

ARBORICULTURAL IMPACT ASSESSMENT AT 100 TOTTERIDGE LANE, TOTTERIDGE



Prepared for ADL

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Executive Summary

This assessment outlines the tree constraints that affect the construction a new extension and demonstrates how the retained trees can be protected throughout the development process.

No trees will require removal for development purposes.

All the retained trees will be provided with proper protection as set out in BS5837:2012 during the construction phase. Protection measures will include erecting temporary protective fencing, pre-emptive root pruning and the use of No-Dig techniques to construct the patio.

This assessment forms an important stage in the process of managing and protecting the trees on site in relation to the proposed development. However, it will only ensure the protection of the trees on site if the tree protection measures in the Arboricultural Method Statement are implemented in full and the prescribed system of arboricultural supervision is followed. Tree protection works must be fully integrated into the construction process.

Provided that the protective measures outlined within this report are adhered to, it is anticipated that the trees adjacent to the site will not be significantly impacted by the development.

G.G. Robbie

AT Coombes Associates Ltd.

16 February 2021



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1. Terms of Reference

- 1.1 The aim of this assessment is to survey trees that may be affected by the construction of an extension to a residential property at 100 Totteridge Lane, Totteridge.
- 1.2 The assessment addresses the likely impact of the proposed development on surrounding trees and provides recommendations for the protection of retained trees during construction work based on BS 5837:2012 "Trees in relation to design, demolition and construction-Recommendations".
- 1.3 The client has provided a plan showing the position of the proposed development. However, the plan provided did not show the tree positions which have been plotted on the plan based on site measurements. These tree positions should be regarded as approximate and if accurate positions are needed the services of a land surveyor would be required.

2. Site Description

- 2.1 The site is a residential property at 100 Totteridge Lane, Totteridge. It is a detached property, with a number of small shrubs and bushes adjacent to the driveway (Fig 1). Within the neighbouring property to the west is a row of laurel (Fig 2).



Fig 1: Frontage of 100 Totteridge Lane.



Fig 2: Laurel row in neighbouring property.

- 2.2 The rear garden extends approximately 40m from the back of the existing building and is largely set to lawn surrounded by flower beds and small shrubs (Fig 3). Within the neighbouring property to the east are two trees comprising a weeping willow closer to the dwelling, and a sycamore further north. The weeping willow has a TPO in place.



Fig 3: Rear garden set to lawn.



Fig 4: Willow and sycamore within neighbouring property.

3. Tree Survey Details

- 3.1 Appendix 1, the Tree Survey Schedule gives the survey findings in tabular form. The schedule contains all the information specified in section 4.4.2.5 of the British Standard. Appendix 2 gives a full explanation of the survey headings.
- 3.2 The trees were surveyed on 18 December 2020; they were not climbed but surveyed from ground level.
- 3.3 The details recorded during the tree survey have been collected independently of any development proposals, and the categorisation of the quality and amenity value of the trees is made purely on arboricultural grounds.
- 3.4 No assessment of the soil has taken place as part of this report. The British Standard states that a soil assessment should be carried out by a competent person to establish the structure, clay content and potential for volume change of the soil. A survey of this nature is considered outside the scope of this Arboricultural Assessment. For guidance on soil structure in relation to construction advice should be sought from a Structural Engineer. Guidance on foundation depth in relation to building and trees can be found in NHBC Chapter 4.2.

4. Assessment of Tree Constraints

- 4.1 To facilitate the proper assessment of tree constraints a Tree Constraints Plan (TCP) has been prepared and forms Appendix 3. The plan has been produced as a basis for the assessment of the constraints imposed by existing trees on the proposed design.
- 4.2 Appendix 3 shows the position of trees marked by a coloured dot matching the retention category status and a reference number (as listed in Appendix 1). Heights (Ht) are marked in metres for each tree, together with the predicted ultimate heights (U/Hgt).
- 4.3 The plan deals with constraints that the trees may place on the development in two areas as follows:

Below ground Constraints

- 4.4 The Root Protection Areas (RPA) for the trees are shown as a coloured circle to match the retention category colour. The RPA will be used to help inform the closest positions of any future buildings. The RPA will be protected during any development work with temporary barriers as prescribed by the British Standard.

