



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

tree@treeplan.co.uk

treeplan.co.uk

Steeton, West Yorkshire

Site Location

28 Tivy Dale Drive
Cawthorne, Barnsley, S75 4EH

Task

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

To Inform

Self-Build Dwelling

For

Coda Studios Limited

Report Date

19 March 2026

Surveyor/Document Author

Ross Cannon NDF, Tech Cert (Arbor A)

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 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 (high quality), blue (moderate) and grey (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

Report and plans copyright ©

Summary

A British Standard 5837 Trees in relation to design, demolition and construction survey was undertaken at 28 Tivy Dale Drive, Cawthorne, S75 4EH

The tree stock was mainly early mature/mature ornamental cypress and typical domestic mixed shrub boundary features of limited amenity value. Two moderate value off-site trees to the southwest were also recorded

A Tree Constraints Plan (plan 1 of 3), found in Appendix 1 was produced

Architects issued a proposed site plan which was used to produce an Arboricultural Impact Plan (plan 2 of 3), also found in Appendix 2

- Three cypresses will be removed as part of the development. These are less than 3.5m tall and have historically been trimmed into rounded ornamental form. They cannot be seen from any public vantage point so their removal will not be detrimental to the amenity of the area

A Tree Protection Plan (plan 3 of 3) is provided in Appendix 1 showing the location of temporary tree protection measures to reduce the impact of the proposed development on retained trees

Contents

1. Survey Background	4
1.1 Instruction	4
1.2 Site Location	4
1.3 Plans/Information Received.....	4
1.4 Tree Survey Date & Weather Conditions	4
1.5 Site Limitations at Survey	4
1.6 Brief Site Appraisal.....	4
1.7 Brief Appraisal of Tree Stock	4
2. Tree Constraints – Generic Considerations	5
2.1 Above Ground Constraints Tree Trunk and Canopy.....	5
2.2 Below Ground Constraints Root Protection Area (RPA)	5
3. Proposed Development.....	5
4. Arboricultural Impact Assessment	6
4.1 Presence of Tree Preservation Orders/Conservation Areas	6
4.2 Above Ground Impacts	6
4.3 Below Ground Impacts	7
4.4 Site Clearance, Demolition, Groundworks, Build & Landscaping Requirements.....	7
5. Conclusions	8
6. Arboricultural Method Statement.....	8
7. Generic Tree Protection Methodology.....	9
7.1 Project Arborist	9
7.2 Requirements to Protect Retained Trees	9
7.3 Tree Ground Protection – Generic Precautions	9
7.4 Temporary Tree Protective Fencing During Groundworks and Build	9
7.5 Temporary Ground Protection (within RPAs) to enable build access.....	9
7.6 Excavation Within RPA's of Retained Trees	9
Appendix 1. Tree Data Schedule & Tree Plans	10

1. Survey Background

1.1 Instruction

Coda Studios Limited

1.2 Site Location

28 Tivy Dale Drive, Cawthorne, S75 4EH - see also TCP

1.3 Plans/Information Received

Topographic ref 1115_001, Proposed ref 3431

1.4 Tree Survey Date & Weather Conditions

11 March 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, long axis approximately north/south accessed from north

1.7 Brief Appraisal of Tree Stock

Early mature/mature ornamental cypress and typical mixed domestic shrub boundary features of limited amenity value. Two moderate value off-site trees to the southwest were also recorded

2. Tree Constraints – Generic Considerations

See TCP (Plan 1 of 3) 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

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. Proposed Development

See AIP (Plan 2 of 3) in Appendix 1. The proposed development is the removal of current dwelling and construction of a self-build new dwelling

4. Arboricultural Impact Assessment

Table 1 Impact of Proposed Development

	Impact/Work Required	BS5837 Tree Quality Category			
		U	A	B	C
1	Items* to be REMOVED as part of development	-	-	-	T4, T5, T6
2	Items* to be PRUNED to enable development	-	-	-	-

* Arboricultural Features – Trees (T), Group (G), Hedge (H)

See AIP

4.1 Presence of Tree Preservation Orders/Conservation Areas

Online mapping at <https://www.barnsley.gov.uk/barnsley-maps/tree-preservation-orders-map/>, accessed 19.3.26 indicates the eastern periphery of the property is within a conservation area, and all the property is within a historic 1963 Parkland Tree Preservation Order, presumably pre-dating the original dwelling build. 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

