

Arboricultural Impact Assessment and Method Statement

CAS/2024/113

For

Medway Tree Surgeons 8 Winchester Ave, Chatham, ME5 9AS.

Proposed Development Site 9 Tower Lane, Bearsted, Kent, ME14 4JJ.

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 to undertake a tree survey and provide arboricultural advice on the site known as 9 Tower Lane, Bearsted, Kent, ME14 4JJ to accompany a planning application.
- 1.1.2 The site visit was carried out on Friday 16th February 2026, between the hours of 1030-1130hrs (60 minutes) and weather conditions were noted as clear with visibility conducive of surveying.

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.
- 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 successfully retained within the proposed development.

1.3 Documentation & Disclosure

- 1.3.1 The following documentation has been made available -
 - Existing and proposed site plans 9-TOWER-LANE-03C-Layout1.pdf & 9-TOWER-LANE-04C-Layout1.pdf.
 - I am informed that Tree Preservation Orders have been applied to trees numbered T01 Beech and T04 Box Elder.
 - I am informed that a row of Cypress trees which ran along the Western and Southern boundary have been removed due to their close proximity to both 9 Tower Lane and the 1 Otteridge Road (the occupant of this address raised concerns and requested the removal of the trees)

2.0 Site & Tree Discussion

2.1 Site Description

2.1.1 The site consists of a detached property set in a plot of approx. 832 square metres (0.2 Acre). The property faces Northwards onto Tower Lane at the junction with Otteridge Road. Neighbouring properties abut the property to the East and South.



- 2.1.2 The gradient of the plot is generally level throughout.
- 2.1.3 The front area is split between an existing area of hard surfacing which has likely been utilised for off road parking and lawn / planter beds around the existing trees. At the time of inspection, it is evident that some development operations have already taken place and in some areas' debris / soil was stacked within the measured RPAs' of trees marked for retention (base of T01 Beech & T04 Box Elder).
- 2.1.4 The rear garden is predominantly lawn with a small area of hard surfacing located immediately to the rear of the property.



2.2 Access

2.2.1 Vehicle and plant access to site is unencumbered via existing Tower Lane and existing hard surfaced areas located to the front of the house.

2.3 Proposal

2.3.1 The proposal is the construction of a single storey side extension and two storey front extension.

2.4 Scope of Report / Limitations

- 2.4.1 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.
- 2.4.2 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. Each tree is surveyed and allocated an identifying number. Then data is collected, and individual trees measured with regards to their height, stem size, canopy size and potential to pose a material constraint to development. Subject trees are each allocated one of four grade categories (A, B, C or U) indicating their quality. 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.

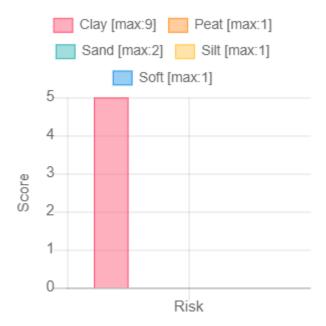
- 2.4.3 Any conclusions relate to conditions found at the time of inspection. Any alteration to the site that may affect the trees that are present or have a bearing on planning implications (including level changes, hydrological changes, extreme climatic events or other site works) will necessitate a re-assessment of the trees and the site and render any previous advice/ findings invalid.
- 2.4.4 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.
- 2.4.5 Where there are access restrictions data has been estimated. This is reflected in the survey schedule with a (#) symbol before measurement.
- 2.4.6 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

2.5 Tree Discussion

2.5.1 A total of five 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	Quantity	Identification Numbers
A	1	T01
В	1	T04
С	4	G01, T02, T03 & T05

