Cantia Arboricultural Services

Arboricultural Impact Assessment and Method Statement

CAS/2018/125

For

Shepherd Neame, 17 Court St, Faversham, ME13 7AX

Proposed Development Site

Red Lion PH, 82 Lower Green Rd, Rusthall, Royal Tunbridge Wells, Kent, TN4 8TW.

Boyd Saunders
Dip Arb L4- Tech Arbor A

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1.0 Introduction

1.1 Instruction

1.1.1 Cantia Arboricultural Services were instructed by Mr Simon Milliken to undertake a tree survey and provide arboricultural advice on the site known as Red Lion PH, 82 Lower Green Rd, Rusthall, Royal Tunbridge Wells, Kent, TN4 8TW to accompany a planning application.

1.1.2 The site visit was carried out on Wednesday 9th May 2018 between the hours of 1030-1400hrs (210 minutes) and weather conditions were noted as clear with good visibility.

1.1.3 The content and format of this Report are for the exclusive use of the Client as shown on the front cover of this report. It may not be sold, lent, hired out or divulged to any third party not directly involved in the subject matter without the written consent of Cantia Arboricultural Services.

1.2 Aim of Report

1.2.1 To survey in accordance with BS 5837: 2012 'Trees in Relation to Design, Demolition and Construction – Recommendations' to plot and assess the quality of the existing trees located on site and within 15m of proposed development operations. Each tree is then allocated a grade category.

1.2.2 To assess the impact of the proposed development upon trees located on site and within the immediate vicinity. To provide advice on trees requiring removal and outline protective measures for trees marked for retention.

1.2.3 To provide a work specification as required by retained trees to accommodate the proposed development.

1.2.4 To provide recommendations and guidance on how trees and other vegetation may be satisfactorily integrated into the construction and development process.

1.3 Survey Method

1.3.1 This is a preliminary assessment from ground level and observations have been made solely from a visual perspective for the purposes of assessment in terms relevant to planning and development. No invasive or other detailed internal decay detection devices have been used in assessing internal conditions.

1.3.2 All individual trees within a 15m radius of the development that have a stem diameter over 75mm at 1.5m above ground level have been surveyed. Individual trees are given identification numbers which begin with 'T' (T01, T02 etc).

1.3.3 Where a significant number of trees grow in close proximity to one another they are surveyed as a group. In this instance trees with a stem diameter over 150mm only are recorded. Where appropriate only the largest members of a group are surveyed. Groups are given identification numbers which begin with 'G' (G01, G02 etc)

1.3.4 Where trees have been formally planted in a group they are classed as a hedge and given an identification number which begins with an 'H' (H01, H02 etc)

1.3.5 When available, trees are plotted onto a Topographical Survey. If no such survey is provided then trees are plotted onto maps provided by *UKPlanning Maps*.

1.3.6 Where there are access restrictions data has been estimated. This is reflected in the survey schedule with a hashtag (#) symbol as a prefix before measurement.

1.3.7 The survey was carried out with the assistance (where required) of the following inspection equipment-

- Binoculars – Inspection of upper sections of the tree
- Sounding Mallet – Assessment of wood quality, decay extent
- Steel Probe – To test resistance of wood and depth of cavities
- Secateurs – Removal of basal growth & ivy to allow inspection

- DBH (diameter) Tape – Measurement of stem diameter
- Clinometer- To measure height of tree
- Laser measure – Measurement of canopy dimensions & tree location

1.4 Scope of Report

1.4.1 This is an arboricultural report and no such reliance must be given to comments relating to buildings, engineering, soil or ecological issues.

1.4.2 Any conclusions relate to conditions found at the time of inspection. Any significant alteration to the site that may affect the trees that are present or have a bearing on planning implications (including level changes, hydrological changes, extreme climatic events or other site works) will necessitate a re-assessment of the trees and the site and render any previous advice/ findings invalid.

1.4.3 Trees, groups and hedges have been graded upon individual merit in the context of their existing surroundings regardless of any proposed development of the site.

1.4.4 Trees are living organisms and even apparently healthy trees cannot be considered completely safe due to forces of nature and environmental fluctuations which dictate a natural failure rate of intact and healthy trees.

1.4.5 This report is made on behalf of Cantia Arboricultural Services, and no individual is personally liable. By receiving the report and acting on it, the named client, or any third party relying on it, accepts that no individual is personally liable in contract, tort or breach of statutory duty (including negligence).

1.5 Documentation

1.5.1 The following documentation has been made available

- Plot boundary map – 747-P01
- Block Plans – 747-P02

- Internal Layout – 747-P03
- Proposed Elevations – 747-P04
- Proposed Analytical Site Plan – 747-P05

2.0 Site & Tree Discussion

2.1 Site Description

2.1.1 The Red Lion Public House is a Grade II listed historic Coach House which was first licensed in 1415 located on the junction between Lower Green Road and Ashley Gardens.

2.1.2 The building occupies approx. 146 square metres of floor space with openings Westwards onto a client car park and also to the South onto the public footpath. An associated outbuilding is located in the Northern section of the car park which occupies an additional 60 square metres of floor space.

2.1.3 The buildings, associated car parking area and gardens occupy a total plot of approx. 2,385 square metres.

2.1.4 The building is located in the South Western corner of the plot with car parking and a small beer garden located to the North along the edge of Lower Green Road. The Easterly and South Eastern section of the plot rises to an area of garden laid to grass which is largely unused.

2.2 Proposal

2.2.1 The proposal is to section off the unused rear garden area and construct a terraced block containing three individual three bedroom houses situated within a small cul-de-sac with associated gardens and car parking areas.

