



BS5837 Tree Surveys - Mapping - Plans – Reports
Tree Opportunities & Constraints Plans
Arboricultural Impact Assessments
Tree Protection Plans
Arboricultural Method Statements
Tree Condition & Management Surveys
Woodland Management
AutoCAD Technicians

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Steeton, West Yorkshire

Site Location

Redminster House, Thurlstone, S36 9RH

Task

British Standard 5837 *Trees in relation to design, demolition and construction* (2012)
Arboricultural Impact Assessment, Method Statement & Tree Protection Plan to inform Proposed Outbuilding

For

Coda Studios

Report Date

27 August 2026

Surveyor/Document Author

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Glossary of Terms

Arboriculture

Cultivation/management of primarily urban individual or tree groups for landscape, amenity and green infrastructure, undertaken by an 'arborist'

BS5837

British Standard 5837 *Trees in relation to design, demolition and construction recommendations* – 2012 provides recommendation and guidance for arboriculturists, architects, builders, engineers and landscape architects regarding planning for the management, protection and planting of trees in the vicinity of structures

Tree Quality/Retention Categorization

The quality and value (in a non-fiscal sense) of the existing tree stock, allowing informed decisions to be made concerning which trees should be removed or retained in the event of development occurring. Colour coded on plans red (unsuitable for retention), green (Category A - high quality), blue (Category B - moderate) and grey (Category C - low)

Stem

Principal above ground component(s)/trunk that supports branches and canopy

Root Protection Area (RPA)

Layout design tool indicating the minimum area around a retained tree deemed to contain sufficient roots and rooting volume (soil) to maintain trees viability and where protection of the roots and soil structure is treated as a priority. Calculated by stem diameter x 12 producing a radius measurement centred on the stem

Canopy

Above ground branches and leaves

Tree Constraints Plan (TCP)

Existing site showing tree locations, quality category, root protection areas, canopy spread, possibly canopy shade cast and tree data schedule

Arboricultural Impact Plan (AIP)

Proposed site plan (utilities in/out, buildings and landscaping) overlaid onto TCP highlighting impact of development through tree removal, pruning and planting

Tree Protection Plan/Arboricultural Method Statement

Plan showing location and type of tree protection measures to reduce impact of development to minimum and order of/methodology/supervision of works to/close to retained trees

Report Limitations

Trees/Arboricultural Features were inspected using the 'Visual Tree Inspection' methodology (Mattheck). No decay detection equipment was used. Methodology of survey is in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction – Recommendation and is not a tree hazard, tree risk or subsidence/subsidence potential survey. Trees are living and dynamic structures subject to extreme weather, physical, chemical and biological changes that can quickly have an impact on a tree's condition and its growing environment. As such, even with robust tree inspections unforeseen changes, hidden defects and resulting structural failures can occur. All trees have a tolerance to the expected weather at a site they have grown in, but even then, healthy defect free trees can still fail

Tree condition comments/survey data only relate to the day the tree was inspected; this report is valid for one year from the date given on the front page under normal weather conditions and site conditions.

A re-appraisal is recommended after a significant weather event, such as but not limited to severe winds, extremes in temperature, floods and drought not normal for the area, an outbreak of a virulent pest or disease which the author cannot foresee, pruning or works recommended that are not undertaken to British Standard 3998:2010 or to the specification recommended in the report, if groundwork operations/level changes or use are/have been undertaken, that we are not aware of, within the vicinity of the trees that could alter their rooting environments, such as but not limited to underground utility work that doesn't meet the recommendations in NJUG 10 or British Standard 5837:2012 or their successors, significant change in on or off-site conditions, such as, but not limited to adjacent tree/building removal, ground/surface water alteration

Horizontal and vertical measurements were taken using laser rangefinder, estimated where limited access dictates

Maps and plans are for illustrative purposes only to inform site design and planning requirements. Any document or plan is for the instructing client only; any third-party relying on those does so entirely at their own risk

Plans, information & data received is presumed to be accurate, no responsibility will be taken for unknown inaccuracies provided/received

No soil assessment has been undertaken in relation to built structure, existing or proposed

Trees are just one part of the planning process. The conclusions of this document/plan are in the opinion of the tree surveyor/document author and are considered to be acceptable, but clients must be aware that the local planning authority may take an alternative view and can refuse permission

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Summary

Coda Studios instructed Treeplan to undertake a *British Standard 5837 (2012) Trees in relation to design, demolition and construction* survey at Redminster House, Towngate, Thurlstone, S36 9RH, particularly referencing trees adjacent the central/north area

