ARBORICULTURAL IMPACT ASSESSMENT AND METHOD STATEMENT

Twineham Court Farm
Bob Lane
Haywards Heath
West Sussex RH17 5NH

Client: Telbridge Properties Ltd

May 2024

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MICFor MArborA DipArb L6 (ABC) MEng(Hons)

Ref: StA 2078 AIA AMS Twineham Court Farm Rev -

Executive Summary

This report provides an arboricultural impact assessment and method statement for a FUL planning application for: *The removal of redundant agricultural buildings and erection of new buildings to create an events venue. Proposed use of the redundant farmhouse and annex to provide ancillary accommodation to serve the events venue. Provision of new vehicular access onto Bob Lane and creation of driveway and parking area, plus ancillary infrastructure including surface and foul water drainage strategy. Provision of ecological enhancements and hard and soft landscaping* at Twineham Court Farm, Bob Lane, Haywards Heath, West Sussex RH17 5NH.

This report complies with the planning policies of Mid Sussex District Council and with the recommendations of British Standard BS 5837: 2012, *Trees in relation to design, demolition and construction – Recommendations.*

The site is situated to the north of Bob Lane and abuts an access track to the east which leads to an electricity substation located to the north of the site as well as a farm and farm fields to the east. There is an area of mixed woodland to the west of the site. The site is on predominantly level ground and is currently occupied by a number of dilapidated outbuildings and a Listed farmhouse.

The trees on the site were surveyed by Abi St Aubyn & Tom Wawman on the 20th March 2023. A total of 26 individual trees, 22 groups, 3 hedges and 1 woodland were surveyed. The key arboricultural features of the site are:

- The off-site boundary Oak trees growing to the south and east of the site (G25, T26, T28, T30, T33, G46, G47, G48, G49 and T50).
- The off-site woodland to the west of the site (W42).

Information about the survey methodology and the tree data recorded can be found at **Appendix 1**. The root protection areas (RPAs) table and the tree constraints plan can be found at **Appendices 2** & **3.**

The design has been an iterative process, with the tree constraints plan informing the evolving design. The final proposals have been assessed and the remaining arboricultural impacts identified. The tree removals plan can be found at **Appendix 4** and the tree protection plan at **Appendix 5 .**

The proposals will require the removal of 5 individual trees, 5 groups & 2 sections of groups, and 1 hedge & 2 sections of hedges. All of the proposed removals are lower quality, either category 'C' or category 'U' trees. Several are required to be removed on the basis of safety irrespective of these planning proposals.

Pruning is proposed to 6 individual trees, 2 hedges and 1 group. All proposed works are minor in extent and will be carried out in accordance with British Standard BS 3998: 2010, Tree Work – recommendations.

The method statement at section 4 of this report provides mitigation to enable minor sections of excavation within the RPAs of T10, T22, T36, T50, H51 and G35 and areas of proposed hard surfacing within the RPAs of T22, T23, T10, and T6.

There are two areas adjacent to Field Maple T10 where existing hard surfacing is to be removed and returned to soft landscaping (the existing track surfacing and the concrete pad at the base of an existing building).

The landscaping proposals include tree, shrub and hedge planting to mitigate for the proposed tree removals and to provide an attractive setting for the events centre.

Subject to the adherence to the recommendations within the method statement at section 4 of this report, I consider that the proposals would have a negligible impact on the health and longevity of the retained trees. Adherence to the method statement could readily be secured by an appropriate planning condition. The proposals represent a negligible impact on the character and appearance of the locality as far as this is contributed to by trees.

Contents

1. Introduction

1.1. Scope of report

This report provides an arboricultural impact assessment and method statement for a FUL planning application for: *The removal of redundant agricultural buildings and erection of new buildings to create an events venue. Proposed use of the redundant farmhouse and annex to provide ancillary accommodation to serve the events venue. Provision of new vehicular access onto Bob Lane and creation of driveway and parking area, plus ancillary infrastructure including surface and foul water drainage strategy. Provision of ecological enhancements and hard and soft landscaping* at Twineham Court Farm, Bob Lane, Haywards Heath, West Sussex RH17 5NH.

1.1.1 This report complies with the planning policies of Mid Sussex District Council and with the recommendations of British Standard BS 5837: 2012, *Trees in relation to design, demolition and construction – Recommendations* (the British Standard).

1.1.2 This report provides an impact assessment and an arboricultural method statement including a tree removals plan and a tree protection plan.

1.2. Site description

1.2.1 The site is situated to the north of Bob Lane and abuts an access track to the east which leads to an electricity substation located to the north of the site as well as a farm and farm fields to the east. There is an area of mixed woodland to the west of the site.

1.2.2 The site is on predominantly level ground and is currently occupied by a number of dilapidated outbuildings and a Listed farmhouse.

1.2.3 The site has a number of ponds and small patches of deciduous wooded areas comprising Goat Willow, Field Maple, Ash, Elder and Hawthorn. There are also a number of fruit trees (Apple and Pear) as well as individual trees of mixed species growing within the site. There is a woodland area to the west of the site comprising mature Oak trees with an understorey of Hawthorn and Rhododendron. To the east and south of the site there are several mature boundary trees growing adjacent to Bob Lane and the access track for the electricity substation; these comprise mature Oak trees growing within boundary hedgerows.

1.2.4 A check of an online soil information resource[1] revealed the soils to be slowly permeable, seasonally wet and slightly acid but base-rich loamy and clayey soils.

1.3. Information provided

1.3.1 The following documents were used to aid the preparation of this report:

- G3 Architecture Proposed Site Layout/Block Plan ref: 2427.PL01
- GTA Event Venue Drainage Strategy 12391-1601 P2

[1]CRANFIELD SOIL AND AGRIFOOD INSTITUTE. (2021) Soil descriptions. [Online] Available from: www.landis.org.uk/soilscapes/ [Accessed: 17th March 2023]

1.4. Limitations

1.4.1 This arboricultural impact assessment and method statement have been prepared for the proposals stated above, using the information available at the time of writing. Any subsequent amendments to the design or to the construction methods proposed, will need to be reviewed by the project arboricultural consultant to assess whether these changes might create additional or fewer arboricultural impacts and to see if additional measures are required or if some of the measures specified are no longer needed.

2. Tree survey

2.1. Findings

2.1.1 The trees on the site were surveyed by Abi St Aubyn & Tom Wawman on the 20th March 2023. Information about the survey methodology and the tree data recorded can be found at **Appendix 1**.

2.1.2 The root protection areas (RPAs) table and the tree constraints plan can be found at **Appendices 2** & **3** of this report respectively.

2.1.3 A total of 26 individual trees, 22 groups, 3 hedges and 1 woodland were surveyed. A summary of their British Standard categorisation is provided at **Table 1** below.