4.2 Above Ground Impacts

Items found in row 1 of Table 1 above are within the footprint of the proposed development, or will be removed in order to provide development build space and post development garden updates

- Cypress trees T4, T5 & T6 are less than 3.5m tall and have historically been trimmed into rounded ornamental form. They cannot be seen from any public vantage point so their removal will not be detrimental to the amenity of the area. See photograph of these trees below

Cypress trees T4, T5 & T6 to be removed



- No trees are proposed for pruning
- The eastern boundary hedges are close to the proposed self-build. If they are trimmed as has occurred historically there will be ample room for pedestrian access. During building works some work planning will be required as the narrow gap will only take pedestrian access and any temporary scaffold installed may reduce this access even further. This is however not an unusual constraint and alternative space/access is available to the west

Shade from Retained Trees (see blue shade arcs on AIP)

- Off-site trees T8 & T9 are currently <12m tall. They only cast a shade on the south west corner of the property/garden around midday. The rest of the day the property/garden is in full sun
- T8 has some potential to increase in size and shade cast in future decades, but even then this is never likely to be significant/there will always be most of the property/garden in full sun

Future Potential Tree Growth

- T8 has some potential for growth but never where it will be a significant constraint any more than is found currently. A mature tree, its speed of growth will not be rapid

Future Pressure for Removal/Pruning of Retained Trees

- Retained trees are not under any more pressure for removal/pruning than is already found
- The property is within a Tree Preservation Order/on the periphery of a conservation area, so the local planning authority remains in some control of the trees regardless of development

Species Specific/Seasonal Nuisance from Retained Trees

- Leaf, seed, twig and honeydew fall already occurs to the current property, the applicant already deals with these occurrences and manages them as normal property maintenance

4.3 Below Ground Impacts

Items found in row 1 of Table 1 above are within the footprint of the proposed development, or will be removed in order to provide development build space and post development garden updates

- No additional trees/hedges will see any significant removal or alteration of RPAs
- The RPA of hedge H6, a Cotoneaster will be at the periphery of the self-build. Its RPA is however already surfaced by a footpath. The retention of this footpath post demolition and during the self-build will protect this RPA
- Utility routes in and out of the property will utilise those already in place

4.4 Site Clearance, Demolition, Groundworks, Build & Landscaping Requirements

- The site can be accessed via the existing access for tree removal works
- Contractor vehicle access for site clearance, demolition, groundworks, build and landscaping has the potential to detrimentally compact and degrade retained trees RPAs (or areas of post development planting) as such temporary tree protective fencing will have to be installed to provide a 'Construction Exclusion Zone' (CEZ). The type and location have been provided in an Arboricultural Method Statement in section 6 below and on the Tree Protection Plan (TPP) (Plan 3 of 3) in Appendix 1

5. Conclusions

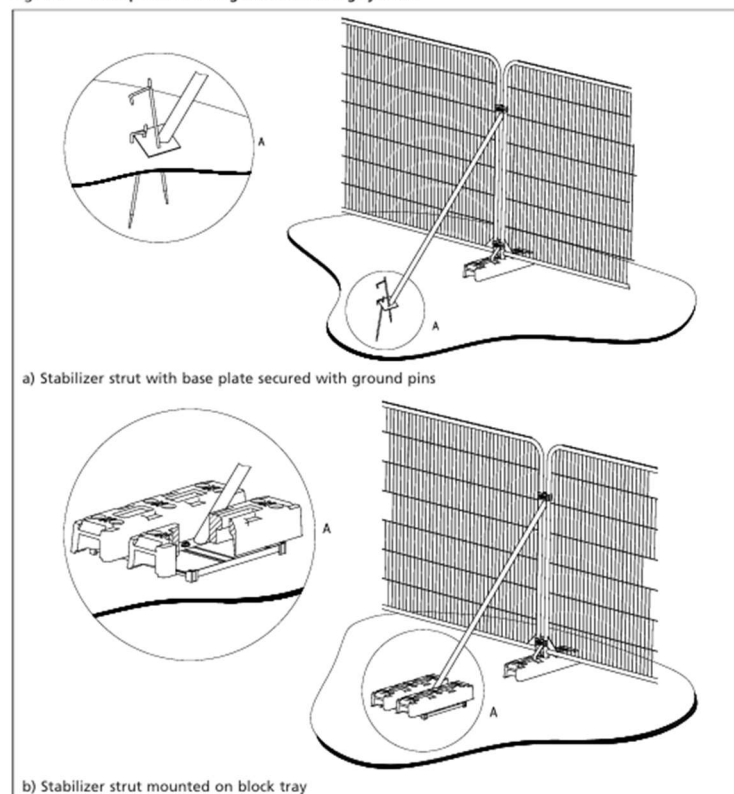
- The tree work proposed as part of the development will not be detrimental to the amenity of the area
- The health and longevity of the retained trees can be ensured by the use of temporary tree protective measures as recommended in British Standard 5837 - see section 6 below