A BS5837 tree survey was undertaken on 9 June 2026. 16 (arboricultural features) consisting of 12 individual trees and four group of shrubs/trees/hedges were recorded

A Tree Constraints Plan (Plan 1 of 3), found in Appendix 1 was produced showing the tree locations, stem diameter, root protection areas (RPA), canopy spread and shade cast. This informed a site design for a proposed outbuilding. Following design team discussion a proposed site plan was produced, best meeting the design brief and site/tree constraints

Following issue of the proposed site plan an Arboricultural Impact Plan (Plan 2 of 3), also found in Appendix 1 was produced. The impact of the proposed development is provided in section 4, in brief

- No trees need to be removed in order to enable the development
- Four trees need to be lightly pruned (crown lifting/low lateral reduction for build space) in order to enable the development. The location of the pruning cannot be seen from any public vantage point so there would be no detrimental impact on the amenity of the area
- Two trees will see peripheral loss of their root protection areas in order to enable the development. These losses total only 5.5% or 8% of the trees concerned. Both trees have alternative, undisturbed rooting area in other directions they can access

It is considered the proposed outbuilding can be constructed without significant detriment to the recorded trees or the amenity of the area

A Tree Protection Plan and Arboricultural Method Statement (Plan 3 of 3) is included in Appendix 1. It is recommended this is conditioned as part on any planning consent

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1. Survey Background

1.1 Instruction

Coda Studios instructed a BS5837 (2012) Tree Survey for the area labelled/trees within influencing distance of blue area labelled on plan below



1.2 Site Location

Redminster House, Towngate, Thurlstone, S36 9RH - see also TCP (Plan 1 of 3)

1.3 Plans/Information Received

Topographic site plan ref 26327-26-01 Castle Surveys Ltd

1.4 Tree Survey Date & Weather Conditions

9 June 2026. Weather provided no limitations

1.5 Site Limitations at Survey

Trees only viewed from within the site. Shrubs/undergrowth/ivy on stems prevents full appraisal

1.6 Brief Site Appraisal

Rectangular domestic garden accessed from south west.

1.7 Brief Appraisal of Tree Stock

Early mature and mature cypress and establishing ornamentals on west and southern boundary. Mature sycamore on site to east and off-site to north. Mature beech off-site to north. Previous management

2. Tree Constraints – Generic Considerations

See TCP including tree survey data in Appendix 1

2.1 Above Ground Constraints Tree Trunk and Canopy

The trees current canopy spread is marked on plans to aid site design. Consideration needs to be made to the following pre-development:

- Mature height and spread
- Species characteristics such as evergreen or deciduous, honeydew (sap) drip, fruit fall
- Shade potential
- Potential incompatibilities between layout and trees proposed for retention
- Working/access space needed for construction phase
- Protection of tree canopies from machinery impact or scaffold clearance
- Infrastructure requirements- easements, lighting, solar collectors, CCTV

2.2 Below Ground Constraints Root Protection Area (RPA)

The RPA is plotted on plans as a circle, but where pre-existing site conditions are considered to have altered the rooting area a polygon can be produced

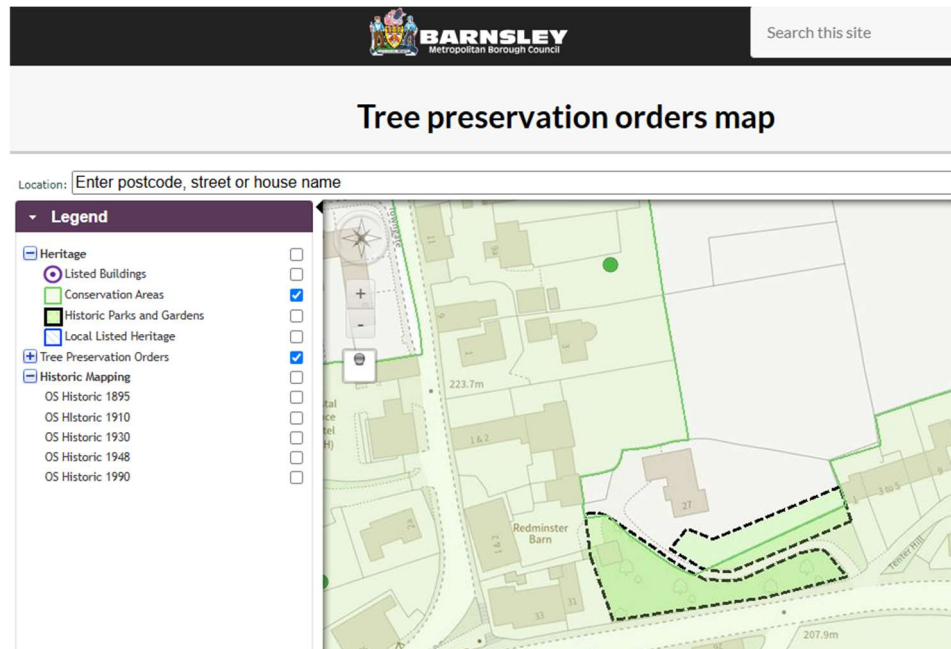
The default position is that proposed structures/ground alterations/utilities should be located outside the RPA's of retained trees unless a sound arboricultural judgement can be made to support an incursion taking in to account pre-development ground conditions, tree type, age, ability to tolerate change