Tree category	Individual tree	Group	Hedge	Woodland
A	1	-	-	-
B	8	3	-	1
C	12	18	3	-
U	5	1	-	-
Totals	26	22	3	1

Table 1: Tree categorisation summary

2.1.4 Bob Lane has been considered to be a root barrier and the shapes of the root protection areas (RPAs) of the adjacent trees have been modified as shown on the tree constraints plan to reflect this. Although the shapes of the trees' RPAs have been modified, their areas have been maintained.

2.1.5 The key arboricultural features of the site are:

- The off-site boundary Oak trees growing to the south and east of the site (G25, T26, T28, T30, T33, G46, G47, G48, G49 and T50).
- The off-site woodland to the west of the site (W42).

2.1.6 These trees are readily visible in views from Bob Lane to the south and are in keeping with the character and appearance of this locality, which is characterised by farmland with fields surrounded by boundary hedgerows and mature trees and areas of woodland.

2.2. Statutory protection

2.2.1 From information on Mid Sussex District Council's website, no trees within or adjacent to the boundaries of the site are shown to be the subject of a Tree Preservation Order (TPO).

2.2.2 The site is not in a Conservation Area.

2.3. Other designations

2.3.1 A check of 'MAGIC'[2] map showed that there are no areas of ancient semi-natural woodland (ASNW) within or adjacent to the site. Ancient semi-natural woodland is any area that's been continuously wooded since at least 1600 AD.

[2] The DEFRA MAGIC map website provides authoritative geographic information about the natural environment across government: www.magic.defra.gov.uk

3. Arboricultural impact assessment

3.1. Overlay of the proposals to identify impacts

3.1.1 The design has been an iterative process, with the baseline tree survey information and tree constraints plan informing the evolving design. The final proposals have been overlaid with the tree constraints plan and the remaining arboricultural impacts identified. The tree removals plan can be found at **Appendix 4** and the tree protection plan at **Appendix 5 .** The arboricultural impacts are described below.

3.2. Tree removals

3.2.1 Trees to be removed to enable the proposed development are shown with dashed outlines on the tree removals plan at **Appendix 4** and are shaded to indicate their British Standard tree category. A summary is shown at **Table 2** below.

Tree No.	Species	Cat-egory	Justification for tree removal
T1	Ash	U	At risk of collapse; removal recommended irrespective of this planning application.
G2	Ash & Goat Willow	C	Small, low quality self-seeded individuals; remove to enable space for high quality landscaping.
G7	Goat Willow, Elder & Blackthorn	U	Within proposed access road; group of small low quality trees of predominantly Elder; mitigation landscaping proposed.
T8	Goat Willow	U	Low quality tree with several failed limbs, removal recommended on the basis of safety due to the proposed increased usage of the site.
G11	Elder	C	Partly within the footprint of a proposed building; of low quality; readily replaceable.
G12	Ash	C	Low quality trees, remove to enable space for high quality landscaping.
G13	Ash	C	Small, low quality, self-seeded trees; remove to enable high quality landscaping.
T14	White Willow	U	Low quality tree with significant storm damage and several cavities; mitigation landscaping to be provided.
T15	Dead	U	Dead high stump.
T16	Cherry	C	Remove to enable the demolition of the adjacent building; small tree with an asymmetrical crown; mitigation landscaping to be provided.
H21	Leyland Cypress	C	Remove to enable drainage run; non-native conifer hedge of 6m in height; mitigation planting with more appropriate species proposed.
G24	Apple	C	Fell one of a group of 2 trees because a drainage run is too close to implement without special measures; small fruit tree, more prudent to replace rather than implement special measures.

Tree No.	Species	Cat-egory	Justification for tree removal
G34	Oak, Horse Chestnut, Ash & Hawthorn	C	Remove small section of the group as shown on the tree removals plan to construct drainage connection into the ditch.
H51	Blackthorn, Hawthorn & Field Maple	C	Remove two small sections, as shown on the tree removals plan, to construct drainage connections into the ditch.
H52	Blackthorn, Field Maple & Hawthorn	C	Remove section to enable the proposed access and the required visibility splays; mitigation planting proposed.

Table 2: Tree removals summary

3.2.2 The proposals will require the removal of 5 individual trees, 5 groups & 2 sections of groups and 1 hedge & 2 sections of hedges. All of the proposed removals are either category 'C' or category 'U'. Several are required to be removed on the basis of safety irrespective of these planning proposals.

3.3. Pruning

3.3.1 A summary of pruning works required is provided at **Table 3** below.

Tree No.	Species	Works required	Reasons for works
T6	Oak	Crown lift from 5m to 5.5m over the access road.	Minimal works required as there is an existing crown clearance of c.5m. Works needed to provide adequate crown clearance for construction activities and future use.
T10	Field Maple	Crown lift from 4.5m to 5.5m over the access road.	To allow adequate space for construction activities and future growth.
G17	Blackthorn & Hawthorn	Minor pruning of the SE section which overhangs a farm building to allow 1.5m clearance.	To allow sufficient crown clearance for demolition activities.
T22	Portuguese Laurel	Crown reduce to edge of road.	To allow adequate space for construction activities and future use.
T23	Cider Gum	Crown lift from 3m to 5.5m over road.	To allow adequate crown clearance for construction activities (including drainage trench outside of RPA but under crown) and future use.
T31	Silver Birch	Crown lift E & N edges of crown from 1.5m to 5.5m.	To allow adequate crown clearance for construction activities and future use.
T50	Oak	Crown lift from 3m to 3.5m over area of excavation for drainage.	To enable sufficient crown clearance to allow excavation for drainage to take place
H51	Blackthorn, Hawthorn & Field Maple	Crown lift over the entrance to 5.5m .	To ensure adequate crown clearance for future use and construction activities.

Tree No.	Species	Works required	Reasons for works
H52	Blackthorn, Field Maple & Hawthorn	Crown lift over the entrance to 5.5m Remove section of hedgerow adjacent to proposed access.	To ensure adequate crown clearance for future use and construction activities.

Table 3: Summary of pruning

3.3.2 Works are proposed to 6 individual trees, 2 hedges and 1 group. All proposed works are minor in extent and will be carried out in accordance with British Standard BS 3998: 2010, *Tree Work – recommendations.*

3.4. Excavation

3.4.1 Excavation within root protection areas (RPAs) is proposed in the following areas:

- Minor incursion into the western edge of the RPA of Field Maple T10 by the eastern end of a proposed building (incursion is 1.5% of the tree's overall RPA) and a drainage run (1.1% of the overall RPA). The combined extent of this incursion is 2.6% of the overall RPA.
- Minor incursion into Portuguese Laurel T22 by a proposed parking bay - 5.6%.
- Minor incursion by the edge of a pedestrian path into the RPA of Oak T36 – minimal.
- Two drainage connections into the existing ditch running along the eastern boundary. These have been located in order to minimise the impact on the higher value trees within the boundary vegetation. The incursions are within the RPAs of T50, H51 & G35. The incursion within the RPA of Oak T50 is minimal.