2.2.2 An entrance to the site will be gained by the construction of an access road which will run from the Southern extremity of the plot on Lower Green Road and up along the Eastern boundary of the plot

2.3 Tree Discussion

2.3.1 A total of thirteen individual trees, and one group of trees have been assessed in detail from ground level by visual means only. The Tree Survey Schedule, at Appendix 2, details the trees in respect of dimension and quality in accordance with the methodology set out in the British Standard 5837:2012. The following categories were recorded

- Category A- Four trees have been classed as Category A - Trees of high quality with an estimated remaining life expectancy of at least 40 years. Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features. Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture).
- Category B- Two trees have been classed as Category B - Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.
- Category C- Six trees and one group have been classed as 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 150 mm. 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/transient landscape benefits.
- Category U- One tree been classed as Category U - Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.

2.3.2 Searches using Tunbridge Wells Councils interactive map showed that the plot does not fall within a Conservation Area. However the Copper Beech (T02) located to the front of the pub is covered individually by a Tree Preservation Order (TPO).

2.3.3 The site is dominated by four large mature individual trees (T01 Lime, T02 Beech, T03 Red Oak & T08 Sycamore) which are visible when passing from Lower Green Road and contribute significantly to the amenity value of the wider landscape.

2.3.4 Tree numbered T08 Sycamore has had its RPA altered to reflect the fact that it is located on the edge of a sheer drop to the West of approx. 1 metre. It is therefore reasonable to assume that the bulk of the trees roots will be located in the grassed area to its East

2.3.5 Tree numbered T13 Ash has had its RPA altered to reflect the fact that it is located upon a raised bank with a retaining wall located to its South and West.

2.4 Trees Requiring Removal

2.4.1 The proposal does not require the removal of any trees.

3.0 Arboricultural Impact Assessment on Retained Trees

3.1 Access

3.1.1 Vehicle and plant access will be unencumbered via existing hard surfacing provided by Lower Green Road and the proposed new access road.

3.1.2 Existing and planned access points fall outside of the RPA's of retained trees and therefore no protective or precautionary measures are applicable in this instance.

3.2 Demolition

3.2.1 The planned demolition of a retaining wall located in the Southern section of the plot does not fall within the RPA's of retained trees and therefore no specialised techniques are required in this instance.

3.3 Construction

3.3.1 The foundations of unit one will conflict with the RPA of tree numbered T08 by 34.7 square metres (7.6%). Therefore in this instance pile foundations will be required to minimise the impact upon the root zone. Prior to installation an investigation will be required to determine their optimal location whilst avoiding damage to roots important for the stability of the tree, by means of hand tools or compressed air soil displacement, to a minimum depth of 600mm. Design and installation of piles should be carried out as stipulated in section P4.0 of the Arboricultural Method Statement.

3.3.2 Proposed hard surfacing and parking bays located around unit one conflict with the RPA of T08 (Sycamore) by 47.8 square metres (10.5%) and T03 (Red Oak) by 2.6m (2.1%). Therefore surfacing in this area will require a 'no-dig' design and incorporate a 3d cellular confinement system. Design and installation should be carried out as instructed in section P5.0 of the Arboricultural Method Statement.

3.3.3 The proposed pedestrian footpath linking the development to Lower Green Road will pass through the RPA of tree to be retained T05 Sycamore 3.04 square metres (7.4%) & T06 Sycamore 10.7 square metres (14.6%). Therefore this footpath must be of a no dig design to minimise compaction and impact upon the root zone. Design and installation must be carried out as instructed in section P5.0 of Arboricultural Method Statement.

3.3.4 No service run design has been provided. Therefore it is assumed that service runs will be laid outside of the RPA's of retained trees as adequate space exists on site to accommodate this.

3.4 Tree protection

3.4.1 Tree protection fencing will be required to be installed as shown on the Tree Protection Plan CAS/2018/125. Fit for its purpose fencing must be installed after any required tree works and prior to any construction operations on site.

3.4.2 Protective fencing should remain in situ throughout the entire construction process. The site manager should be aware that it is his responsibility to maintain protective measures adequately and these should be casually inspected at regular intervals.

3.4.3 Where stipulated ground protection should be laid. The gross weight of predicted traffic in the area should be calculated and ground protection laid in accordance with section P3.5 of the Arboricultural Method Statement.

3.4.4 When there is a requirement to carry out work in an area covered with ground protection then only the immediate area of work should have the protection rolled/scraped back. Once the task in hand is completed then ground protection should be instantly re-instated.

3.4.5 Adequate room is available for the locating of compounds and material storage within the site boundaries and outside of any measured RPA.

3.5 Cultural Implications for Retained Trees

3.5.1 Tree numbered T03 Red Oak will require access facilitation pruning to accommodate the proposal elevations. It is recommended that the Eastern section of its canopy be reduced by approx. 30% (Removing 3m, leaving 6m). It is likely that the tree may require future periodic pruning to avoid re-growth coming into conflict with the construction.

3.5.2 Tree numbered T08 Sycamore currently has 3m clearance from the proposal elevations. There is a possibility that there may be a requirement for future pruning to avoid physical contact with the proposed elevations. Although the mature size of the tree makes this unlikely.

4.0 Conclusions

4.1.1 The proposal does not require the removal of any trees.

4.1.2 Some minor access facilitation pruning of one Red Oak will be required to accommodate the proposal.

4.1.3 Specialised foundation design will be required for one unit to minimise potential impact upon the root zone of trees to be retained.

4.1.4 No-dig design will be required for some areas of hard surfacing to reduce impact upon trees within the vicinity.

4.1.5 Proposed soft landscaping and planting planned for the development aims to provide native habitat and enhance the amenity value of the area.

4.1.6 So long as the precautionary and protective measures outlined within this report are strictly observed and adhered to then the proposal should have minimal negative impact upon retained trees.

Arboricultural Method Statement

1.0 Summary

1.1 The purpose of this report is to aid the preservation of trees shown to be retained at and adjacent to the site shown on the attached plan CAS/2018/125. Trees can easily be retained and effectively protected during the proposed redevelopment of the site, by clearly setting out the tree protection methods, construction techniques and working practices. This document provides this information; principles that are approved and enforced by the local planning authority.