If utility operations within the RPA are proposed consideration should be given to NJUG4 (National Joint Utilities Group Volume 4 (Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees)). See - <https://streetworks.org.uk/wp-content/uploads/V4-Trees-Issue-2-16-11-2007.pdf>

3. Arboricultural Constraints

3.1 Presence of Tree Preservation Orders/Conservation Areas

Online mapping at <https://www.barnsley.gov.uk/barnsley-maps/tree-preservation-orders-map/> indicates trees recorded here as T1, T2, T3, T4, T6, G1, G2 & G3 are within Thurlstone Conservation Area. This information however should be viewed as a snapshot in time and at the caveats of that webpage. Clients & contractors should make their own search prior to undertaking any works at their own risk



3.2 Comments on Trees

- Trees T1, T2, T3 & T4 have potential RPAs to site. However, off-site trees T2 & T4 have a boundary wall between them and site which may have acted as a root barrier. Without knowledge of how much the wall is acting as a barrier, RPAs have been retained as circular. Electricity/water/waste can be routed along the wall, just below the surface in an armoured cable/pipe or through central lawn areas outside RPAs
- The boundary to the east of T4 is being displaced either as a consequence of ground pressure and/or T4 growth adjacent to it
- T5 is a mature elder. It is of sub-optimal health and could be removed, retained/pruned without detriment to the amenity of the area
- An off-site tree, beech numbered T7 will have an RPA to site. T7 is a large tree of landscape and amenity value. Although this tree was only observed from the Redminster House gardens the fruiting bodies of a wood decay fungi (*Ganoderma* sp.) were seen on its stem/trunk to the south, east and north east at around 2.5/3m. This fungus may be reducing the integrity of the wood and it is recommended that the tree owner be informed and seek advice (either their own advisor or this reports author can be contacted direct if required). While this tree currently looks healthy its life expectancy may be reduced as a consequence of the wood decay fungi. The fungi does not necessarily mean the tree needs to be removed, some investigation, monitoring and pruning may be appropriate
- Trees T3 & T4 have the potential to increase in size and shade cast, all other trees are outside influencing distance or have reached a mature size where speed of growth will not be rapid or significant

Off-site beech tree T7

View from the south, on-site looking north

Fruiting bodies of a *Ganoderma* sp. wood decay fungi labelled yellow circles, arrow
approximate location of a further fruit body out of sight



4. Arboricultural Impact Assessment

4.1 Proposal

Proposed outbuilding. Area historically seen ground level alterations, storage, trenching and storage sheds. Utilities in and out not yet designed but ample room for these to be routed through the site and outside RPAs to the west

4.2 Above Ground Impacts

- No trees need to be removed in order to enable the development
- Sycamore T4, Elder T5, Beech T7 and Holly T9 need to be lightly pruned to provide build space and post development clearance. None of this pruning is significant and can be undertaken/cyclically undertaken without detriment to the health or longevity of the trees. None of the pruning can be seen from a public vantage point so there is no detrimental impact on the amenity of the area
- T4 has the potential to increase in size in the future. It is however growing against a boundary wall being displaced so it may never be retained where it would reach full growth potential
- All other trees are well outside of influence or have reached peak size/rate of growth slow
- Shade arcs indicate the proposed/its outside amenity areas will be in full sun for most of the day
- Leaf, seed, twig fall and substance deposited due to the action of aphids can accumulate on built structure adjacent trees, so these areas may need to be cleared/cleaned at more regular intervals than elsewhere. The applicant already deals with this as normal property maintenance