6. Arboricultural Method Statement

1. Undertake tree removal (canopies shaded red hatched on AIP)
2. Install temporary tree protective fencing as per figure 3 of BS5837 (copied below). Any support poles on inside/tree/hedge side of fence
3. Attach weatherproof signs every 9m on longer linier sections or on each individual shorter section near T1 & T2/3 with the words 'CONSTRUCTION EXCLUSION ZONE – NO ACCESS'
4. Photograph and send copies of temporary tree protective fencing to local planning authority
5. Area behind temporary tree protective fencing becomes a construction exclusion zone, no contractor access, storage of materials, ground level changes, storage or washing of cement
6. Temporary tree protective fencing stays in place until end of build
7. When build complete inform local planning authority 7 days prior to removal of temporary tree protective fencing

Figure 3 of BS5837. Angled support struts may not be possible adjacent hedges/shorter options or angled at alternative direction to be used

Figure 3 Examples of above-ground stabilizing systems



7. Generic Tree Protection Methodology

This is of a generic/preliminary nature to inform client, contractors and local planning authority of requirements and achievability. Further, more definitive details can be requested

7.1 Project Arborist

Sometimes instructed as a planning condition. Any tree related enquiry should be directed to them to ensure trees are considered throughout development

7.2 Requirements to Protect Retained Trees

- Physical protection – by the use of protective fencing to limit or prevent the physical impact on above ground tree parts or below ground rooting areas
- Site management – by detailing suitable methods for activities where they may influence trees which may include arboricultural supervision or precautionary techniques

7.3 Tree Ground Protection – Generic Precautions

These general precautions must be followed within RPAs (unless in footprint of development) of retained trees during the construction phase:

- No soil disturbance, including compaction
- No change in the soil level, by excavation, stripping or filling unless controlled and agreed
- No redirection of surface water runoff into or out of the RPA
- No temporary buildings, sheds, or offices, without prior discussion
- No storage of materials or fuel
- No dumping of materials, whether into a skip or onto the ground
- No fires within 10m of the RPA or tree canopy, whichever is greater
- No refuelling of mechanical equipment
- No storage or mixing of cement or washing of cement mixers within or uphill of the RPA
- Follow the guidance contained within the National Joint Utilities Group Volume 4 (NJUG 4) if installing underground services inside or other excavation in the RPA of a tree

7.4 Temporary Tree Protective Fencing During Groundworks and Build

Protective fencing should be erected around any retained trees peripheral RPA as a minimum. The area inside this fence line becomes the 'Construction Exclusion Zone' (CEZ) and should follow the line shown on a Tree Protection Plan. Fencing will prevent construction activity that could cause damage occurring close to retained trees. No plant, equipment or vehicles should operate within the CEZ. Paragraph 6.2.2 and Fig. 2 & 3 of BS5837 details the appropriate fencing specification.

7.5 Temporary Ground Protection (within RPAs) to enable build access

Should be capable of supporting any traffic without distorting or compacting of underlying soil/ Paragraph 6.2.3.3 of BS5837

- a) pedestrian movements only – single thickness scaffold boards placed either on top of driven scaffold frame, so as to form a suspended walkway or on top of 100mm depth of woodchip laid on to a breathable geotextile membrane
- b) up to a gross weight of 2t ground protection boards on top of 150mm depth of woodchip laid on top of a geotextile membrane
- c) >2t/wheeled or tracked requires proprietary engineered specification in liaison with Project Arborist

7.6 Excavation Within RPA's of Retained Trees (NJUG 4)

Soils within the RPA of retained trees only to be removed/lowered under on-site supervision of the Project Arborist (with planning approval) to ensure roots, if any, are appropriately dealt with. Hand digging or a combination of slow and considerate back actor use will be required within the RPA:-