1.2 This document gives site specific instructions on the methods required to protect the existing tree stock agreed to be retained. These methods are set out in a logical sequence of operations

1.3 The BS recommendations are made for appropriate barriers to exclude construction from RPA's: The RPA for each tree or group is provided in the tree survey schedule. The protective barriers are sacrosanct and no construction activities shall take place within this zone. This fencing should be erected in position prior to any construction and be maintained in position for the duration of the development process.

1.4 The Tree Protection Plan (TPP) will indicate retained trees, trees to be removed, the precise location of protective barriers and ground protection, service routing and specifications, areas designated for structural landscaping to be protected and suitable space for site materials storage and other construction related facilities. This document and the associated TPP will be endorsed by planning conditions, agreement or obligation as appropriate.

2.0 Important Tree Information

2.1 As the majority of tree roots are found in the upper metre of soil, development works, including for example even shallow excavation, soil compaction and soil contamination,

can be harmful to trees in close proximity. Trees differ in their tolerance of root loss or disturbance, according to their age, species and/or condition. All protection works within this document will be in accordance with BS 5837: 2012 'Trees in Relation to Design, Demolition and Construction – Recommendations'

2.2 An assessment of the site's tree stock has been undertaken and those trees to be retained are clearly shown on the Tree Protection Plan (TPP). A calculation has been made of the volume of soil required to ensure the survival of these and this is represented by the Root Protection Area (RPA) indicated by the magenta circles or squares around the retained tree on the plan.

2.3 The RPA has been used to inform the Construction Exclusion Zone (CEZ), the area to be protected during development by the use of barriers, ground protection and specialised construction techniques - outlined below:-

3.0 Sequenced Methods of Construction and Tree Protection

P1.0 Phase 1- Pre Contract Meeting

P1.1 An onsite meeting will be held, if required with all relevant parties including the developer, appointed arboricultural supervisor and Local Planning Authority (LPA) representative. The purpose of this meeting is to record site features including tree condition, agree tree works (detailed below), location of permanent and temporary access, location of site storage and the location of tree protection barriers.

P1.2 Root survey to be carried out to ensure optimal pile location

P2.0 Phase 2- Execute Agreed Tree Works

Tree No	Proposed Works	Comments
T03	Reduce Eastern section of canopy by 30%	Pruning required to accommodate proposal

P2.1 All tree work is to conform to BS 3998:2010 and to current arboricultural best practice. Tree works are to be undertaken by a professional and specialist arboricultural contractor, who carries the appropriate experience and insurance cover and following formal approval from the LPA

P3.0 Phase 3- Tree Protection Barriers and ground protection

P3.1 In order to protect the tree stems from significant construction activity, protection barriers will be erected. See Plan for fencing location. Fencing should be of a reasonable standard and suitable for the purpose of preventing machinery entering the protected zones see example given below in appendix 1.

P3.2 Once the barriers have been properly erected in position, they are to be considered as sacrosanct and are not to be removed or altered in any way without prior approval from the LPA.

P3.3 Clear notices are to be fixed to the outside of the fencing with words such as 'PROTECTED AREA – NO ACCESS AND NO STORAGE OR WORKING WITHIN THIS AREA'. All operatives and other relevant personnel are to be informed of the role of the exclusion barriers and their importance.

P3.4 The location of the protection barriers is indicated on the TPP. The barriers will be erected prior to any works on site in the vicinity of retained trees, including the delivery of machinery, materials, plant or equipment to the site or any adjacent land. The barriers will remain in situ until final completion or a time agreed by the LPA and Contractor.

P3.5 Where it has been agreed, as shown on the plan, access for construction operations can be located within a tree's RPA a combination of barriers and ground protection should be adopted to form the CEZ.

- For pedestrian access, a single thickness of scaffold boards placed on a driven scaffold frame, so as to form a suspended walkway or on a compressive- resistant

layer such as, e.g. woodchip 100mm min, laid onto a geotextile membrane will be sufficient.

- For pedestrian operated machinery up to a gross weight of 2t inter linked ground protection boards places on top of a compression- resistant layer, as above, will be required.
- For machinery greater than 2t and engineered specification will be required.

P4.0 Phase 4 - Pile Installation & Ground works

P4.1 Spoil, including soil and rubble surplus to requirements will be removed from site and not stored against any protective fencing.

P4.2 Piles to be installed near to trees must be of the smallest practical pile diameter as this reduces the possibility of striking major tree roots, and reduces the size of the rig required to sink the piles.

P4.3 Pile holes must be lined with an impermeable sleeve to reduce risk of leeching into the root zone of the trees.

P4.4 Service runs to be located outside any indicated RPA.

P5.0 Phase 5 - Construction of Hard Standing, Drives and Parking Bays

P5.1 The sections below relate to the construction of hard surfaces, for example, roads and paths, parking areas and bases for bicycle or bin stores not required to be to an adoptable standard and within the CEZ of retained trees.

P5.2 With reference to BS 5837 clause 11.8, where the construction of permanent hard surface is approved within the CEZ, a non-dig design should be used to avoid root loss caused by excavation.

P5.3 The construction area is to be levelled by filling hollows and removing protrusions and hard landscaping. No soil excavation, other than the removal of a 'turf or vegetation layer' is to be carried out during this process and filling material should be of a porous nature to allow water and oxygen to reach the soil below. In the unlikely event that roots are required to be pruned, sharp cutting tools are to be used to ensure that minimum damage is caused. No roots, greater than a diameter of 25mm, are to be pruned without prior agreement with the appointed arboricultural supervisor or LPA representative.

P5.4 A geo-textile membrane (Terram or similar) is then to be laid over the whole surface, including any retained hard surfaces. This is to be fixed firmly into position with ground pegs.