Approximate scale/location of western elevation (shown yellow) in relation to current site.
Photo taken west of current sheds (see location on TCP (Plan 1 of 3)), south of T9, looking west



4.3 Below Ground Impacts

- Two trees will see peripheral loss of their root protection areas in order to enable the development
 - Beech T7 will see a 5.5% loss
 - Holly T9 will see an 8% loss
- Both trees have alternative, undisturbed rooting area in other directions they can access. Both trees are healthy and likely able to adapt to such minor change
- No drainage plan has yet been produced but the design team is well aware of the tree constraints. There is ample room through the current central lawn area, outside RPAs
- RPAs can still be detrimentally impacted through alteration, compaction or loss in groundworks, build and material storage. As such temporary tree protective fencing and ground protection will be installed prior to groundworks and retained through the development in order to reduce the impact on trees. As such a Tree Protection Plan & Arboricultural Method Statement has been provided in Appendix 2 (Plan 3 of 3)

5. Recommendations

1. Arborist is retained and tree related input is maintained through any planning conditions/utility designs
2. The Tree Protection Plan & Arboricultural Method Statement (Plan 3 of 3) is conditioned as part of any planning consent

Appendix 1. Tree Data Schedule. Tree Plans x 3

Ref.	Tree Type	Height (m)	Stem Diam. (mm)	North (m)	East (m)	South (m)	West (m)	Crown Clearance (m)	First Branch (m)	Age Class	Health	Comment	Work Recommendations	Retention Category
T1	Cypress	11	800	4	4	4	4	2	2	M	G	Ivy prevents inspection, co-dominant stems at 0.4-1.5m	None	C
T2	Goat Willow	9	500	5	5	5	5	2	0	M	G	Off-site, not fully inspected	None	C
T3	Birch	8	130	1	3	3.5	3	1	3	EM	G	Suppressed to north	None	C
T4	Sycamore	11	377	4.5	4.5	5.5	4.5	2.5	1	EM	G	Off-site, not fully inspected, wall adjacent displaced	Prune lateral growth to east from current 4.5m to 3m, to suitable side branch	C
T5	Elder	3	147	2.5	2.5	2.5	2.5	0	0	M	F	Sparse canopy	Prune lateral growth to east from current 2.5m to 1m, to suitable side branch	C
T6	Eucalyptus	10	350	2	3	5	4	4	5	EM	G	Off-site, not fully inspected	None	B
T7	Beech	18	1000	8	10	8.5	9	2	3	OM	G	Off-site, not fully inspected, Ganoderma fruit bodies on stem	Prune lateral growth to south from current 8.5m to 7m, to suitable side branch. Crown lift to 3.5m within 2m of proposed	B
T8	Beech	18	800	6	8	6	9	3	3	OM	G	Off-site, not fully inspected	None	A
T9	Holly	13	693	5	6	6.5	6	1.5	3	M	G	Off-site, not fully inspected	Prune lateral growth to south from current 6.5m to 4m, to suitable side branch	B
T10	Sycamore	21	1000	8	9	10	8	5	4	M	G	Off-site, not fully inspected	None	A
T11	Sycamore	19	704	4.5	4.5	4	4.5	3.5	7	M	F	Canopy sparser than normal	None	B
T12	Sycamore	19	960	7	8.5	7.5	8	3.5	7	M	G	Ivy prevents inspection	None	B
G1	Cypress	5	100	As plan				0	0	EM	G	Ornamental group	None	C
G2	Ornamental Shrubs & Trees	5	100	As plan				0	0	EM	G	Ornamental group	None	C
G3	Holly	5	100	As plan				0	0	M	G	Ornamental group	None	C
G4	Cypress Hedge	5	100	As plan				0	0	M	G	Boundary feature	None	C

Age Class – EM=Early Mature, M=Mature, OM=Old Mature

Health – F=Fair (sub optimal), G=Good (normal)

Plans x 3 (1:250 @A3)

1. Tree Constraints Plan (current site and trees)
2. Arboricultural Impact Plan (proposed site and trees)
3. Tree Protection Plan & Arboricultural Method Statement



Item Reference Number
Common Name
BS 5837 Retention Category

Stem Location & Diameter
Root Protection Area (RPA)
Canopy Spread

BS 5837 Retention Category Colour

- Category A - Tree of High Quality
- Category B - Tree of Moderate Quality
- Category C - Tree of Low Quality
- Category U - Tree Unsuitable for Retention

Notes:

AM PM

Approximate sweep of shade cast by trees in midsummer, plotted as per description in BS5837: 2012

"An indication of potential direct obstruction of sunlight can be illustrated by plotting a segment, with a radius from the centre of the stem equal to the height of the tree, drawn from due north-west to due east, indicating the shadow pattern through the main part of the day."