3.4.2 Due to the small percentages of the respective RPAs affected and subject to the protective measures indicated shown on the tree protection plan at Appendix 5 and described in Section 4 below, these minor encroachments will not compromise the trees' health or longevity.

3.5. Proposed new hard surfacing

3.5.1 Within the RPAs of retained trees areas of new or replacement hard surfacing will either reuse the existing sub-base or be constructed using an above soil (no-dig) methodology using a cellular confinement system so as to minimise any disturbance to the underlying roots.

3.5.2 The use of above ground cellular confinement systems to install surfacing near to trees has been used for over 20 years. This involves laying a geocell mat onto a non-woven geotextile laid on the surface of the ground (no excavation required), filling it with clean stone aggregate, and topping this sub-base with a wearing course. **Fig 1** below, from the latest good practice guidance on above soil surfacing near trees[3], shows this in principle.

[3] Rose, B., 2010. The use of cellular confinement systems near trees; A guide to good practice. The Arboricultural Association: Gloucestershire.

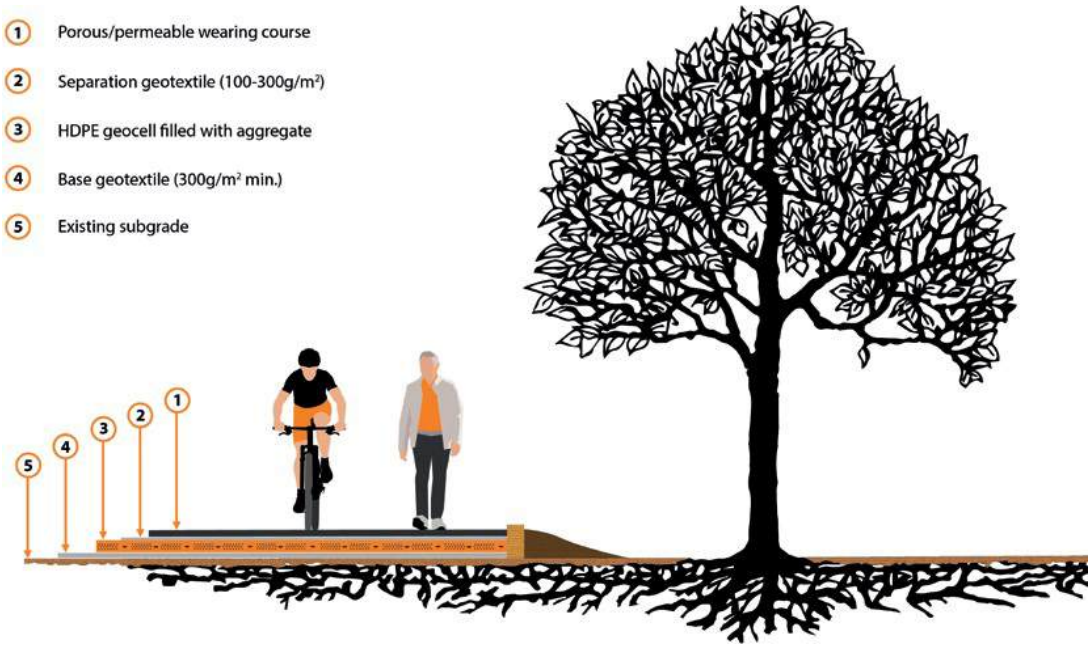


Fig 1: Excerpt from the best practice guidance on above soil surfacing[2]

3.5.3 This surface does not require excavation (other than tying into existing levels for example at the junction with a road) and it improves the bearing capacity of the soil by distributing stress over a wider area which prevents ground deformation.

3.5.4 The areas affected are:

- The existing sub-base will be reused or the existing surface will be carefully removed in accordance with para 3.6.1 below and an above soil surfacing will be constructed within the RPAs of T22 & T23.
- An existing track to the north of Field Maple T10 will be formalised into an access road using above soil surfacing. The proposed footprint is partly within the existing compacted track and partly within the footprint of a building to be removed to the north. Consider this is a betterment to the existing situation where the track is used by heavy farm machinery without any measures to protect the underlying roots from compaction. Decompaction measures are recommended before the above soil surface is laid.
- Within the RPA of Oak T6, part of the new surfacing is over an existing compacted track, and part is a new area of hard surfacing. The combination of these two areas is 19% of the tree's overall RPA, which is below the 20% maximum extent recommended within the British Standard. Furthermore, the existing track section is compacted because it is in use by heavy farm machinery without any measures to protect the underlying roots from compaction. Decompaction measures are recommended before the above soil surface is laid.

3.6. Return of existing hard surfacing to soft landscaping

3.6.1 There are two areas adjacent to Field Maple T10 where existing hard surfacing (the existing track surfacing and the concrete pad at the base of an existing building) is to be removed and returned to soft landscaping. Removal of hard surfacing within RPAs will need to be carried out carefully in order not to damage the underlying roots or compact the soil.

3.6.2 If the existing sub-base is not reused, the existing track within the RPAs of T6, T22 and T23 also may be removed and replaced with an above soil surface, if this is the case, the same methodology will be followed.

3.6.3 The method statement at Section 4 of this report provides a methodology for removal of hard surfacing within root protection areas.

3.7. Levels

3.7.1 No changes of levels are proposed within the RPAs of any of the retained trees.

3.8. Services

3.8.1 At this stage, exact details of the routing of services for the proposed development are not available. It is intended that all services will be routed outside of the RPAs of retained trees. However, once details of the routing of new services becomes available, prior to commencement, these will be reviewed by the project arboriculturist and advice provided about how to minimise any impacts to adjacent trees.

3.9. Landscaping

3.9.1 The landscaping proposals include tree, shrub and hedge planting to mitigate for the proposed tree removals and to provide an attractive setting for the events centre.

3.9.2 Any fencing within the RPAs of retained trees will need to be constructed using postholes rather than trenching. Also, the levels of any fences will need to follow existing ground levels as there must be no re-grading of levels within RPAs.

3.9.3 Where tree and shrub planting occur within the root protection areas of retained trees, in order to avoid damage to roots and compaction to soil, these works must occur sensitively as described in the arboricultural method statement at section 4 of this report.

3.10. Conclusions

3.10.1 The proposals will require the removal of 5 individual trees, 5 groups & 2 sections of groups, and 1 hedge & 2 sections of hedges. All of the proposed removals are lower quality, either category 'C' or category 'U' trees. Several are required to be removed on the basis of safety irrespective of these planning proposals.

