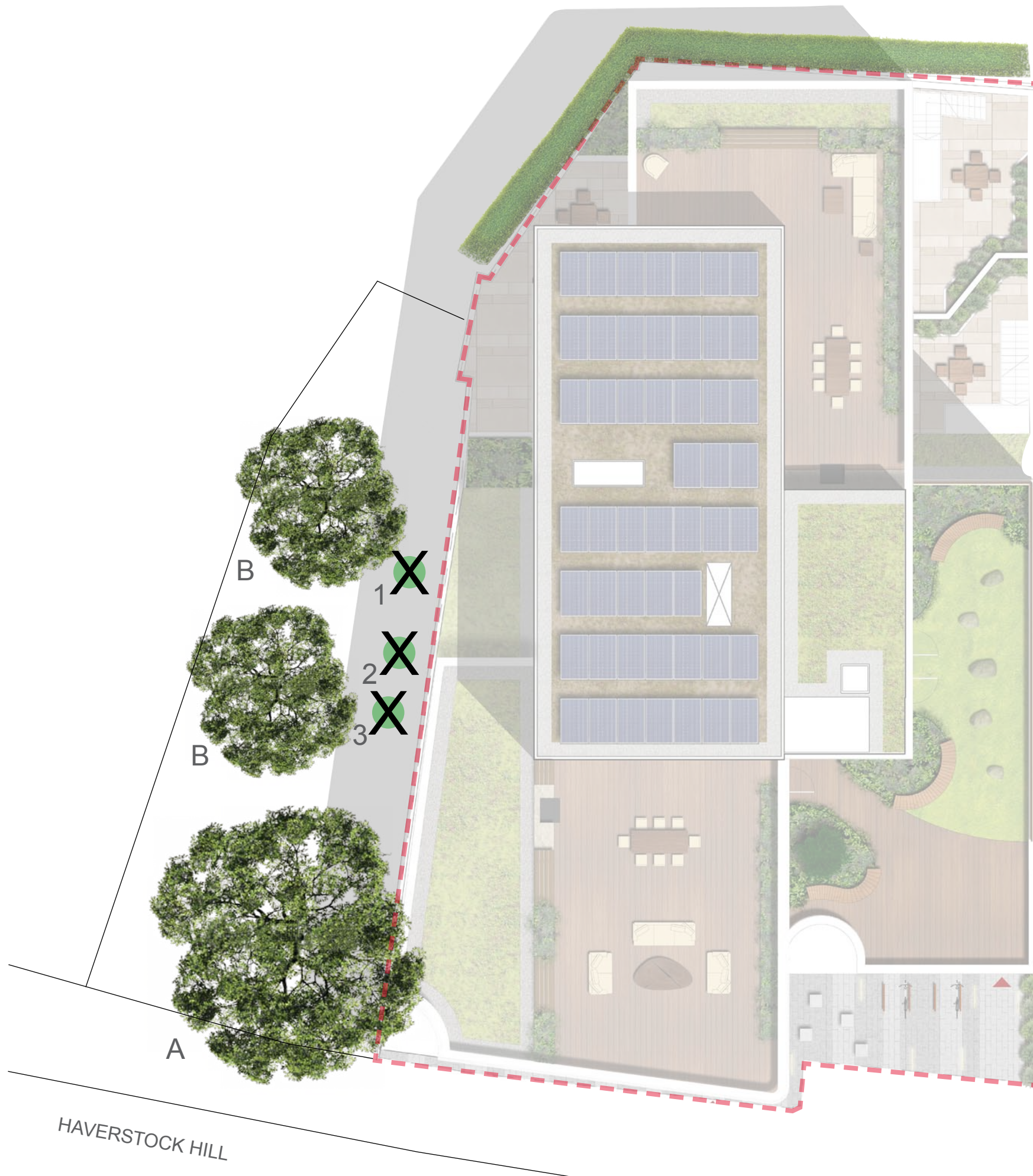
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Project Haverstock Hill	Sheet 1 of 1
Date 23/03/2018	
Scale 1 to 100 at A1	

APPENDIX 3.0: TREE RETENTION/REMOVAL PLAN



3.17 Arboricultural implication plan

Three existing trees on the adjacent property to the West could be removed due to impacts on existing retaining wall, ongoing maintenance, and tree health concerns. Small immature trees could also be removed to allow new mature tree growth. Replacement trees were selected with discussions with local authority tree officers, maintenance, and seasonal interest. A new prominent semi-mature deciduous tree could enhance the public realm environment. Additional Carpinus could help screen the development from the school boundary.

Legend

-  Tree to be removed
-  Proposed tree

Removed tree schedule

Item	Species
1	Prunus sp.
2	Salix sp.
3	Salix sp.

Proposed tree schedule

Item	Species
A	Acer cappadocicum 'Rubrum'
B	Carpinus betulus 'Frans Fontaine'



Acer cappadocicum 'Rubrum'
25-30cm girth



Carpinus betulus 'Frans Fontaine'
20-25cm girth