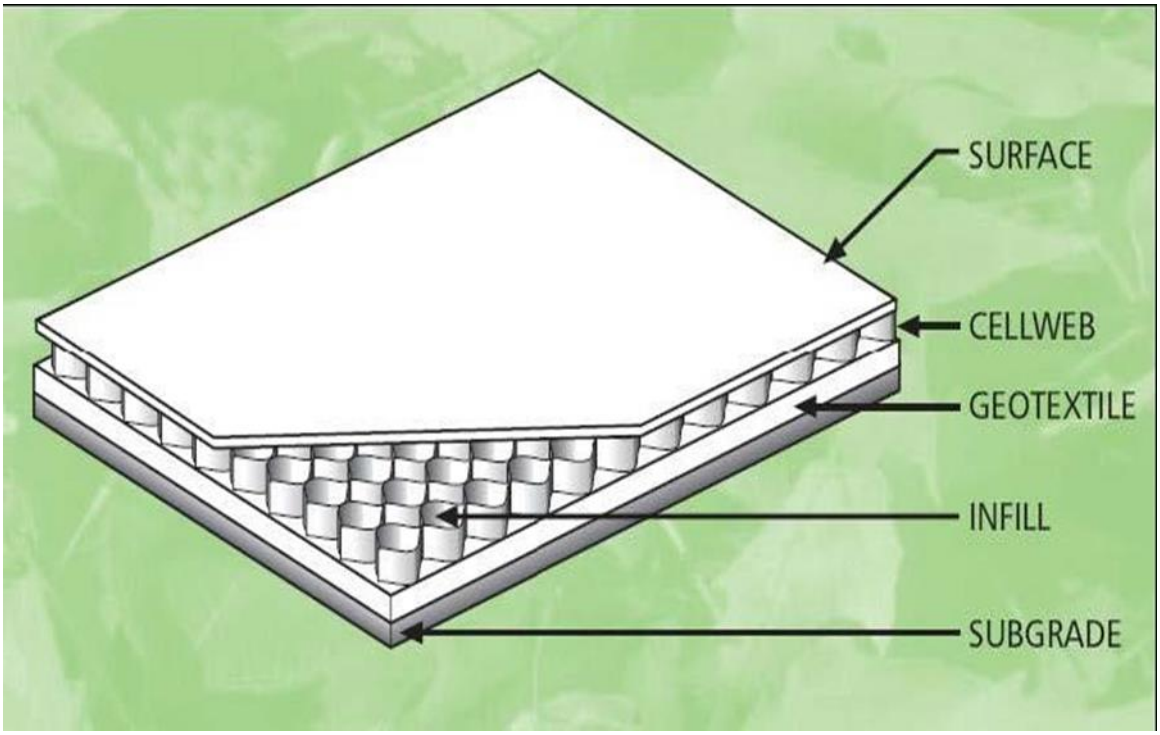
P5.5 Where edging blocks or stone are to be used to retain the drive surface within the CEZ, the mix into which they are set will be laid directly onto the geo-textile membrane over the supporting base. No deeper excavations are to be made to accommodate the footing of the edging detail.

P5.6 A geoweb material is then placed over the membrane and also fixed into position. An example material is attached at Appendix 3. An aggregate sub-base material is then introduced in to the geoweb. The depth of the sub-base aggregate should be the same depth as the geoweb and no less than 100mm. The aggregate should be a granular no fines material (typically 40-20mm). Not only will this material dissipate load and reduce soil compaction, it will permit easy passage of air (oxygen) to the rooting area of the tree below the surface.

P5.7 The sub-base material is to be compressed into position ready for the final surface treatment. This surface can also be used as a temporary works access route prior to the laying of the final surface.

P5.8 Final surface details for residential purposes will be of a porous nature such as gravel, block paviors or small paving slabs and should be approved by the LPA. In the usual

way these should be bedded into a lean mix that is also highly porous. Final surface treatment can be installed as part of the landscaping works.



P6.0 Phase 6 - Dismantling Protection Barriers and Landscaping Works

P6.1 A minimum notice period of seven days will be given to the LPA prior to the dismantling of the protection barriers.

P6.2 All landscaping once the barriers have been removed will avoid soil re-grading and disturbance within the CEZ and no soil levels be altered after the protection barriers have been removed. All vehicles are strictly prohibited from entering any RPA once barriers are removed.

4.0 General Principles for Tree Protection

4.1 A copy of this AMS and the attached TPP is to be retained on site at all times and all personnel associated with the construction process will be made familiar with the principles within.

4.2 No fires are to be lit on site at any stage during the construction process.

4.3 A designated storage area is to be created away from retained trees. All materials for construction purposes are to be stored in this compound. Care must be taken to avoid the leakage or leaching of noxious materials into the soil.

4.4 No materials will be stored or left stacked in positions around the site other than within the storage compound area.