3.10.2 Works are proposed to 6 individual trees, 2 hedges and 1 group. All proposed works are minor in extent and will be carried out in accordance with British Standard BS 3998: 2010, *Tree Work – recommendations.*

3.10.3 The method statement at section 4 of this report provides mitigation to enable minor sections of excavation within the RPAs of T10, T22, T36, T50, H51 and G35 and areas of proposed hard surfacing within the RPAs of T22, T23, T10, and T6.

3.10.4 There are two areas adjacent to Field Maple T10 where existing hard surfacing is to be removed and returned to soft landscaping (the existing track surfacing and the concrete pad at the base of an existing building).

3.10.5 The landscaping proposals include tree, shrub and hedge planting to mitigate for the proposed tree removals and to provide an attractive setting for the events centre.

3.10.6 Subject to the generic and specific tree protection measures recommended within the arboricultural method statement at section 4 of this report being adhered to, I consider that the proposals represent a negligible impact on the amenity of the locality in so far as it is contributed to by trees. However, following implementation of a high-quality landscaping scheme, as the new planting establishes it will progressively make a positive contribution to the age and species diversity in the area the extent of local canopy cover.

4. Arboricultural method statement (AMS)

4.1. Pre-start meeting

4.1.1 Before any works take place on site, the developer will hold a pre-start meeting. This meeting will be led by the project arboricultural consultant and will be attended by the site manager and the demolition contractor and any other parties working close to the trees on the site. The LPA tree officer will also be invited to this meeting. At the pre-start meeting the project arboricultural consultant will:-

- explain the approved tree protection methodology.
- sign-off the pre-start tree works, tree protection fencing and temporary ground protection.
- discuss the phasing of the works and agree when excavation and above soil surfacing will take place & confirm the phasing between Type 1 and Type 2 protective fencing/ground protection for specific operations.
- discuss any changes that may be required to the approved arboricultural method statement. These changes will either be agreed with the LPA tree officer at the time or if the LPA tree officer is not attendance, by exchange of email following the meeting.
- agree the arboricultural monitoring frequency and reporting required with the LPA tree officer if in attendance.
- contact numbers will be exchanged and the methods of tree protection outlined in this statement will be explained.

4.2. Phasing of works

Works Order	Stage	Notes
1	Initial tree works	The approved tree works will be carried out in accordance with para 4.3.1 below.
2	Installation of tree protection fencing and temporary ground protection	The tree protection fencing and temporary ground protection will be installed in the locations shown on the tree protection plan and to the specification described in this method statement.
3	Pre-start meeting	The project arboricultural consultant will explain tree protection measures at the pre-start meeting. The tree works and protective fencing & ground protection will also be signed off. This meeting must occur before any plant activity, ground works or demolition or construction activities begin.
4	Construction phase	The tree protection fencing and temporary ground protection must be maintained and the construction exclusion zone maintained throughout the construction phase. Where specific operations are required within the construction exclusion zone, Type 2 fencing and ground protection will be used as shown on the tree protection plan.
5	Landscaping	Landscaping works will take place after the construction phase has been completed and all heavy plant has left site.

Table 4: Phasing of works

4.3. Tree works

4.3.1 The trees listed at **Table 5** below are to be felled or pruned as specified. All tree works will be carried out in accordance with British Standard BS 3998: 2010, *Tree Work – recommendations.* Advice should be sought from an ecologist regarding the nesting bird season and any protected species prior to the works being undertaken.

Tree No.	Species	Height (m)	Works
T1	Ash	14m	Fell
G2	Ash, Goat Willow	6.5m	Fell
T6	Oak	15m	Crown lift from 5m to 5.5m over the access road
G7	Goat Willow, Elder & Blackthorn	7m	Fell
T8	Goat Willow	7m	Fell
T10	Field Maple	16.5m	Crown lift from 4.5m to 5.5m over the access road
G11	Elder	3.5m	Fell
G12	Ash	9m	Fell
G13	Ash	3m-6.5m	Fell
T14	White Willow	11m	Fell
T15	Dead	3m	Fell
T16	Cherry	7m	Fell
G17	Blackthorn & Hawthorn	6m	Minor pruning of the SE section which overhangs a farm building to allow 1.5m clearance
H21	Leyland Cypress	6m	Fell
T22	Portuguese Laurel	5m	Crown reduce to edge of road
T23	Cider Gum	9.2m	Crown lift from 3m to 5.5m over road
G24	Apple	4m	Remove one of the two trees in the group as shown on the tree removals plan
T31	Silver Birch	9m	Crown lift E & N edges of crown from 1.5m to 5.5m
G34	Oak, Horse Chestnut, Ash & Hawthorn	10m	Remove small section as shown on the tree removals plan
T50	Oak	16m	Crown lift from 3m to 3.5m over area of excavation for drainage
H51	Blackthorn, Hawthorn & Field Maple	8m	Crown lift over the entrance to 5.5m Remove two small sections as shown on the tree removals plan
H52	Blackthorn, Field Maple & Hawthorn	4m	Crown lift over the entrance to 5.5m Remove section of hedgerow adjacent to proposed access as shown on the tree removals plan

Table 5: Tree removals and pruning

4.3.2 Plant machinery will not be used to scrape vegetation or grub out stumps within root protection areas (RPAs). Tree stumps and vegetation located within the RPAs of retained trees will be cleared with controlled hand tools (e.g. stump grinder/brush cutter).

4.3.3 No bonfires will be used to dispose of arisings.

4.4. Tree protection fencing and ground protection

4.4.1 Retained trees must be protected by tree protection fencing or ground protection before any materials or machinery are brought onto the site and before any demolition or construction activities commence.