Above Ground Constraints

- 4.5 The branch spreads were measured at the four cardinal compass points, with a shape drawn around these points to indicate approximate branch spread, represented by green broken lines on the plan. The ultimate crown spread has been shown with an orange dashed line. This is a predicted distance, and is based on personal experience of how far it is likely the crown will grow.
- 4.6 A shade pattern has been shown for each tree forming an arc from north west to due east. This gives an indication of the patterns of shadows created by the trees around mid-day in the summer. This is as recommended in BS5837:2012 (Section 5.2.2) but actual shade patterns throughout the year will vary widely. If shading is likely to be a serious constraint a more detailed analysis of shade pattern using proprietary software may be deemed necessary.

5. Arboricultural Impact Assessment

- 5.1 A total of two individual trees and one tree group were included in this report. Groups contain trees forming continuous features or clusters with similar characteristics. All trees included within the survey are under separate ownership.
- 5.2 T1 and T2 have been classed as Category B. These trees are generally in good condition and confer landscape values. They are suitable for retention in the context of a development.
- 5.3 The laurel row (G1) has been classified as Category C. These trees do not play such a significant role in the local landscape. They are within a neighbouring property and therefore they must be retained and protected throughout any developments unless other arrangements are made with their owner.
- 5.4 Any trees that are retained will be provided with their proper protection according to BS5837:2012 regardless of which category they have been placed in.
- 5.5 The tree constraints for each element of the development, are considered separately below:

Element	Detail
Construction of New Extension	<p>The footprint of the existing building is shown on the Tree Constraints Plan (TCP, Appendix 3). It can be seen that the proposed new extension extends 4m to the north.</p> <p>The extension encroaches into the RPA of both G1 and T1. The incursion into the RPA of T1 is less than 1%, whilst the incursion into the RPA of G1 is approximately 10%. Therefore, pre-emptive root pruning will be carried out to minimise the damage caused to roots, should they be present. This</p>

Element	Detail
Construction of New Extension cont.	<p>will be carried out by excavating a trench at least 500mm outside the line of the strip foundations in the area shown on the TPP using hand tools or an airspade. Any roots found during this excavation will be severed using a sharp handsaw or secateurs. This will ensure that the roots are not ripped or torn and will have a good point from which to re-grow and will have a chance to occlude and prevent fungal pathogens from entering.</p> <p>The new extension is within to the current branch spread of G1 which will need facilitative pruning to provide clearance between the outer branches and the new building and provide sufficient clearance for construction works. The amount of facilitative crown pruning will be agreed and carried out prior to the commencement of construction works. G1 is within a neighbouring property and therefore attention must be paid to the restrictions on pruning as outlined in section 6 below.</p> <p>G1 will also provide some shading to the western wall of the building, but this will be no more significant than that already experienced within the dwelling.</p>
Hard Surfaces, Paths and Drives	<p>The proposed patio to the rear of the extension will be within the RPA of T1. Therefore, this patio must be formed without any excavation where within the RPA. It is recommended that it is also dry jointed if possible, to provide continued permeability to the RPA.</p>
Services and Soakaways	<p>No details of any new service runs have been provided, should they be required for the extension. They should be routed to avoid the RPAs of trees. If this is not possible, special techniques must be employed to place the services within the RPA of the trees. The British Standard suggests a range of trenchless methods suitable for various applications including microtunnelling, surface launched directional drilling, Pipe ramming and Impact Moleing/thrust boring. It is important common ducts should be used where it is not possible to avoid the RPA. Further guidance on installing underground services adjacent to trees can be found in the NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Volume 4 Issue 2). This document outlines a number of techniques that may be used for trenching near trees, including trenchless techniques, discontinuous trenching and hand digging.</p> <p>It will be necessary to prepare detailed plans for any services that run thorough the RPA of retained trees. This should be produced in conjunction with an arboriculturist and include allowance for the space needed for access for the installations, and the levels across the proposed area.</p> <p>Any above-ground apparatus including CCTV cameras and lighting should also be positioned to avoid the need for any regular or detrimental pruning to the trees. Minor facilitative pruning is acceptable. However, positions that require repetitive and significant tree work must be avoided.</p>

6. Tree Management

- 6.1 No tree work has been specified in column 12 of Appendix 1 for arboricultural and health and safety reasons.
- 6.2 This schedule does not refer to, and is superseded by, any requirements for tree felling for development purposes that may be required.
- 6.3 Please note that the inspection of trees on site was of a preliminary nature, gathering, as set out in the British Standard, only information needed to assess tree constraints. While any obvious tree defects that may constitute a risk have been recorded in the survey and appropriate remedial work specified this assessment does not constitute a full tree health and safety survey. In particular inaccessible trees, trees with heavy ivy cover and trees within groups have not been inspected fully and dimensions estimated. However, any comments on the trees relating to health and safety remain valid for 12 months from the date of this report after which the trees will require re-inspection.