PLAN 1 OF 3

Scale 1:250@ A3

Plan Title Tree Constraints Plan

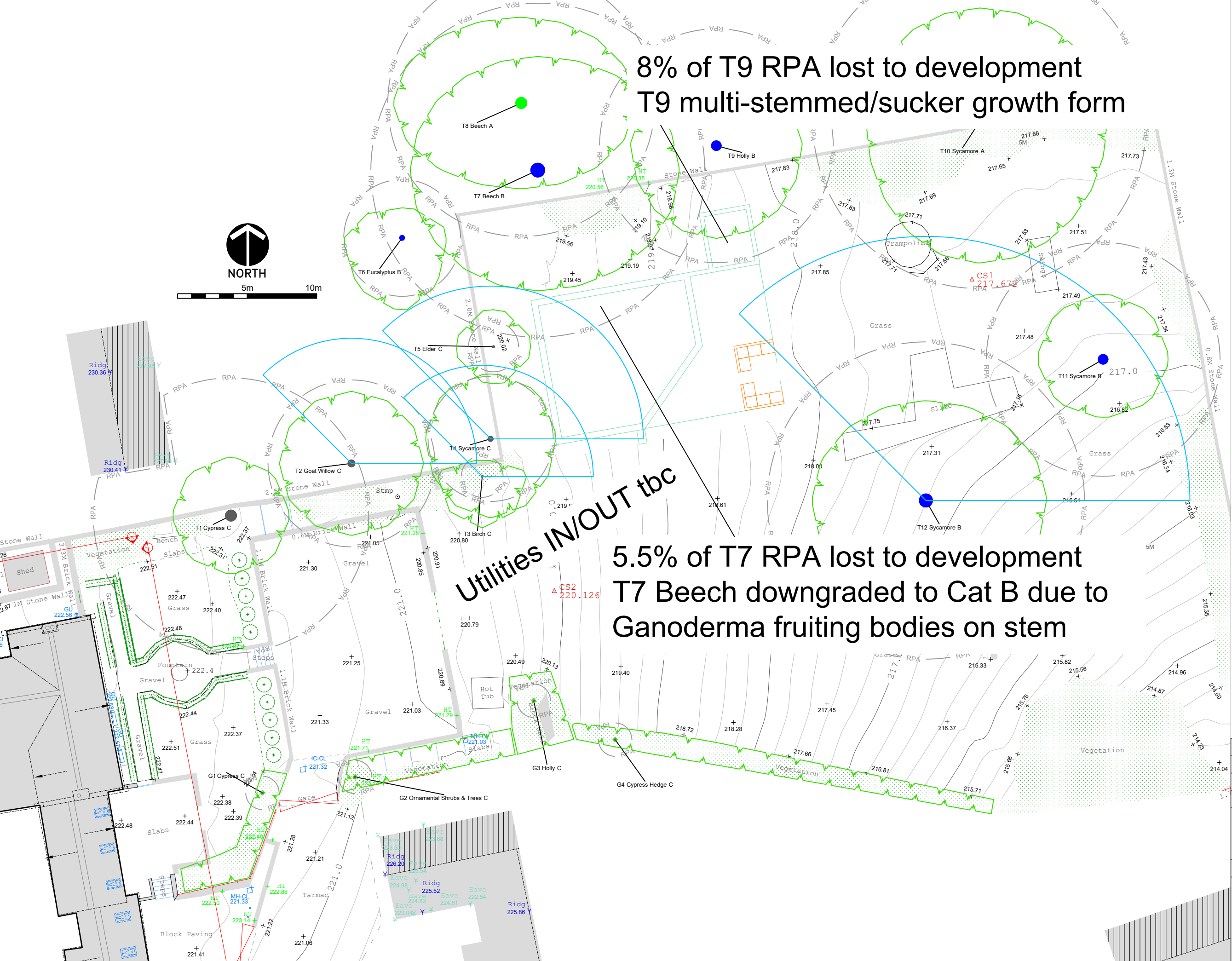
Site Redminster House
Thurlstone

Date June 2026

tree@treeplan.co.uk

For planning purposes only, check all measurements on site
Read in colour & with associated report. Copyright.
Base Topographic Plan ref - 26327-26-01 Castle Surveys Ltd
BS5837 (2012) Tree Survey Date - 9/6/26. Trees only
viewed from within site, off-site tree survey data estimated