- 2.5.2 Trees categorised as A or B are viewed as a constraint to development. Should any proposed development require the removal of trees/groups (or parts of groups) within these categories then it is likely that local authorities would require mitigation in the form of a robust soft landscaping/planting plan. Trees classed as category C are generally not viewed as a constraint although plans to remove large numbers of these would likely still require mitigation.
- 2.5.3 Where trees have been surveyed and plotted in groups, they typically contain specimens of varying age class and size. Please take note of survey schedule for indication of average height/size and maximum height/size within group. Where groups of trees have been surveyed and plotted, the largest DBHs' of the trees located along the groups edge have been noted and used to indicate the maximum RPA potential.
- 2.5.4 Soil analysis provided by Terrasure/Airbus indicated a soil with moderate clay content (5/9). Therefore, there is a potential risk of indirect damage caused by soil shrinkage in periods of hot/dry weather. This information must be considered when designing foundations with a recommendation for either pile type foundations or a traditional foundation design with a depth in accordance with NHBC guidelines.



2.5.5 Searches carried out on Tuesday 20th February 2024 using Maidstone Councils website/interactive map indicated that the site does not fall within a Conservation Area. On the 13/12/2023 Maidstone Council applied a Tree Preservation Order (5014/2023/TPO) on trees numbered T01 Beech & T04 Box Elder.

3.0 Arboricultural Impact Assessment on Retained Trees

3.1 Demolition

3.1.1 The proposal includes the resurfacing of the existing driveway and the removal of debris piles noted on the measured RPAs' of trees marked for retention. These operations must be carried out as stipulated in section P4.0 of the Arboricultural Method Statement.

3.2 Construction

- 3.2.1 The foundations of the proposed construction do not conflict with the measured RPAs' of trees marked for retention and therefore in this instance no specialised foundation design or installation techniques are required on arboricultural grounds.
- 3.2.2 No service run plans have been provided. It is assumed that existing ducts and runs will be utilised and augmented within the design. Adequate space exists on site so that any requirement for fresh runs can be located outside of the measured RPAs' of trees marked for retention.

3.3 Trees Requiring Removal

3.3.1 The proposal does not seek nor require the removal of any existing trees.

3.4 Implications for Retained Trees

3.4.1 Trees marked for retention will require no additional pruning or intervention due to the proposed development.

4.0 Conclusions

- 4.1.1 The proposal does not seek nor require the removal of any existing trees.
- 4.1.2 Specialised techniques will be employed during the removal of existing debris piles & hard surfaced areas.
- 4.1.3 So long as the precautionary and protective measures outlined within this report are strictly observed and adhered to then the proposed development will have neutral impact upon trees marked for retention.
- 4.1.4 Adequate space exists on site to accommodate new planting should this be stipulated by the LPA.

Arboricultural Method Statement

1.0 Summary

1.1 This document outlines the principles that are approved and enforced by the local planning authority, including site specific instructions on the methods required to protect the existing tree stock agreed for retention. These methods are set out in a logical sequence of operations with location of protective measures shown on the accompanying Tree Protection plan CAS/2024/113.

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 If stipulated by the local authority an onsite meeting will be held with all relevant parties including the developer, appointed arboricultural supervisor and Local Planning Authority (LPA) representative.

P2.0 Phase 2 - Tree Protection Barriers and ground protection

- P2.1 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.
- P2.2 BS5837 Trees in Relation to Design, Demolition and Construction (2012) requires that the root protection area be calculated for each tree marked for retention on the development. The root protection area is the minimum area in m2 which should be left undisturbed around each retained tree, including the delivery of machinery, materials, plant or equipment to the site or any adjacent land. The protective measures will remain in situ until final completion or a time agreed by the LPA and Contractor.
- P2.3 Tree protection fencing will be required to be installed as shown on the Tree Protection Plan CAS/2024/113. Fit for its purpose fencing must be installed after any required tree works and prior to any construction operations on site. 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.
- P2.4 Clear notices as shown below are to be fixed to the outside of the fencing with words such as 'Tree Protection Zone Do not remove this fencing'. All operatives and other relevant personnel are to be informed of the role of the exclusion barriers and their importance. 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 with written records of inspection.