7. Further Arboricultural Input into the Design Process, Construction and Aftercare

- 7.1 A Tree Protection Plan (TPP), Arboricultural Method Statement (AMS) and Timetable for implementation of Tree Protection Works form Appendices 4, 5 and 6 respectively.
- 7.2 The AMS contains a timetable for implementation of the tree protection works. No work will commence until the protective fencing is in place.
- 7.3 If the proposed layout of the development changes it will be necessary to revise this report.

8. Permissions and Constraints

- 8.1 T1 is believed to be the subject of a Tree Preservation Order. Therefore, written permission must be obtained from the Local Authority prior to commencing any work that may affect the condition of the protected trees, including any ground works adjacent to them.
- 8.2 All trees included within the survey are within a neighbouring garden. G1 will require facilitative crown pruning in order to construct the extension. There is a Common Law right to prune neighbouring trees to the boundary, provided that the tree is not destroyed or significantly damaged in the process. All arisings must be offered to the owner of the trees and the pruning must not go beyond the boundary line. It is recommended that such works are carried out in consultation with the owner of the trees to avoid any potential conflict.
- 8.3 To assist the planning process the LPA should be provided with a copy of this report and invited to comment on the proposals.

- 8.4 When dealing with developments close to trees, special attention should be paid to related legislation ensuring that the Wildlife and Countryside Act (1994), Conservation of Habitats and Species Regulations (2010) and the Countryside Rights of Way Act (2000) are adhered to. It must be ensured that nesting birds and protected species such as bats and reptiles are considered and protected.

9. Conclusions

- 9.1 All trees can be retained and protected as set out in BS5837:2012 throughout the works.
- 9.2 The new extension will encroach slightly into the RPA of T1 and G1. This will be addressed by carrying out pre-emptive root pruning.
- 9.3 The patio to the rear of the dwelling will be constructed without any excavation.
- 9.4 Where new structures are located near trees, pruning will be required prior to construction to allow enough space between the trees and the buildings.
- 9.5 Provided that the above precautionary measures are in place, it is likely that this development will have minimal impact on adjacent trees.

G. G. Robbie, BSc Hons For, MICFor, M Arbor A

A.T. Coombes Associates Ltd

16 February 2021

**APPENDIX 1-
TREE SURVEY SCHEDULE**

SITE: 100 TOTTERIDGE LANE, TOTTERIDGE

SURVEY COMPLETED: 08/12/20

1	2	3	4	5	6				7	8	9	10	11	12	13	14	15	16
Tree No.	Species	Ht (m)	Stem dia (mm)	No of Stems	Branch Spread				Height and Direction of First Branch (m)	Mean Canopy Ht	Life Stage	Physiological Condition	Structural Condition	Preliminary Tree work	Estimated remaining contribution (Yrs)	Cat grading	Radius of RPA (m)	RPA (sq m)
					N	E	S	W										
T1	Weeping willow #	12.5	600	1	4.2	4.9	6.5	5.0	6.4 S	4.0	EM	Good	Good - Pollarded in the past	No work required	20+	B1	7.2	162.9
T2	Sycamore #	15.5	602	2	5.0	5.0	5.8	5.0	6.8 S	6.3	EM	Fair - moderate vitality	Good	No work required	20+	B1	7.2	164.0
G1	Laurel #	7.0	300	1	4.0	4.0	4.0	4.0	-	3.0	EM	Good	Good	No work required	20+	C1	3.6	40.7