- Roots of 25mm diameter or less should be moved to one side of the excavation or be cut back with a sharp tool, such as secateurs, leaving as small a wound as possible, except where they occur in clumps
- Roots greater than 25mm in diameter to be retained. These must be wrapped in damp hessian to prevent damage and desiccation but removed prior to backfilling
- Installation of new surfacing/footing should take place as soon as possible after excavation to reduce the time roots will be exposed

Appendix 1. Tree Data Schedule & Tree Plans

Ref.	Name	Height (m)	Stem Diam (mm)	North (m)	East (m)	South (m)	West (m)	Crown Clearance (m)	First Branch (m)	Retention Category	Management
T1	Cypress	2.5	140	1	1	1	1	0.7	0.7	C	None
T2	Cypress	3	150	1	1	1	1	1	1	C	None
T3	Evergreen Oak	5	216	2	2	2	2	1	1	C	None
T4	Cypress	3	150	1.5	1.5	1.5	1.5	0.5	1	C	If permission given remove
T5	Cypress	3	180	1	1.5	1.5	1	0.5	1	C	If permission given remove
T6	Cypress	3.5	200	1.5	1.5	1.5	1	1	0.7	C	If permission given remove
T7	Cypress	3.5	150	1.5	1.5	1.5	1.5	1	1	C	None
T8	Sycamore	12	600	5.5	7	7	7	5	4.5	B	None
T9	Oak	8	400	6	1	7	6	2	2	B	None
H1	Beech	2	100	0.5	0.5	0.5	0.5	0.2	1	C	None
H2	Privet	1.5	50	0.5	0.5	0.5	0.5	0	0	C	None
H3	Beech	2.5	100	0.5	0.5	0.5	0.5	0.3	1	C	None
H4	Holly	2.5	100	0.5	0.5	0.5	0.5	0.3	0.8	C	None
H5	Mixed Hedge	2.5	100	0.5	0.5	0.5	0.5	0	0	C	None
H6	Cotoneaster	2	50	0.5	0.5	0.5	0.5	0	0	C	None

Plan 1 of 3 – Tree Constraints Plan

Plan 2 of 3 – Arboricultural Impact Plan

Plan 3 of 3 – Tree Protection Plan



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:

T = Tree
H = Hedge

Root Protection Area (RPA)
A layout design tool indicating minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability, and where the protection of roots and soil structure is treated as a priority