- P2.5 Where stipulated on the Tree Protection Plan ground protection should be laid. The gross weight of predicted traffic in the area should be calculated and ground protection laid as stipulated below
 - 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.
- P2.6 If there is a requirement to move or carry out operations inside the area of protective fencing then ground protection should be laid over any exposed ground prior to movement or works commencing. This should be laid in accordance with section P3.5 of the Arboricultural Method Statement.

- P2.7 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.
- P2.8 Adequate room is available for the locating of compounds and material storage within the site boundaries and outside of any measured RPA.

P3.0 Phase 3 - Ground works

- P3.1 Spoil, including soil and rubble surplus to requirements will be removed from site and not stored against any protective fencing or within the measured RPAs' of trees marked for retention.
- P3.2 Service runs to be located outside any indicated RPA.

P4.0 Phase 4 – Removal of Hard Surfacing & Debris within Root Protection Areas

- P4.1 All plant and vehicles engaged in demolition works should either operate outside the RPA or run on the ground protection/existing hard surfacing. Where such ground protection is required, it should be installed prior to commencement of operations.
- P4.2 Where an existing hard surface is scheduled for removal, care should be taken not to disturb tree roots that might be present beneath it. Hand-held tools or appropriate machinery should be used (under arboricultural supervision) to remove the existing surface, working backwards over the area, so that the machine is not moving over the exposed ground. If a new hard surface is to be laid, it is preferable to leave any existing sub-base in situ, augmenting it where required.
- P4.3 Where existing debris piles are scheduled for removal care must be taken not to lower the original soil level. This will require the use of hand tools or compressed air soil displacement for the final layers.

P5.0 Phase 5 - Dismantling Protection Barriers and Landscaping Works

P5.1 A minimum notice period of seven days will be given to the LPA prior to the dismantling of the protection barriers.

P5.2 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.

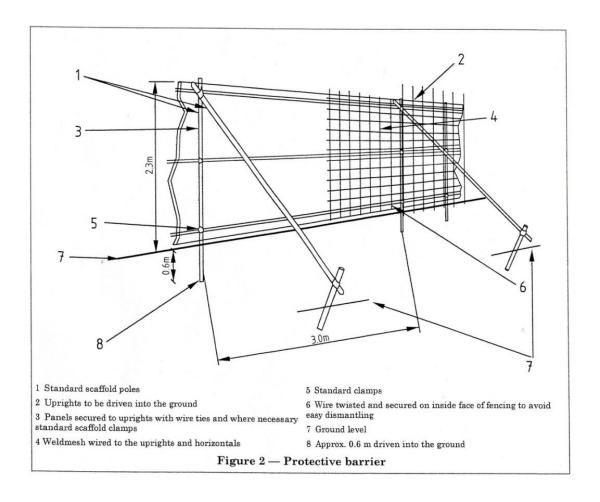
5.0 Communication Details, Monitoring and Compliance

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.