SURVEYED BY A.T. COOMBES ASSOCIATES

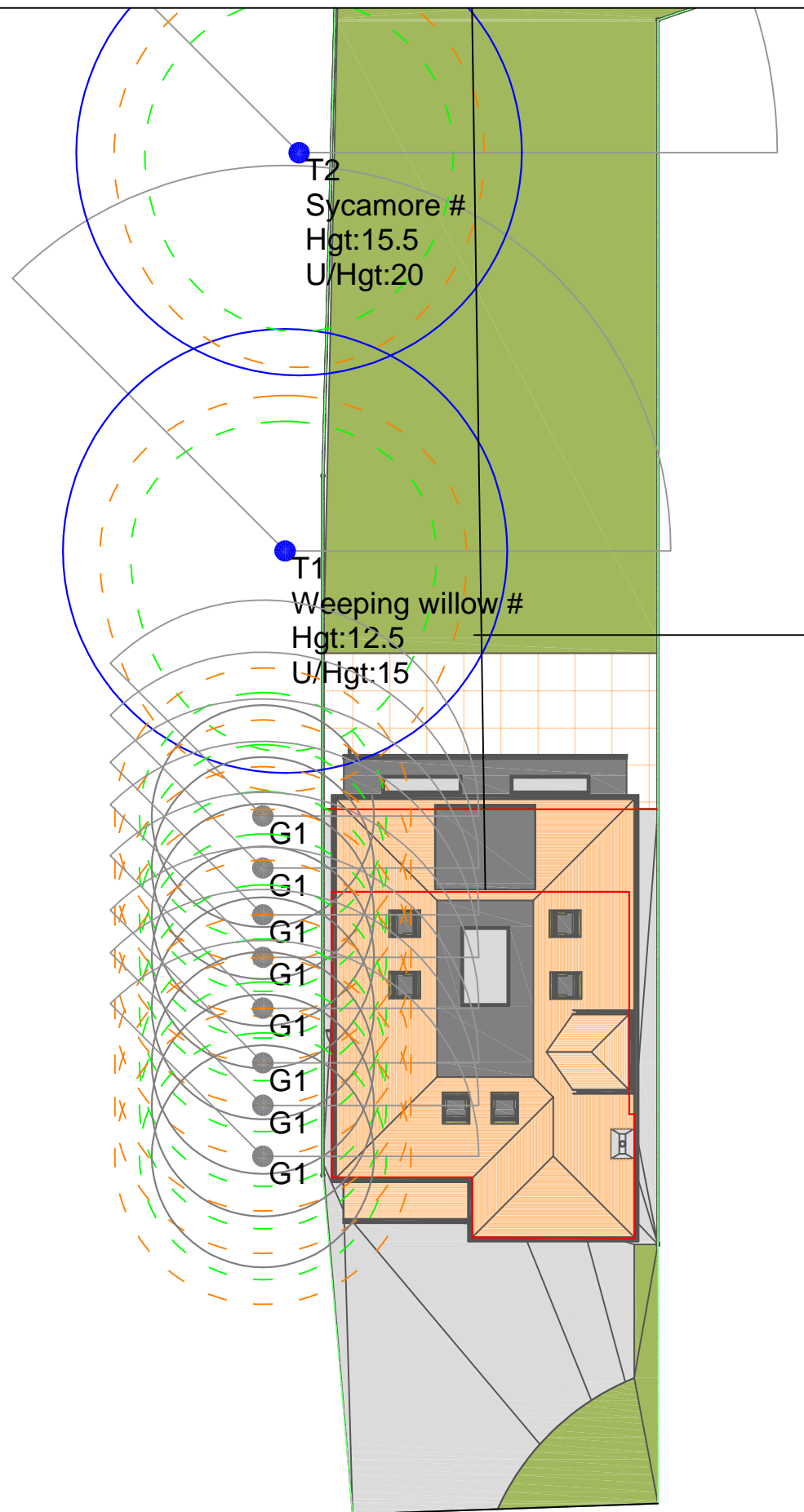
denotes estimated dimensions due to lack of access to tree

Appendix 2: Notes on the Column Headings in Appendix 1

Col#	Title	Notes
1	Tree No.	Tree numbers to correspond with those shown on the TCP.
2	Species	Each tree has been identified and the common name given in each case.
3	Ht (m)	Height of the tree
4	Stem dia (mm)	<p>The stem diameter measured in millimetres at 1.5 metres above ground.</p> <p>For multi-stemmed trees the stem diameter has been calculated according to the formula given in BS 5837:2012. For trees with up to 5 stems, each stem has been measured at 1.5m, squared and added together. The diameter shown is the square root of the total.</p> <p>For multi-stemmed trees with over 5 stems a sample of five diameters has been taken at 1.5m, averaged and squared, then multiplied by the total number of stems. The square root of this sum gives the stem diameter figure.</p>
5	Number of Stems	Total number of stems on the tree.
6	Branch Spread	The branch spread measured in metres from the stem to the tip of the outer branches has been measured in four directions of the compass North, South, East and West.
7	Height and Direction of First Branch spread (m)	First significant branch and direction of growth (relative to the four cardinal compass points).
8	Canopy Ht	Mean height of the canopy above ground level.
9	Life Stage	The life stage of the tree has been assessed into one of the following categories: Y =Young, SM = Semi Mature, EM = Early Mature M = Mature, OM = Over mature and V = Veteran.
10 and 11	Condition	The British Standard recommends that a note is made of the structural and physical condition of the tree.