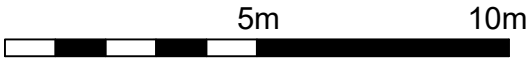
AM PM

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

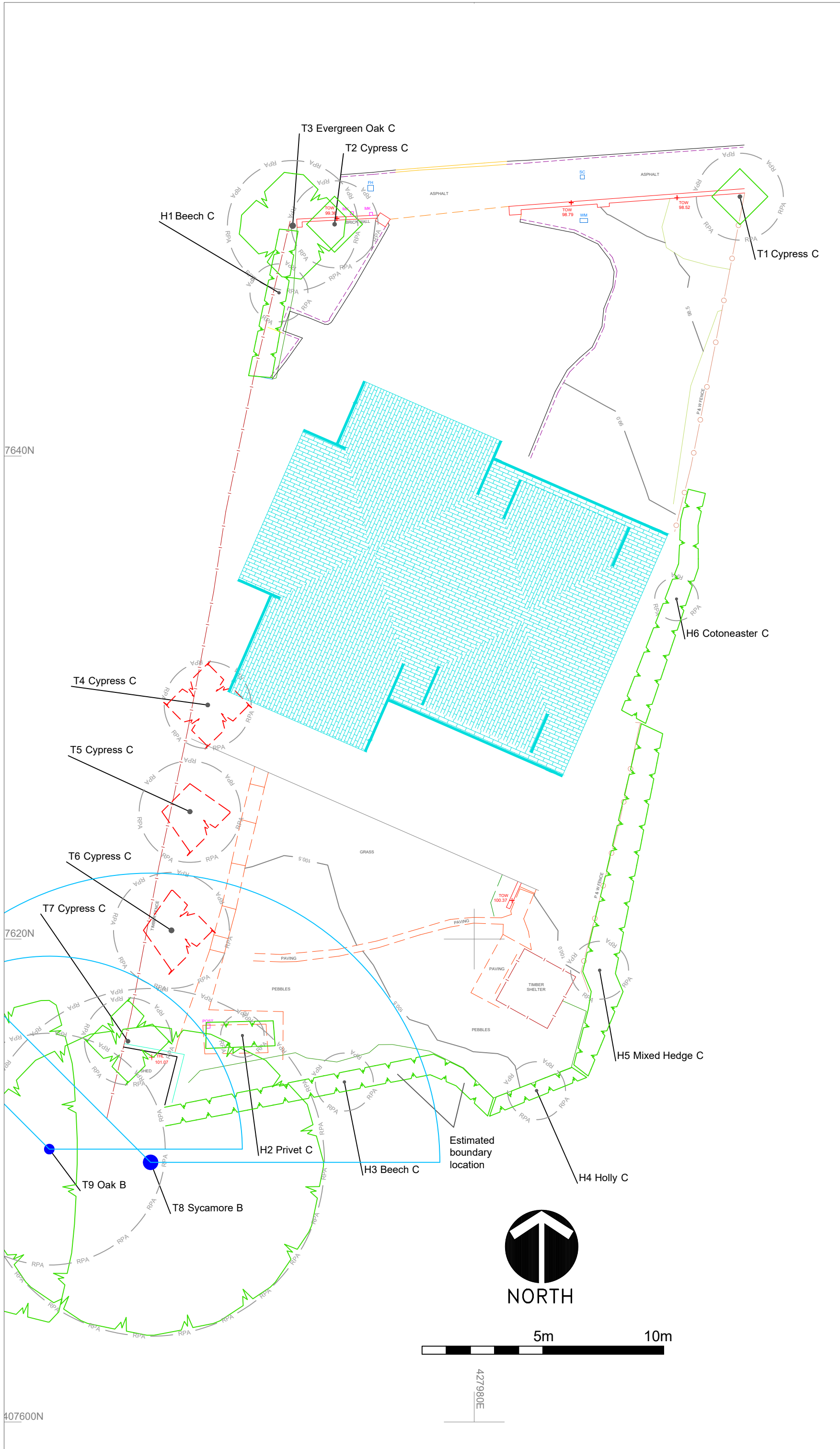
An indication of potential direct obstruction of sunlight can be illustrated by plotting a segment, with a radius from the centre of the stem equal to the height of the tree, drawn from due north-west to due east, indicating the shadow pattern through the main part of the day.

For planning purposes only, check all measurements on site Read in colour & with any associated report. Copyright, Base topographic ref 1115_001 Morris Infrastructure Group. Tree Survey Date 12.3.26. Trees recorded here as T8 & T9, off-site, locations and dimensions estimated

PLAN 1 OF 3	
Scale	1:150@ A3
Plan Title	Tree Constraints Plan
Site	28 Tivy Dale Dr
Date	13.3.26
tree@treeplan.co.uk	



427980E



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:

T = Tree
H = Hedge

Root Protection Area (RPA)
A layout design tool indicating minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability, and where the protection of roots and soil structure is treated as a priority

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.

Tree/Shrub/Group to Remove to enable development.
Canopy shown hatched RED

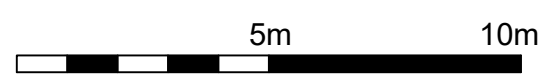
7640N

7620N

407600N

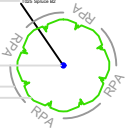
For planning purposes only, check all measurements on site Read in colour & with any associated report. Copyright. Base topographic ref 1115_001 Morris Infrastructure Group. Tree Survey Date 12.3.26. Trees recorded here as T8 & T9, off-site, locations and dimensions estimated Proposed site plan ref 3431

PLAN 2 OF 3	
Scale	1:150@ A3
Plan Title	Arboricultural Impact Plan
Site	28 Tivy Dale Dr
Date	19.3.26
tree@treeplan.co.uk	



427980E

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:

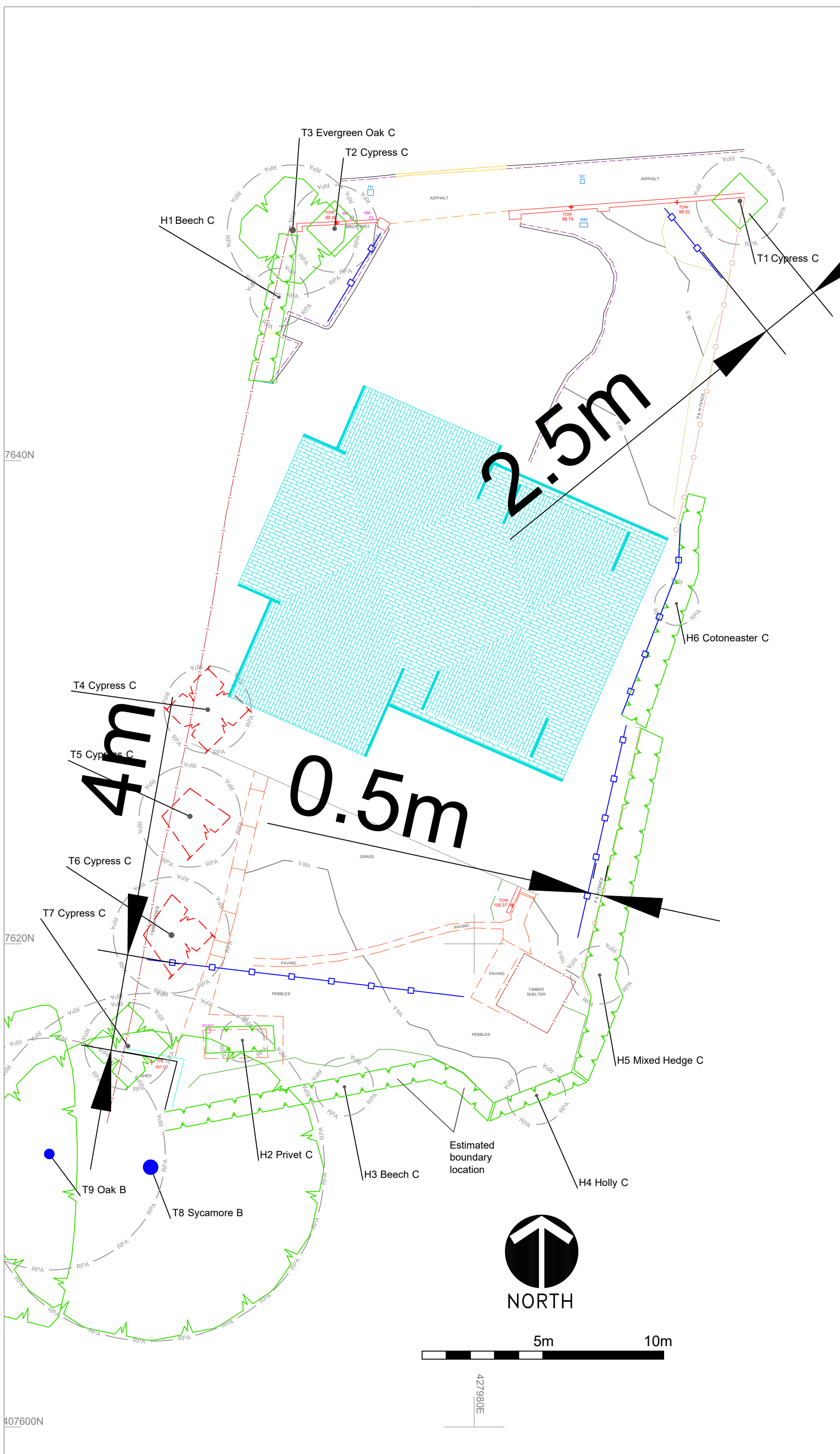
T = Tree
H = Hedge

Root Protection Area (RPA)
A layout design tool indicating minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability, and where the protection of roots and soil structure is treated as a priority

Tree/Shrub/Group to Remove to enable development.
Canopy shown hatched RED

Temporary Tree Protective Fence to Fig. 3 of BS5837

Setting out dimension (m)



For planning purposes only, check all measurements on site Read in colour & with any associated report. Copyright. Base topographic ref 1115_001 Morris Infrastructure Group. Tree Survey Date 12.3.26. Trees recorded here as T8 & T9, off-site, locations and dimensions estimated Proposed site plan ref 3431

PLAN 3 OF 3	
Scale	1:150@ A3
Plan Title	Tree Protection Plan
Site	28 Tivy Dale Dr
Date	19.3.26
tree@treeplan.co.uk	