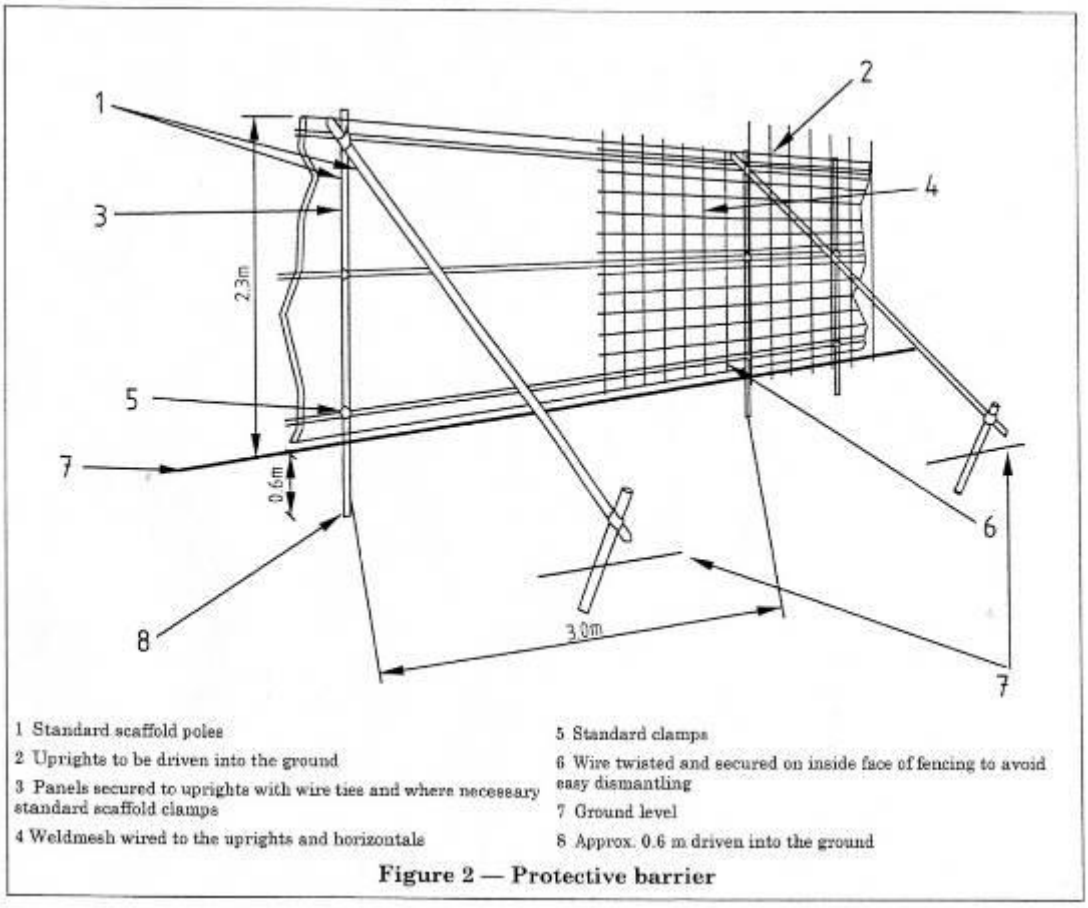
5.0 Communication Details, Monitoring and Compliance

5.1 In order to ensure that the principles of tree protection set out in the statement are adhered to, it is important to set out communication details for key individuals and tasks that require monitoring. These details should be retained by all relevant parties and available on site at all times. Relevant parties will be advised of any changes in personnel or contractor during the development process.

5.2 Before construction begins written confirmation that the developer/contractor or its agents agree to comply in full with the principles set out within this Method Statement will be lodged with the LPA.