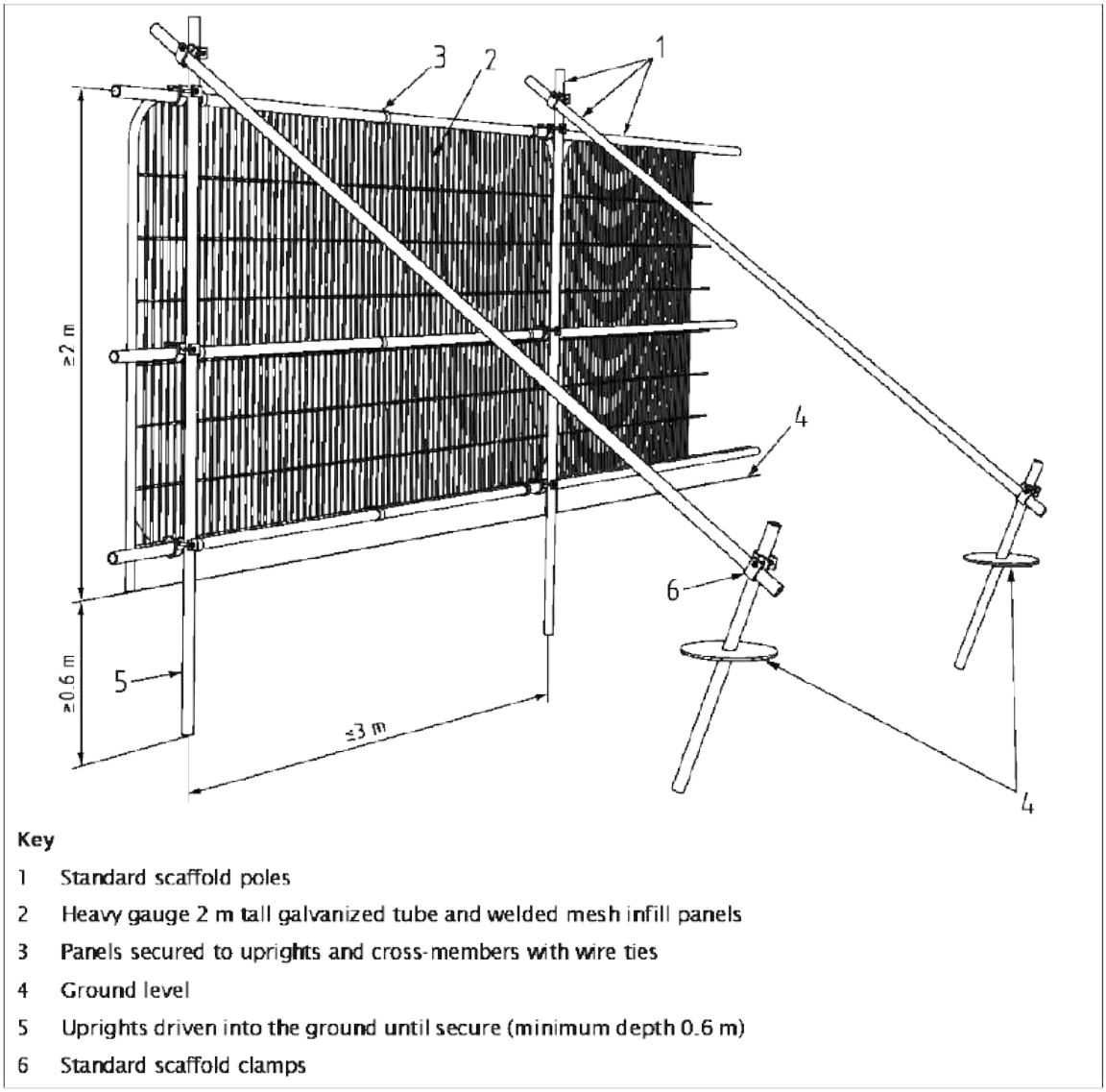
4.4.2 The areas on the tree side of the protection fencing are construction exclusion zones and must be regarded as sacrosanct. There must be no storage of materials, no access for vehicles or people and no excavation or changes in soil level of any kind within the construction exclusion zones. The construction exclusion zones are shown as yellow hatching on the tree protection plan.

4.4.3 Following installation of the tree protection fencing and temporary ground protection they must not be removed or altered without prior recommendation by the project arboricultural consultant and, where necessary, approval from the LPA tree officer.

4.5. Tree protection fencing

4.5.1 The location of the Type 1 fencing is denoted by the continuous purple lines and Type 2 fencing as cyan lines on the tree protection plan.

4.5.2 Both Type 1 and Type 2 fencing specification will be in accordance with para 6.2.2.2 and Fig 2 of the British Standard – as shown below:



Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Fig 2: Fencing specification

4.5.3 The fencing will consist of a vertical and horizontal scaffold framework, well braced to resist impacts. The vertical tubes will be spaced at a maximum interval of 3m and driven securely into the ground. Onto this framework, welded mesh panels will be securely fixed. Care will be exercised when locating the vertical poles to avoid underground services and, in the case of the bracing poles, also to avoid contact with structural roots. If the presence of underground services precludes the use of driven poles, an alternative specification will be prepared.

4.5.4 Notices stating “Tree Protection Zone – Keep Out” will be attached with cable ties to every third panel.

4.5.5 The contractors’ site huts may, where appropriate, may be incorporated into the protective fencing line. If this is to be the case, then their locations must be agreed in advance with the project arboricultural consultant and a method statement supplied that details how the huts are to be placed and supported without compacting the soil within the RPA. Details of the proposed hut locations will be supplied to the LPA tree officer in advance of their positioning on site for approval.

4.5.6 Areas for storing or mixing of fuels, oils or cement will be agreed at the pre-start meeting.

4.5.7 No structures will be attached to the trunks or branches of trees.

4.5.8 Where tall plant or equipment may pass close to the crowns of trees, timber uprights will be erected and attached to the protective fencing to prevent accidental damage to branches. Cross members between the uprights will be marked clearly with reflective tape to ensure high visibility.

4.5.9 When the installation of the protective fencing is complete, the project arboricultural consultant will be notified so that they can sign it off. If the protective fencing is accidently damaged, it will be marked with high visibility tape or mesh fencing and replaced within 48hrs. This incident must then be reported to the project arboricultural consultant.

4.6. Ground protection

4.6.1 In order to protect the structure of the soil within the RPAs of the trees adjacent to areas of construction activities, either temporary ground protection (shown as purple hatching on the tree protection plan) or a sacrificial layer above the above soil surfacing (shown as red honeycomb hatching on the tree protection plan) will be used.

4.6.2 If temporary ground protection is used, it must be designed by an engineer, based on its intended loading and the soil bearing capability. The options are:-

- For lighter loading, scaffold boards placed either on top of a driven scaffold frame, as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100mm depth of woodchip), laid onto a geotextile membrane;
- For moderate loading, a proprietary inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150mm depth of woodchip), laid onto a geotextile membrane;
- For wheeled or tracked construction traffic a proprietary system or pre-cast reinforced concrete slabs to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

4.6.3 If the above soil surfacing is laid at the beginning of the construction phase, it may be used as temporary ground protection instead of temporary ground protection. In this case a sacrificial uppermost layer and addition geotextile membrane is used, to prevent debris from construction vehicles causing damage or clogging up of the underlying aggregate. See Fig 3 below, from the latest best practice advice on above soil surfacing:

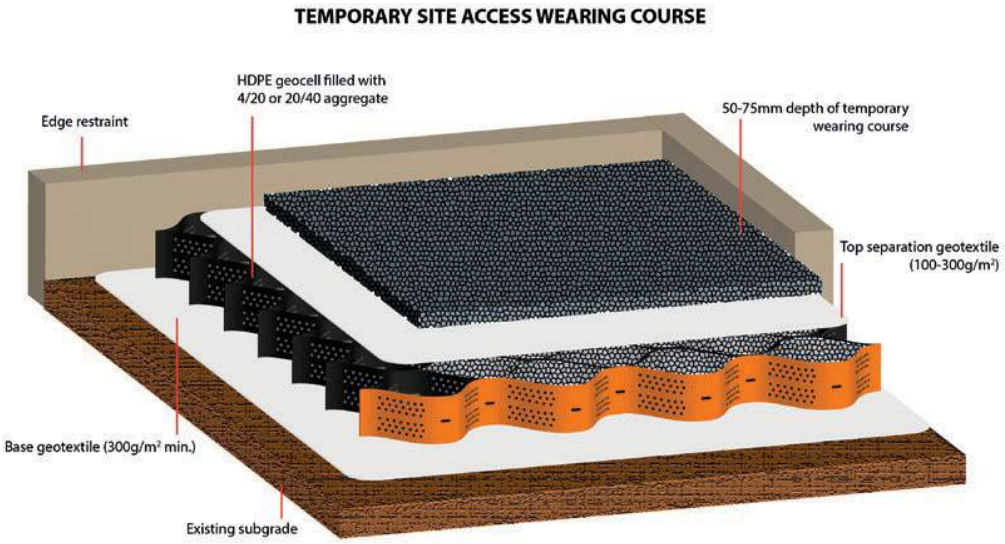


Figure 5: A geocell surface used during construction needs to be protected by a temporary wearing course and an upper geotextile is required to prevent mud from migrating down into the infill [*image courtesy of Core LP*].

4.7. Removal of hard surfacing within RPAs

4.7.1 Prior to the demolition of the existing agricultural building within the RPA of Field Maple T10, and if the option of removing the existing hard surfacing within the RPAs of Portuguese Laurel T22, Cider Gum T23 and Oak T6 is chosen, then project arboricultural consultant will review the demolition method statement to ensure there are no conflicts with this method statement.

4.7.2 In general it is proposed that existing hard surfacing within RPAs will be retained during the construction phase to act as ground protection.

4.7.3 Where hard surfacing is proposed to be removed within RPAs it will be removed carefully, under direct on-site arboricultural supervision as follows:

- The wearing course will be broken up using a handheld pneumatic breaker and hand tools, and wheelbarrows to remove the debris, leaving the sub-base beneath intact and undisturbed. Where it is necessary to remove the sub-base, this is to be undertaken using a fork to loosen the material, which will then be moved using shovels and wheelbarrows. Suitable ground protection will be used by all people working within RPAs.
- In some situations it may be possible to use an excavator using a hydraulic breaker and a suitably sized narrow toothless grading bucket. If an excavator is to be used it must be based outside of the RPAs, either on top of the hard surfacing or on temporary ground protection suitable for the loading.
- Any roots exposed by the removal of hard surfaces or foundations will be immediately protected and kept damp by covering with wet hessian. A further covering layer of top-soil will be applied as soon as possible.
- The area uncovered will be decompacted by inserting a fork and moving it backwards and forwards at c.0.5m centres.
- Following removal of hard surfacing within RPAs the area will be protected by fencing or temporary ground protection straight away.

4.8. Supervised excavation

4.8.1 Small areas of excavation within RPAs are required, these areas are shown as solid dark brown lines with cross-hatching on the tree protection plan. Within these sections:-

- Up to the first 650mm depth will be excavated using hand tools and/or an air spade only, under direct on-site arboricultural supervision.
- Any roots found with a diameter of less than 25mm be cut cleanly by the project arboricultural consultant. In the unlikely event that roots larger than 25mm diameter are found, the project arboriculturist will liaise with the site manager and LPA tree officer to agree a way forward.
- Where excavation is required below 650mm, this may be undertaken by a small tracked digger, with a small, narrow, toothless bucket under direct on-site arboricultural supervision. The machinery must be based either outside the RPAs of retained trees or on suitable ground protection, and there must be adequate clearance from the crowns of retained trees.

4.9. Construction of above-ground hard surfacing

4.9.1 Within the RPAs of T6 and T10 new hard surfacing will be constructed using above soil surfacing. Furthermore within the RPAs of T22 and T23 either the existing subbase will be reused, or the existing hard surfacing will be removed and new above soil surfacing will be installed.

4.9.2 These areas are shown as red honeycomb hatching on the tree protection plan. The above soil surfacing will be constructed using a cellular confinement system in accordance with section 7.4 of the British Standard and more recent best practice guidance[4]. Within these areas:

- Any existing surfacing will be removed and the area decompacted in accordance with para 4.7.3 above.
- Or if unmade ground the proposed area of above soil surfacing will be marked out and existing vegetation removed with hand tools or sprayed with an approved non-residual herbicide.
- Any small hollows will be filled with clean sharp sand (not builders' sand) to a maximum depth of 100mm.
- A permeable geotextile membrane will be laid down prior to the installation of a cellular confinement system.
- An engineer should specify the appropriate depth of geocell to use for a specific location, as this will depend on the usage but also the bearing capacity and strength of the soil.
- The cellular confinement system will be laid out and backfilled, ensuring all cells are fully expanded and filled to capacity, with clean, angular, no-fines aggregate (20mm-40mm).
- Edge supports of appropriate size and strength will be set above ground level and will be secured either with steel pins driven into the ground, or with concrete haunching laid onto the existing ground level on an impermeable polythene membrane. The outer edge of the supports may be banked up with clean topsoil.
- A permeable geotextile membrane will also be laid on top of the cellular confinement sub-base to prevent fines and other debris filling the air spaces in the aggregate.
- The wearing course will be permeable such as porous tarmac or concrete setts with sand jointing.

[4] Rose, B., 2010. The use of cellular confinement systems near trees; A guide to good practice. The Arboricultural Association: Gloucestershire.

4.10. Underground services

4.10.1 At the detailed design stage and subject to planning consent being obtained, proposed underground services will either utilise existing service routes where possible, or will be located outside of the RPAs of retained trees.

4.10.2 The locations of proposed service routes will be reviewed by the project arboricultural consultant and shown on an amended tree protection plan to be submitted for approval to the LPA tree officer.

4.11. Landscaping

4.11.1 Whilst any landscaping is being carried out within root protection areas, the site manager will ensure that:-

- Any unwanted vegetation will be removed carefully using hand tools.
- There will be no changes in existing ground levels.
- No vehicles or plant will track across root protection areas.
- No fuels or chemicals will be stored within root protection areas and nothing will be attached to trees.
- Any approved excavation for fencing or other structures will be carried out using hand tools only. If roots are encountered, wherever possible the location of the excavation will be moved to a new location. If this is not possible then any roots with a diameter of less than 25mm may be cut cleanly using hand tools. Advice from the project arboriculturist is required if any roots are uncovered with a diameter greater than 25mm.