Col#	Title	Notes
12	Preliminary Management Recommendations	<p>This column includes all work considered necessary to, as far as is practicable, ensure health and safety and for the good arboricultural management of the trees. These works are not associated with the development proposals. All work to be carried out to BS 3998: 2010 "Tree Work-Recommendations".</p> <p>Recommendations given in respect of Health and Safety remain current for 12 months from the date of this assessment after which further inspection is recommended.</p> <p>It should be noted that trees are dynamic structures subject to the forces of nature, which can fail without showing external symptoms.</p>
13	Estimated remaining Contribution (Yrs)	<p>The estimated remaining contribution of each tree in years has been assessed, using personal experience, into the following groupings:</p> <p>< 10 = Less than 10 years 10+ years = More than 10 years 20+ years = More than 20 40+ years = More than 40 years</p>
14	Category grading	<p>U = Those 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.</p> <p>(Trees that have serious, irremediable structural defects, such that their early loss is expected due to collapse or ill health including trees that will become at risk due to the loss of other U category trees).</p> <p>A = Those trees of high amenity quality and value in such a condition as to be able to make a substantial contribution (a minimum of 40 years is suggested)</p> <ol style="list-style-type: none"> 1) Trees that are particularly good examples of their species if rare unusual or essential components of groups or formal or semi-formal arboricultural features 2) Trees, groups or woodlands which provide a definite screening or softening effect to the locality in relation to views in or out of the site, or those of particular visual importance. 3) Trees groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran tree or wood pasture)

Col#	Title	Notes
14 cont	Category grading cont	<p>B = Those of Moderate quality and amenity value: those in such a condition as to a significant contribution (a minimum of 20 years is suggested)</p> <ol style="list-style-type: none"> 1) Trees that might be included in the high category but are downgraded because of impaired condition (e.g. remediable defects) 2) Trees and woodland that forming distinct landscape features but do not form essential components 3) Trees with clearly identifiable conservation or other cultural benefits. <p>C = Those of low quality and amenity value currently in adequate condition to remain until new planting is established (minimum of 10 years is suggested) or trees under 150 mm stem diameter.</p> <ol style="list-style-type: none"> 1) Tree not qualifying in higher categories 2) Trees present in groups or woodlands but not with a significantly higher landscape value and or offering low or temporary screening benefit. 3) Trees with very limited conservation or other cultural benefits. <p>Note: Category C trees are the least suitable for retention, where they would impose a significant constraint on the development their removal for development purposes may be considered acceptable by the LPA. Trees with a stem diameter under 150mm could be considered for relocation.</p>
15	Radius of RPA (m)	The distance that would form the radius of a circular protection zone is given in metres calculated by multiplying the stem diameter given in column 4 by 12. The methods for calculating the stem diameter of multi-stemmed trees is given in section 4 above.
16	RPA (m ²)	<p>The area of the RPA is given in square metres calculated by the following formula:</p> <p>Single Stemmed Trees;</p> $RPA\ m^2 = \left(\frac{(stem\ diameter\ mm\ @\ 1.5m \times 12)}{1000} \right)^2 \times 3.142$ <p>The methods for arriving at the stem diameter for multiple stemmed trees are described above in the notes for column 4.</p>



Drawing Title:

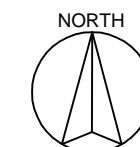
Appendix 3 - Tree Constraints Plan

Site:

100 Totteridge Lane,
Totteridge

Client:

ADL



To Scale 1:200 at A3

KEY

B Category RPA



C Category RPA



Current Crown Spreads



Ultimate Branch Spreads



Shade Pattern



Existing Footprint



Drawn By: GR

Date: 16/02/21

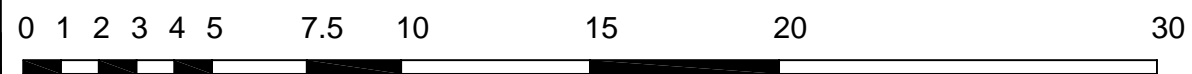


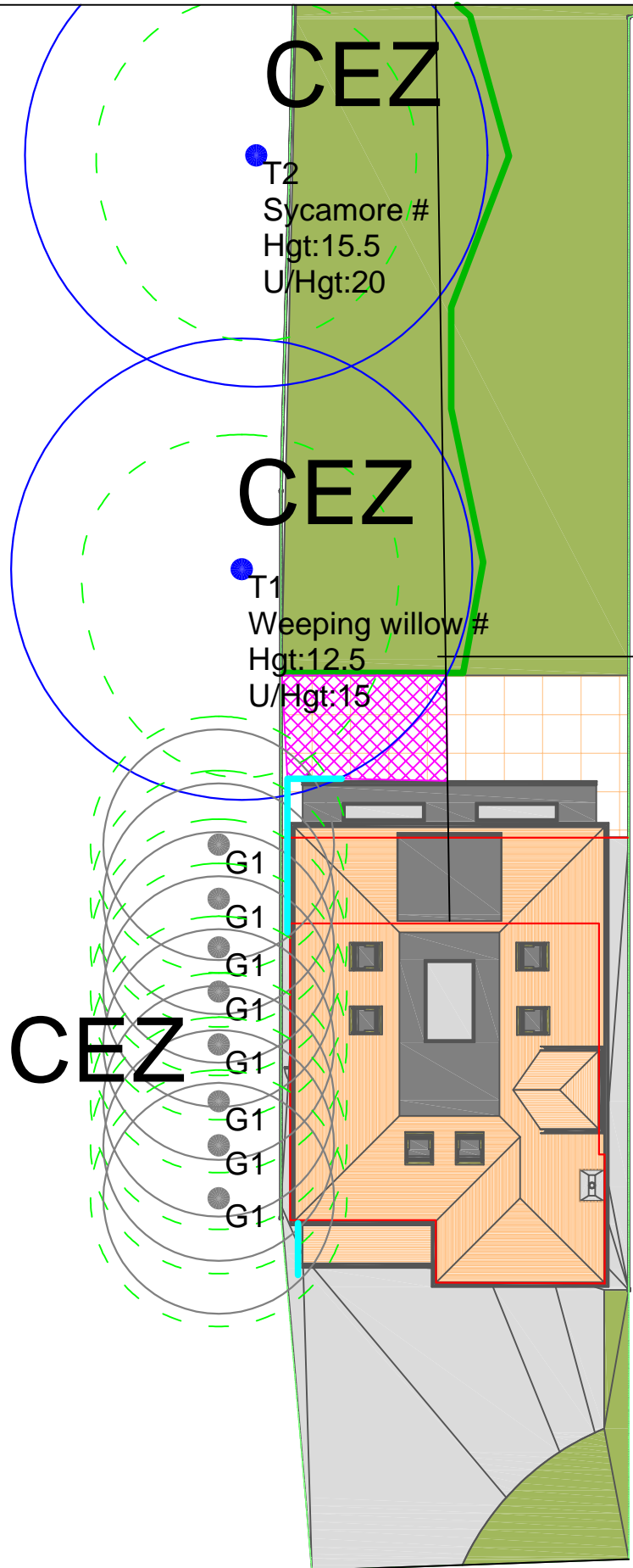
TREE SURVEYS

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Scale (m)

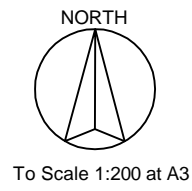




Drawing Title:
Appendix 4 - Tree Protection Plan

Site:
 100 Totteridge Lane,
 Totteridge

Client:
 ADL



KEY

Construction Exclusion Zone	CEZ
Line of Temporary Protective Barriers	
No-Dig Patio Area	
Line of Pre-emptive Root Pruning	
Existing Footprint	

Drawn By: GR Date: 16/02/21



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Appendix 5: Arboricultural Method Statement for a Proposed Development at 100 Totteridge Lane, Totteridge

1. Scope of the Works

- 1.1 The document provides a methodology for protection of trees during the construction of a new extension at the above site and should be read in conjunction with the Tree Protection Plan Appendix 4 and Timetable for Protection Works Appendix 6.
- 1.2 The main features in the protection of the retained trees on site are as follows:
 - Provision of temporary protective barriers
 - Construction of the patio without excavation
 - Use of pre-emptive root pruning.
 - Audited arboricultural site monitoring
- 1.3 A meeting between the site manager/main contractor and a consulting arboriculturist must take place prior to construction work commencing so that the above protection measures set out in this document can be discussed and agreed. At this point a list of contact details for all relevant parties will be produced and circulated including the Tree Officer of the Local Planning Authority.
- 1.4 Protective measures must be in place prior to any ground or construction works take place.

2. Timing of Works

- 2.1 Tree protection works will be completed as detailed below according to the attached timetable Appendix 6.
- 2.2 The exact commencement date is not known. However, the timetable provided gives the order that the works need to be implemented to ensure the trees are fully protected and states when specific arboricultural input will be required.