Appendix 1: Tree Protection Fencing

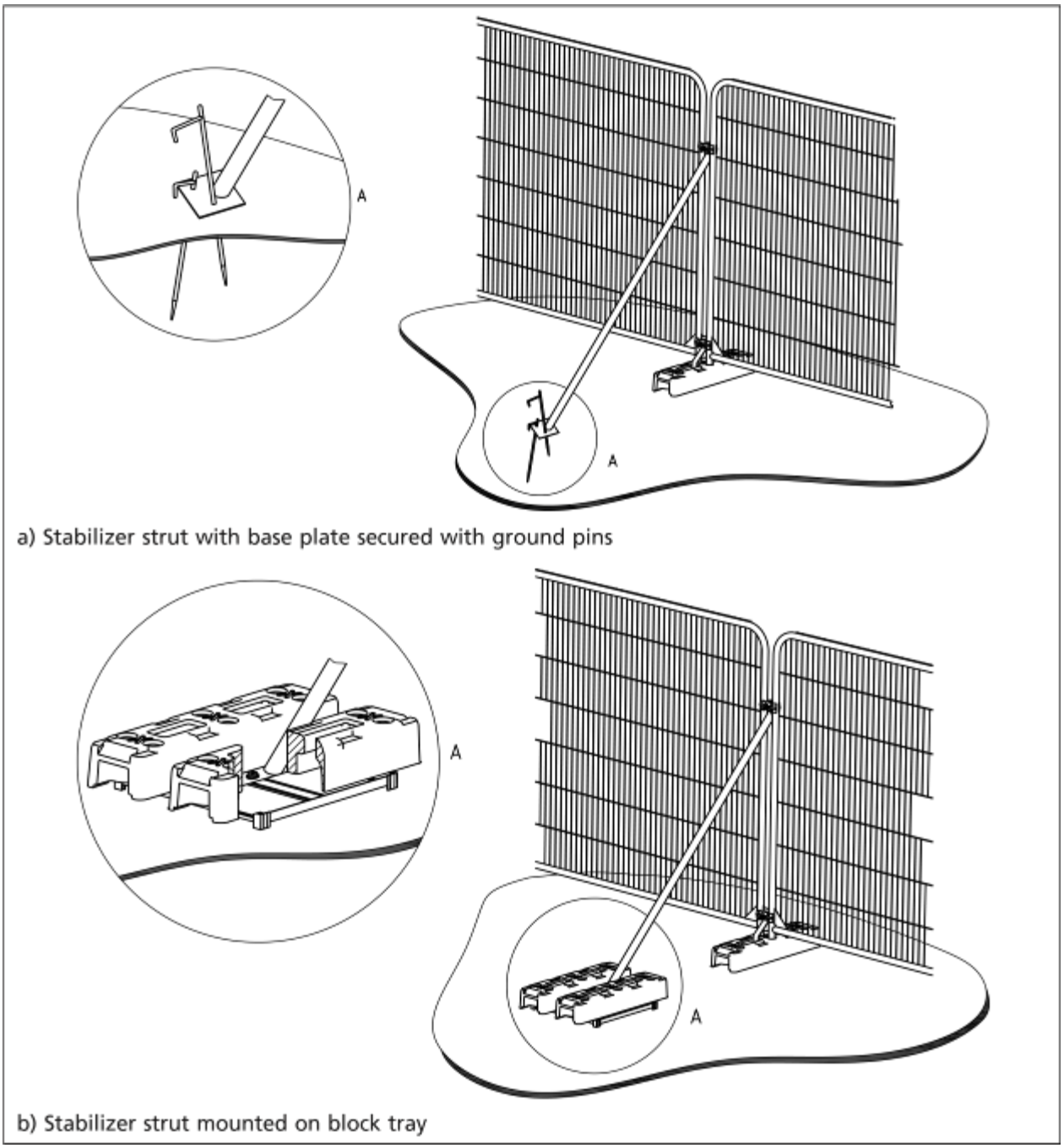
High Traffic Areas



1 Standard scaffold polee
2 Uprights to be driven into the ground
3 Panels secured to uprights with wire ties and where necessary standard scaffold clamps
4 Weldmesh wired to the uprights and horizontals
5 Standard clamps
6 Wire twisted and secured on inside face of fencing to avoid easy dismantling
7 Ground level
8 Approx. 0.6 m driven into the ground

Figure 2 — Protective barrier

Low Traffic Areas



Appendix 2 Tree Survey Schedule

Ref.	Species	Measurements	Physiological and structural condition	Preliminary Management Recommendations	Rem. Contrib.	Category
T01	Lime, European (Tilia x europaea)	Height (m): 25 Stem Diam (mm): 1000 Branch Spread(m): 8(N), 6(S), 6(E), 6(W) Crown Clearance (m): 4 Lowest Branch (m): 4(SW) Life Stage: Mature			30+ Years	A1,2
		Physiological Cond: Fair Structural Cond: Fair Bat Habitat: Low	Additional Comments: none			RPA Radius: 12.0m. Area: 452 sq m.
T02	Beech, Copper (Fagus sylvatica pur-purea)	Height (m): 25 Stem Diam (mm): 1090 Branch Spread(m): 8.5(N), 9.5(S), 8(E), 8.5(W) Crown Clearance (m): 2 Lowest Branch (m): 3(SW) Life Stage: Mature			30+ Years	A1,2
		Physiological Cond: Fair Structural Cond: Fair Bat Habitat: Low	Additional Comments: none			RPA Radius: 13.1m. Area: 539 sq m.

Ref.	Species	Measurements	Physiological and structural condition	Preliminary Management Recommendations	Rem. Contrib.	Category
T03	Oak, Red (Quercus rubra)	Height (m): 16 Stem Diam (mm): 520 Branch Spread(m): 6(N), 8(S), 10(E), 6(W) Crown Clearance (m): 1 Lowest Branch (m): 3(NE) Life Stage: Mature			30+ Years	B1
		Physiological Cond: Fair Structural Cond: Fair Bat Habitat: Low	Additional Comments: none			RPA Radius: 6.2m. Area: 121 sq m.
T04	Apple (Malus sp.)	Height (m): 5 Stem Diam (mm): 260 Branch Spread(m): 4(N), 3(S), 3(E), 3(W) Crown Clearance (m): 1.5 Lowest Branch (m): 2(SW) Life Stage: Over Mature	significant heart wood decay Good/Fair/Poor overall Physiological and Structural condition. Stem/limb decay Fractured limbs - storm damage Dead wood	Remove tree	<10 years	U
		Physiological Cond: Poor Structural Cond: Decaying Bat Habitat: None	Additional Comments: none			RPA none - due to Retention Category of U.
T05	Sycamore (Acer pseudoplatanus)	Height (m): 13 Stem Diam (mm): 300 Branch Spread(m): 6(N), 3(S), 5(E), 5(W) Crown Clearance (m): 2 Lowest Branch (m): 4(N) Life Stage: Mature	Prolific ivy suppressed growth due to adjacent tree		20+ Years	C1
		Physiological Cond: Fair Structural Cond: Fair Bat Habitat: Low	Additional Comments: none			RPA Radius: 3.6m. Area: 41 sq m.

Ref.	Species	Measurements	Physiological and structural condition	Preliminary Management Recommendations	Rem. Contrib.	Category
T06	Sycamore (Acer pseudoplatanus)	Height (m): 16 Stem Diam (mm): 400 Branch Spread(m): 3(N), 6(S), 5.5(E), 6(W) Crown Clearance (m): 3 Lowest Branch (m): 5(NE) Life Stage: Mature	Prolific ivy		20+ Years	C1
		Physiological Cond: Fair Structural Cond: Fair Bat Habitat: Low	Additional Comments: none			RPA Radius: 4.8m. Area: 72 sq m.
T07	Ash, Common (Fraxinus excelsior)	Height (m): 15 Stem Diam (mm): #400 Branch Spread(m): #5(N), #5(S), #5(E), #5(W) Life Stage: Mature	data estimated due to third party ownership		20+ Years	B1
		Physiological Cond: Fair Structural Cond: Fair Bat Habitat: Low	Additional Comments: none			RPA Radius: 4.8m. Area: 72 sq m.

Ref.	Species	Measurements	Physiological and structural condition	Preliminary Management Recommendations	Rem. Contrib.	Category
T08	Sycamore (Acer pseudoplatanus)	Height (m): 22 Stem Diam (mm): 1000 Branch Spread(m): 8(N), 9(S), 8(E), 9(W) Crown Clearance (m): 2 Lowest Branch (m): 5(S) Life Stage: Mature			30+ Years	A1,2
		Physiological Cond: Fair Structural Cond: Fair Bat Habitat: Low	Additional Comments: none			RPA Radius: 12.0m. Area: 452 sq m.
T09	Cherry, wild (Prunus avium)	Height (m): 10 Stem Diam (mm): 340 Branch Spread(m): 4(N), 4(S), 3(E), 4(W) Crown Clearance (m): 1.5 Lowest Branch (m): 3(S) Life Stage: Mature	Poor overall Physiological and Structural condition. Dieback - poor foliage Dead wood		10+ Years	C1
		Physiological Cond: Poor Structural Cond: Poor Bat Habitat: None	Additional Comments: none			RPA Radius: 4.1m. Area: 53 sq m.