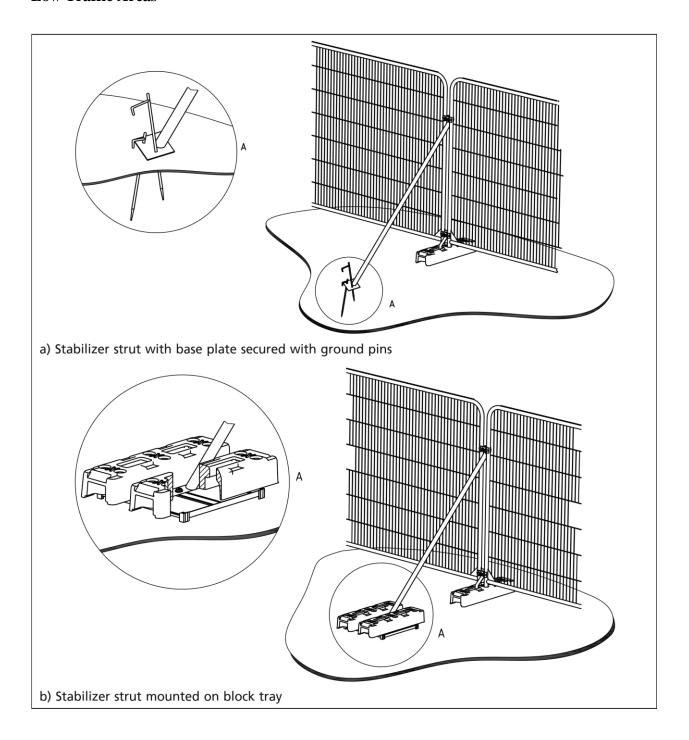


Appendix 1: Tree Protection Fencing

High Traffic Areas



Low Traffic Areas



Appendix 2 - 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 is the diameter of the stem measured in cm at 1.5m from ground level for single stemmed trees or just DBH (mm)

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 (m2) Root Protection Area (RPA) is the minimum rooting area in m2 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

Physioloical and structural May include general comments about growth characteristics, how it is affected by other trees and any condition

previous surgery works. Also specific problems such as dead wood, pests, diseases, broken limbs. Etc

Estimated Remaining Categorised in year bands of less than 10, 10+, 20+, 40+

Years

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

Appendix 3 – Tree Retention Category (as per cascade chart, Table 1, B.S. 5837:2012)

Tree Category	Description
A	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).
В	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.
С	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.
U	Category U – Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.

BS5837 Survey Data



Ref.	Species	Measurements	General Observations	Category	Recommendations
G01	Lawson cypress (Chamaecyparis lawsoniana) Yew x2 (Taxus sp.)	Height (m): 3 3 stems, avg.(mm): 100 Life Stage: Early Mature Rem. Contrib.: 30+ Years	Small group with dbh up to 100mm	C1 RPA Area: 12 sq m.	
T01	Beech (Fagus sp.)	Height (m): 20 Stem Diam(mm): 1110 Spread (m): 10N, 9E, 8.5S, 11W Crown Clearance (m): 2 Lowest Branch (m): 2(W) Life Stage: Mature Rem. Contrib.: 30+ Years	Possible fungal bodies noted at ground level on buttress area to west	A1,2 RPA Radius: 13.3m. Area: 556 sq m.	
T02	Laurel cherry (Prunus laurocerasus)	Height (m): 5 2 stems (mm): 90,90 Spread (m): 1.5N, 2#E, 4S, 2W Crown Clearance (m): 1.5 Life Stage: Early Mature Rem. Contrib.: 20+ Years		C1 RPA Radius: 1.5m. Area: 7 sq m.	
Т03	Monterey cypress (Cupressus macrocarpa)	Height (m): 11 Stem Diam(mm): 390 Spread (m): 5N, 4#E, 2#S, 4.5W Crown Clearance (m): 3 Lowest Branch (m): 3(NW) Life Stage: Mature Rem. Contrib.: 20+ Years	Tree has been subjected to heavy pruning on southern side of canopy	C1 RPA Radius: 4.7m. Area: 69 sq m.	

Ref.	Species	Measurements	General Observations	Category	Recommendations
T04	Box elder maple (Acer negundo)	Height (m): 14 Stem Diam(mm): 520 Spread (m): 8N, 7E, 5S, 6W Crown Clearance (m): 5 Lowest Branch (m): 3.5(W) Life Stage: Mature Rem. Contrib.: 30+ Years	Light ivy cover on main stem	B1,2 RPA Radius: 6.2m. Area: 121 sq m.	
T05	Lawson cypress 'Elwoodii' (Chamaecyparis lawsoniana)	Height (m): 9.5 Stem Diam(mm): 300# Spread (m): 2#N, 2#E, 2#S, 2#W Life Stage: Mature Rem. Contrib.: 20+ Years		C1 RPA Radius: 3.6m. Area: 41 sq m.	