4.12. Review of the detailed design prior to commencement on site

4.12.1 Prior to the pre-start meeting, the project arboricultural consultant will review and where necessary provide input into the arboricultural impacts of the detailed design including the levels, services, drainage and the construction management plan. Where necessary, this method statement and tree protection plan will be updated as required and submitted for approval to the LPA tree officer.

4.13. Site monitoring

4.13.1 The site manager is responsible for giving adequate instructions about the approved tree protection measures and for giving a copy of this method statement to everyone who is working close to trees or who has control over others working close to trees. They are also responsible for ensuring that any works following the recommendations set out within this method statement are fit for purpose in relation to the development and comply with the health and safety policies of the site.

4.13.2 The site manager will provide a monthly update to the project arboricultural consultant including photographs to show that the tree protection fencing and ground protection are intact and that the construction exclusion zones are being observed. This will be forwarded to the LPA tree officer by the project arboricultural consultant.

4.13.3 Following each site visit the project arboricultural consultant will provide a short email summary with photos to the LPA tree officer.

4.13.4 The site owner will inform the arboricultural consultant if there is a change of site manager during the project. If this occurs, the arboricultural consultant will arrange a meeting with the new site manager to

explain the remaining aspects of the method statement as a matter of urgency.

4.14. Arboricultural supervision

4.14.1 The project arboricultural consultant will provide arboricultural supervision for the following works:

- T6 - removal of hard surfacing, decompaction and installation of above soil surfacing
- T10 - small section of excavation and removal of hard surfacing, decompaction and installation of above soil surfacing
- T22 – small section of excavation for the parking bay and either removal of wearing course of existing hard surfacing and reuse of the sub-base; or removal of the hard surfacing entirely, decompaction and installation of above soil surfacing.
- T23 - either removal of wearing course of existing hard surfacing and reuse of the sub-base; or removal of the hard surfacing entirely, decompaction and installation of above soil surfacing.
- Excavation within the RPAs of T36, T50, H51 and G35.

4.14.2 The project arboricultural consultant will provide a short email summary with photos to the LPA tree officer on completion of each of the above stages.

4.15. Unforeseen damage to trees

4.15.1 If at any time during the construction process damage is inadvertently caused to a tree, the project arboricultural consultant must be contacted to advise on the process going forward. This will involve liaison with the LPA tree officer to agree appropriate mitigation and remedial measures. The damage could be caused by chemical or fuel spillage, mechanical damage to roots, trunks or branches, or fire or any other unforeseen circumstances.

Appendix 1 Tree survey schedule

Tree survey methodology

The site was surveyed on the 20th March 2023 by Abi St.Aubyn *DipArb L6 (ABC) MArborA MICFor* and Tom Wawman *CertArb L4 (ABC)*.

Weather conditions at the time were overcast with intermittent rain.

Trees were out of leaf. The trees within and adjacent to the site were surveyed using Visual Tree Assessment[5] and following the recommendations of the British Standard[6].

The survey information was recorded using *Axciscape* tree survey software. Heights and radial crown spreads were measured using a laser distometer or where inaccessible, these were estimated. Trunk diameters were measured using a diameter tape or where inaccessible, these were estimated.

Other tools used if needed were a nylon headed hammer to tap trunks to detect the difference in sound in degraded wood/cavities and a large screwdriver to determine the depth of cavities, within reach from ground level.

The assessment of the categories (A, B, C & U) for trees was carried out in accordance with the British Standard[4].

[5]Visual Tree Assessment (VTA) is a tree survey methodology established by Mattheck & Breloer, outlined within the *Principles of Tree Hazard Assessment and Management* by Lonsdale, where external above ground visual signs of decay and of growth-related defects are recorded from ground level.

[6]BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* (the British Standard). The survey methodology follows the British Standard apart from sub-categories and the first significant branch and direction of growth have been omitted. In practice the omitted information is very rarely used to inform the design process or tree protection measures. However, if in a particular case this information is relevant, it will be included in the comments.

Tree survey schedule key

No	Sequential reference number. Individual trees are recorded as T, groups as G, woodland as W and hedges as H.
Species	Common tree name.
Height	Measured/estimated in metres as access allows.
Trunk diameter	Measured/estimated in millimetres as access allows.
Crown clearance	Height between the existing ground level, estimated in metres.
Radial crown spread	Either an average or at four cardinal points. Measured/estimated as access allows.
Life stage	Young, semi-mature, early-mature, mature, over-mature and ancient.
Physiology	Good, average, below average, poor, dead.
Structure	Good, average, below average, hazardous, dead.
Landscape value	High, moderate, low.
Lifespan	<10 years, 10+ years, 20+ years, 40+ years
Comments	Presence of any decay and/or physical defects, and/or preliminary management recommendations. Whether a tree is considered to be a veteran tree[7], irrespective of its age.
Category	**A** – trees of high quality with an estimated remaining life expectancy of at least 40 years **B** – trees of moderate quality with an estimated remaining life expectancy of at least 20 years **C** – trees of low quality with an estimated remaining life expectancy of at least 10 years, or young tree with a stem diameter below 150mm **U** – trees unsuitable for retention due to their condition

[7] Whist veteran trees typically provide a range of niche habitats, they are especially valuable if ancient, due to their scarcity and high habitat value for associated species of fungi, lichens and saproxylic invertebrates, including some which are rare or endangered and occur only where such trees have been continuously present for centuries. These trees, where present, will be of high value, category 'A'.

Tree Survey Schedule															
No.	**Species**	**Height**	**Trunk Dia.**	**Crown Clear-ance**	**Radial Crown Spread N**	**Radial Crown Spread E**	**Radial Crown Spread S**	**Radial Crown Spread W**	**Life Stage**	**Physi-ology**	**Struct-ure**	**Land-scape Value**	**Life-span**	**Comments**	**Cat-egory**
T1	Ash	14m	385mm, 380mm & 305mm	3.5m	8m	8m	8m	8m	Over mature	Poor	Hazardous	Low	<10	Large cavities at base and fungal fruiting body of *Inonotus hispidus* at base; at risk of collapse; extensive dieback; Ash dieback probably has had some part to play in its decline.	**U**
G2	Ash, Goat Willow	6.5m	45mm x4	1.5m	2m	2m	2m	2m	Young	Average	Average	Low	40+	Low quality self-seeded group.	**C**
G3	Goat Willow, Blackthorn & Field Maple	3.5m	95mm	0m	2m	2m	2m	2m	Mature	Average	Average	Low	20+	No access; mixed species thicket, Blackthorn component of c.10mm diamter stem; growing on banks of pond.	**C**
T4	Field Maple	8.5m	180mm x2	3m	3m	4m	4m	3m	Early mature	Average	Average	Low	40+	No acess due to Blackthorn thicket; ivy growing into crown; growing adjacent to pond bank.	**C**
G5	Goat Willow & Field Maple	7m-10m	250mm	0m	3.5m	3.5m	3.5m	3.5m	Over mature	Below average	Below average	Low	20+	Goat willow have collapsed over the pond with regrowth and Field Maple have suppressed crowns; some dead inviduals within the group.	**C**
T6	Oak	15m	550mm	5m	6.5m	6.5m	6.5m	6.5m	Early mature	Average	Average	Moderate	40+	Growing close to pond and track; severred ivy stems on trunk.	**B**
G7	Goat Willow, Elder & Blackthorn	7m	100mm	0m	3.5m	3.5m	3.5m	3.5m	Mature	Below average	Below average	Low	10+	Low quality mixed species group; mutually suppressed; mostly Elder which has been pruned back from track.	**U**