Ref.	Species	Measurements	Physiological and structural condition	Preliminary Management Recommendations	Rem. Contrib.	Category
T10	Spruce, Norway (Picea abies)	Height (m): 9 Stem Diam (mm): #120 Branch Spread(m): #3(N), #3(S), #3(E), #3(W) Life Stage: Early Mature	data estimated due to third party ownership		10+ Years	C1
		Physiological Cond: Fair Structural Cond: Fair Bat Habitat: None	Additional Comments: none			RPA Radius: 1.4m. Area: 6 sq m.
T11	Oak (Quercus sp.)	Height (m): 17 Stem Diam (mm): #1000 Branch Spread(m): #8(N), #8(S), #8(E), #8(W) Life Stage: Mature	data estimated due to third party ownership		30+ Years	A1
		Physiological Cond: Fair Structural Cond: Fair Bat Habitat: Low	Additional Comments: none			RPA Radius: 12.0m. Area: 452 sq m.

Ref.	Species	Measurements	Physiological and structural condition	Preliminary Management Recommendations	Rem. Contrib.	Category
T12	Sycamore (Acer pseudoplatanus)	Height (m): 12 Stem Diam (mm): #300 Branch Spread(m): #4(N), #4(S), #1(E),# 5(W) Life Stage: Early Mature	data estimated due to third party ownership		10+ Years	C1
		Physiological Cond: Poor Structural Cond: Poor Bat Habitat: Low	Additional Comments: none			RPA Radius: 3.6m. Area: 41 sq m.
T13	Ash (Fraxinus sp.)	Height (m): 10 7 stems, diam(mm): 250, 160, 120, 120, 100, 100, 80, Branch Spread(m): 4(N), 5(S), 4(E), 4(W) Crown Clearance (m): 5 Lowest Branch (m): 5(SW) Life Stage: Early Mature			10+ Years	C1
		Physiological Cond: Fair Structural Cond: Fair Bat Habitat: None	Additional Comments: none			RPA Radius: 4.5m. Area: 64 sq m.
G01	Not identified		group of ash Hawthorne sycamore hazel stage horn dbh 50-150 height up to 8m most around 4-5m			C1,2
		Physiological Cond: Structural Cond: Bat Habitat:	Additional Comments: none			RPA Area: 72.43 sq m.

Appendix 3 Site Photographs

Red Lion viewed from the North on Lower Green Road (T02 Beech and T01 Lime visible)