3. Tree Protection Barriers

- 3.1 Remaining trees will be protected by forming Construction Exclusion Zones (CEZ) as shown on Appendix 4 the Tree Protection Plan (TPP).
- 3.2 Temporary barriers will be erected as shown by the thick green lines on the TPP to form the Construction Exclusion Zone (CEZ). The barriers will consist of 2m tall welded mesh panels (Heras) supported on rubber or concrete feet. The fence panels should be joined together using a minimum of two anti-tamper couplers installed so they can be removed from the inside of the fence. The distance between couplers should be at least 1m and be uniform throughout the fence.

- 3.3 Panels should be supported on the inner side by stabilizer struts which should normally be attached to a base plate and secured with ground pins. Where the fence will be erected on hard surfacing or it is otherwise unfeasible to use ground pins the struts should be mounted on a block tray.

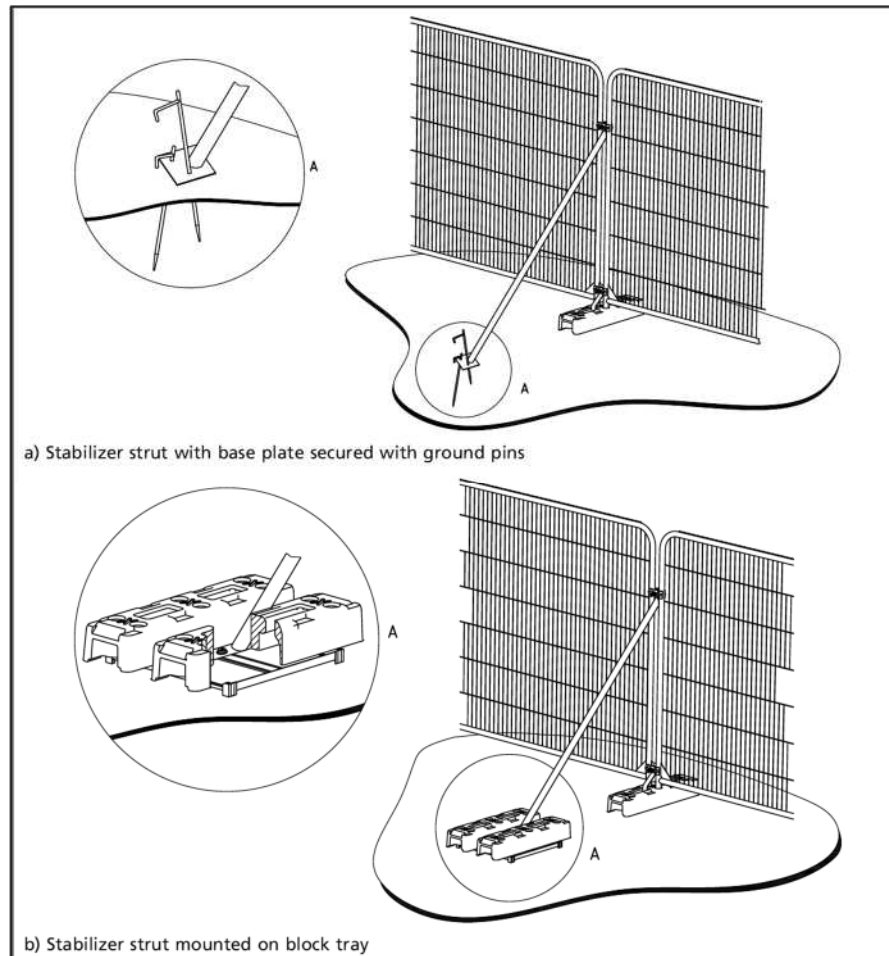


Fig 1: Temporary protective fencing as recommended by the British Standards (2012).

- 3.4 Figure 1 is an extract from BS5837:2012 showing the method of supporting the panels with ground pins and a block mounted tray for use on hard surfaces. Stabiliser struts should be fitted at each panel junction.
- 3.5 At least 3 all-weather notices should be erected on the barriers forming each CEZ stating “Construction Exclusion Zone – No Access “. These should face outwards towards the work area. Signs must be maintained in good condition and remain in place until completion of the works.
- 3.6 Barriers will be maintained throughout the duration of the works, ensuring that access is denied to the CEZ throughout the process.

4. Construction of Patio Without Excavation

- 4.1 The patio must be constructed without excavation where within the RPA of T1.
- 4.2 It is also recommended that, if possible, it is dry jointed to maintain permeability.