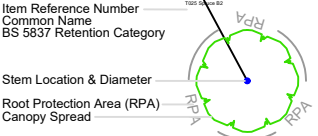




8% of T9 RPA lost to development
T9 multi-stemmed/sucker growth form

Utilities IN/OUT tbc

5.5% of T7 RPA lost to development
T7 Beech downgraded to Cat B due to
Ganoderma fruiting bodies on stem



- BS 5837 Retention Category Colour
- Category A - Tree of High Quality
 - Category B - Tree of Moderate Quality
 - Category C - Tree of Low Quality
 - Category U - Tree Unsuitable for Retention

Notes:

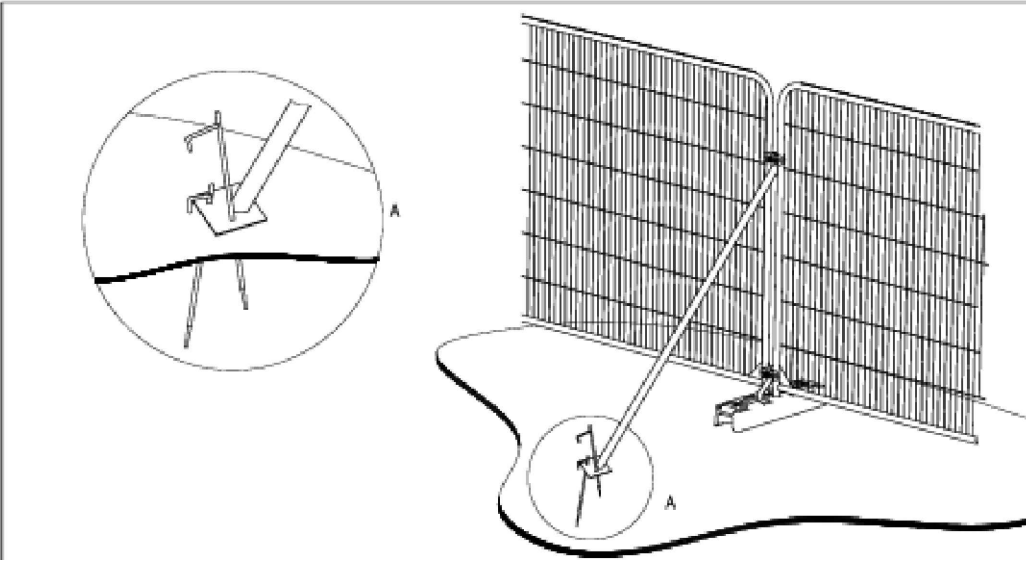
AM PM

Approximate sweep of shade cast by trees in midsummer, plotted as per description in BS5837: 2012

"An indication of potential direct obstruction of sunlight can be illustrated by plotting a segment, with a radius from the centre of the stem equal to the height of the tree, drawn from due north-west to due east, indicating the shadow pattern through the main part of the day."

PLAN 2 OF 3	
Scale	1:250@ A3
Plan Title	Arboricultural Impact Plan
Site	Redminster House Thurlstone
Date	August 2026
tree@treeplan.co.uk	
For planning purposes only, check all measurements on site Read in colour & with associated report. Copyright. Base Topographic Plan ref - 26327-26-01 Castle Surveys Ltd BS5837 (2012) Tree Survey Date - 9/6/26. Trees only viewed from within site, off-site tree survey data estimated	

Figure 3 Examples of above-ground stabilizing systems



Above - Fig 3 of BS5837 - specification of small scale domestic development temporary tree protective fencing required during groundworks and build to prevent access and compaction/degradation of trees root protection areas (RPA).
Angled support poles closest to tree
Attach weatherproof signs to outside every third panel with the words 'CONSTRUCTION EXCLUSION ZONE - NO ACCESS'



Left - Alternative to Fig 3 of BS5837 - specification of small scale domestic development temporary tree protective fencing shown left. Driven wooden posts or posts in post mix

Below - Example of temporary ground protection - required during groundworks and build to prevent compaction/degradation of trees root protection areas (RPA). This image courtesy of www.ground-tracks.co.uk

BS5837 recommends for pedestrian operated plant up to 2t proprietary inter-lined ground protection boards placed on top of a compression resistant layer (eg 150mm depth of woodchip) laid onto a geotextile membrane