T01 Lime

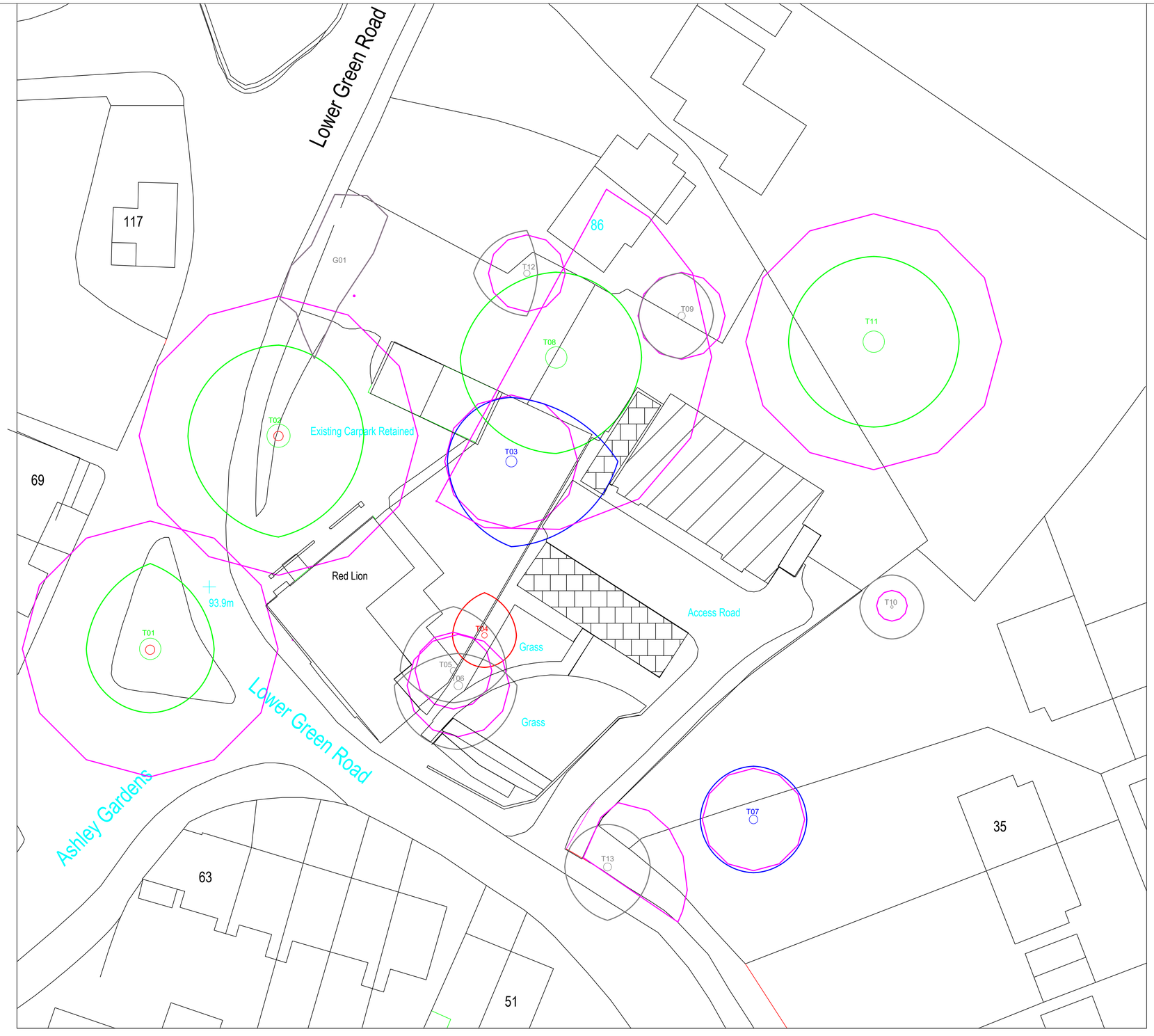
T03 Red Oak

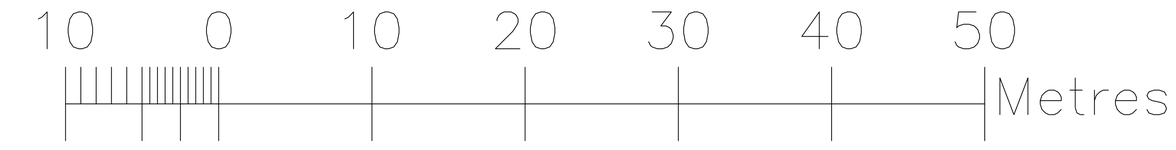
T05 & T06 Sycamores

T08 Sycamore

T09 Cherry

T13 As





Existing Layout & Development

KEY

- T1 — Existing Tree colour referenced in accordance with BS 5837 as shown below
- Green – Cat A Trees of high quality and value
- Blue – Cat B Trees of moderate quality and value
- Grey – Cat C Trees of low quality and value
- Red – Cat R Trees that are dead or showing signs of irreversible decline
- Root Protection Area as calculated in accordance with BS 5837
- Proposed new construction
- Proposed new parking bays

N

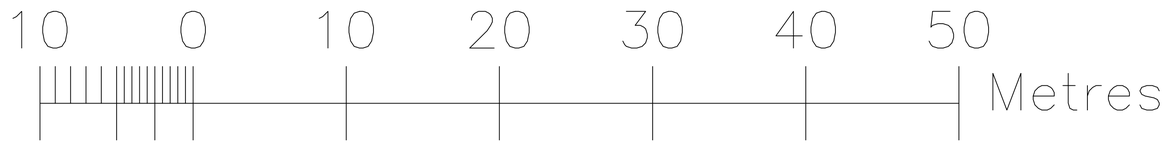
REV.	DATE	INITIALS	DETAILS

CLIENT Shepherd Neame				DWG. TITLE Tree Location Plan	
SITE Red Lion PH, 82 Lower Green Rd, Rusthall, Royal Tunbridge Wells, TN4 8TW.					
DRAWN BY BJS	CHECKED BY BJS	SCALE 1:200 @A1	DATE May 2018	DWG NO. CAS/2018/125A	REV.

Tree Protection Plan

KEY

- T1 — Existing Tree colour referenced in accordance with BS 5837 as shown below
- Green – Cat A Trees of high quality and value
- Blue – Cat B Trees of moderate quality and value
- Grey – Cat C Trees of low quality and value
- Red – Cat R Trees that are dead or showing signs of irreversible decline
- Root Protection Area as calculated in accordance with BS 5837
- Approximate line of protective fencing to be erected in accordance with BS5837 and insert, to be maintained throughout demolition works.
- Area designated for ground protection



REV.	DATE	INITIALS	DETAILS

CLIENT Shepherd Neame	DWG. TITLE Tree Protection Plan
SITE Red Lion PH, 82 Lower Green Rd, Rusthall, Royal Tunbridge Wells, TN4 8TW.	

DRAWN BY	CHECKED BY	SCALE	DATE	DWG NO.	REV.
BJS	BJS	1:200 @A1	May 2018	CAS/2018/125	

Tree Schedule Explanatory Notes

Ref.no	Identifies trees, groups and hedges on the accompanying plan.
Species	Common names are provided to aid wider comprehension.
Height	Describes the approximate height of the tree measured in metres from ground level
Canopy Spread	Indicates the crown radius from the base of the tree in four compass directions, recorded to the nearest metre.
Ground Clearance	Height of crown clearance above adjacent ground in metres.
DBH (mm)	DBH is the diameter of the stem measured in cm at 1.5m from ground level for single stemmed trees or just above root flare for multi-stemmed trees. Stem Diameter may be estimated where access is restricted.
RPR (cm)	Root Protection Radius (RPR) is area required to be protected measured radially from the trunk centre.
RPA (m^2)	Root Protection Area (RPA) is the minimum rooting area in m^2 which should remain undisturbed around each tree.
Age Class	Age of the tree expressed as Y- Young, MA- Middle-Aged, EM- Early Mature, M- Mature or OM- Over-Mature
General Condition	Overall condition of tree expressed as :Good, Fair, Poor, Dead
Structural defects/Comments	May include general comments about growth characteristics, how it is affected by other trees and any previous surgery works. Also specific problems such as dead wood, pests, diseases, broken limbs. Etc
Estimated Remaining Years	Categorised in year bands of less than 10, 10+, 20+, 40+
BS Category	B.S. Cat refers to (BS 5837:2005 Table 1) and refers to tree/overall group quality and value; 'A' - High; 'B' - Moderate; 'C' - Low; 'U' - Remove.
Sub Category	Sub Cat refers to the retention criteria values where 1 is arboricultural, 2 is landscape and 3 is cultural including conservational, historic and commemorative