5. Pre-emptive Root Pruning

- 5.1 Pre-emptive root pruning will take place just outside foundations of the new extension to minimise injurious damage to the root system of the neighbouring trees whilst excavating. The position of this work has been shown as a thick light blue line on Appendix 4 – TPP.
- 5.2 This will be carried out by excavating a trench at most 500mm outside the line of the strip foundations in the area shown on the TPP using hand tools or an airspade. Any roots found during this excavation will be severed using a sharp handsaw or secateurs. This will ensure that the roots are not ripped or torn, and will have a good point from which to re-grow, and will have a chance to occlude and prevent fungal pathogens from entering.
- 5.3 This work will be carried out by a suitably trained operative or under arboricultural supervision.

6. Site Huts and Temporary Buildings

- 6.1 All site huts and temporary buildings will be sited outside the CEZ.

7. Additional Precautions

- 7.1 The movement of plant in proximity to retained trees should be conducted under the supervision of a banksman to ensure adequate clearance from the branches of the trees. Hydraulic cranes, forklifts, excavators or piling rigs (other than small rigs used for mini piling) must be avoided in the immediate vicinity the crown of the trees.
- 7.2 Cement, oil, bitumen or any other products which spillage would be likely to be detrimental to tree growth should be stored well away from the outer edge of the RPA of retained trees. Precautions should include ensuring all toxic liquids are stored in fully bunded containers. Equipment such as barriers or sandbags must be available on site to deal with any accidental spillages that may occur.
- 7.3 Lighting of fires on site should be avoided. Where they are unavoidable they must be at such a distance from retained trees that there is no risk of the heat causing fire damage to the trunk or branches. Full account must be taken of wind direction. Fires must be attended at all times until they are completely extinguished.

8. Service Trenches

- 8.1 No details of new service runs have been provided at this stage, should any be required. They should be routed to avoid the RPAs of trees. If this is not possible, special techniques must be employed to place the services within the RPA of the trees. The British Standard suggests a range of trenchless methods suitable for various applications including microtunnelling, surface launched directional drilling, Pipe ramming and Impact Moleing/thrust boring. It is important common ducts should be used where it is not possible to avoid the RPA. Further guidance on installing underground services adjacent to trees can be found in the NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Volume 4 Issue 2). This document outlines a number of



techniques that may be used for trenching near trees, including trenchless techniques, discontinuous trenching and hand digging.

- 8.2 It will be necessary to prepare detailed plans for these services that should be produced in conjunction with an arboriculturist, and include allowance for the space needed for access for the installations, and the levels across the proposed area.
- 8.3 Any overground services including CCTV must also be positioned to avoid the need for any regular or detrimental pruning to the trees.

9. Arboricultural Supervision and Aftercare

- 9.1 Arboricultural/site monitoring will be carried out throughout the construction phase by a nominated arborist who will be responsible for consultation with the Local Authority's Tree Officer.
- 9.2 The arborist will complete regular site visits to check that the tree protection measures are being carried out. The frequency of the visits will be dictated by the level of activity and degree to which the tree protection measures are being respected. A note of the date of each visit and a summary of the findings will be forwarded to both the Tree Officer and the Main Contractor to provide an audit trail enabling the proper implementation of the tree protection measures to be checked and verified.
- 9.3 There are four key stages where on-site arboricultural advice will be needed:
- Prior to commencement, to review the contents of the AMS, and deal with any queries the main contractor may have.
 - To confirm that the protective fencing is in place.
 - To ensure the patio is constructed using No-Dig methods
 - To supervise pre-emptive root pruning.
- 9.4 On completion of the works the trees will be inspected by the arborist to check the condition of the trees and advise if any remedial work is necessary.

A.T. Coombes Associates Ltd

16 February 2021



Appendix 6: Timetable for Tree Protection Works at 100 Totteridge Lane, Totteridge

Item	Operation *	Before Commencing Construction Works	During Construction Works	On Completion
1.	Carry out a pre-commencement site meeting to discuss any tree protection matters arising	X		
2.	Carry out facilitative crown pruning as outlined within the AIA.	X		
3.	Erect temporary protective fencing (thick green line) on edge of the CEZ as specified in the AMS and TPP.	X		
4.	Erect warning signs on fencing around each CEZ stating "Construction Exclusion Zone - Keep Out".	X		
5.	Maintain Protective fences and signs in good condition.		X	
6.	Carry out pre-emptive root pruning		X	
7.	Construct patio using no-dig methods		X	
8.	Arboricultural supervision and advice including site visits during the course of the works to check the CEZ and liaison with the Local Authority.	X	X	X
9.	Remove protective fencing			X
10.	Check condition of the protected trees and consider if remedial works are necessary.			X
	<i>* All work to comply with the attached Arboricultural Method Statement and BS5837: 2012 Trees in relation to design, demolition and construction - Recommendations"</i>			