No.	Species	Height	Trunk Dia.	Crown Clear-ance	Radial Crown Spread N	Radial Crown Spread E	Radial Crown Spread S	Radial Crown Spread W	Life Stage	Physi-ology	Struct-ure	Land-scape Value	Life-span	Comments	Cat-egory
T8	Goat Willow	7m	150mm x11	1m	8m	8m	8m	8m	Over mature	Below average	Hazardous	Low	<10	Multi-stemmed tree growing on pond bank; no access due to asbeestos; dense ivy and several failed stems.	U
G9	Ash	10m	120mm	1.5m	3m	5m	3m	3m	Semi mature	Average	Average	Low	10+	Of short term potential only due to the threat of Ash dieback; no access due to asbestos; suppressed by T10.	C
T10	Field Maple	16.5m	1050mm	4.5m N 1.5m S	7.5m	7.5m	7.5m	7.5m	Mature	Average	Below average	Moderate	20+	Limited access to base due to asbestos - not possible to inspect base of tree; dense ivy on trunk and growing into the upper crown; broad crown; cavity on N side of trunk between 1m-2m - not possible to inspect; large limb on W side at 1.5m with strip cavity on underside.	B
G11	Elder	3.5m	45mm x3	1m	2.5m	2.5m	2.5m	2.5m	Mature	Average	Average	Low	20+	Two low quality self-seeded indiviudals.	C
G12	Ash	9m	150mm x2	1.5m	3.5m	3.5m	3.5m	3.5m	Semi mature	Average	Average	Low	10+	Growing adjacent to delapidated fence; historically topped at 2m; of short term potential only due to the threat of Ash dieback.	C
G13	Ash	3m-6.5m	45mm x4	1.5m	2m	2m	2m	2m	Young	Average	Average	Low	40+	Low quality self-seeded individuals of between 3m to 6.5m in height.	C
T14	White Willow	11m	950mm	0.5m	4.5m	4.5m	4.5m	4.5m	Over mature	Average	Hazardous	Low	<10	Limited access to base; significant storm damage in crown with main trunk snapped out at c. 7.5m; several cavities and torn limbs; of little potential.	U

No.	Species	Height	Trunk Dia.	Crown Clear-ance	Radial Crown Spread N	Radial Crown Spread E	Radial Crown Spread S	Radial Crown Spread W	Life Stage	Physi-ology	Struct-ure	Land-scape Value	Life-span	Comments	Cat-egory
T15	Dead	3m	350mm	0m	0m	0m	0m	0m	Mature	Dead	Dead	Low	<10	Dead trunk leaning against remaining trunk of T14; no live growth.	U
T16	Cherry	7m	150mm & 60mm	2m	1m	2m	3.5m	2m	Over mature	Below average	Below average	Low	10+	Small tree with dense ivy; crown biased to S.	C
G17	Blackthorn & Hawthorn	6m	50mm x2	1.5m	3m	3m	3m	3m	Mature	Average	Below average	Low	40+	Closely grown group; low quality and mutually suppressed.	C
G18	Cherry	6m	200mm	1.5m	3.5m	3.5m	3.5m	3.5m	Mature	Below average	Below average	Low	10+	Small low quality trees covered in dense ivy; no access to bases due to bramble; leaning trunks; mutually suppressed.	C
G19	Pear	7m	95mm	2m	2m	2m	2m	2m	Early mature	Average	Average	Low	20+	Small fruit trees.	C
T20	Pear	13m	435mm, 210mm & 530mm	2m	4.5m	6m	6m	6m	Mature	Average	Below average	Moderate	20+	Historically crown reduced; dense ivy- recently severred stems on trunk.	B
H21	Leyland Cypress	6m	50mm, 50mm &100mm	0m	1m	1m	1m	1m	Semi mature	Below average	Below average	Low	40+	Section of evergreen conifer hedging which has been pruned back on its N side into older wood, from which no new green growth can develop; unsightly; of long term potential but of low quality and not in keeping with the local landscape character.	C

No.	Species	Height	Trunk Dia.	Crown Clear-ance	Radial Crown Spread N	Radial Crown Spread E	Radial Crown Spread S	Radial Crown Spread W	Life Stage	Physi-ology	Struct-ure	Land-scape Value	Life-span	Comments	Cat-egory
T22	Portuguese Laurel	5m	205mm, 175mm, 150mm, 150mm, 150mm, 150mm & 150mm	1.5m	3m	3m	3m	3m	Mature	Average	Average	Low	20+	Evergreen hedge plant maintained as a small tree; common non-native hedge species; of low landscaoe value.	C
T23	Cider Gum	9.2m	75mm x12	3m	4m	4m	3m	3m	Early mature	Average	Below average	Low	20+	Historically pollarded at 1.5m resulting in unusual habit for species; non-native species out of character with the local landscape; due to past pruning practices, of low quality.	C
G24	Apple	4m	140mm	0.5m	3m	3m	3m	3m	Mature	Average	Below average	Low	10+	Small fruit trees.	C

Appendix 2 Table of root protection areas (RPAs)

The root protection areas (RPAs) table

The root protection area (RPA) of a tree is a layout design tool which shows the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.

The British Standard provides calculations for both single and multi-stemmed trees, which are based on mathematical formulae using the trunk diameter of a tree.

For single stem trees, the RPA, is calculated as an area equivalent to a circle with a radius 12 times the stem diameter. This is capped at a circle of 15m diameter or 707m^2. For trees with 2-5 stems and 5+ stems more complex calculations are required in accordance with the methodology recommended within the British Standard.

The RPA radius and nominal RPA area for each tree is shown at **Table 3** below.

The root protection areas (RPAs) for all trees are initially plotted on the tree constraints plan (Appendix 3) as a circle centred on the base of the stem/s. Where pre-existing site conditions (road, building foundations etc) or other factors (for example trenching) indicate that rooting has occurred asymmetrically, the standard circle has been modified to reflect the more likely root distribution. Although the shape of the RPA may be amended, no change will be made to its overall area, up to a maximum distance of a 15m from the stem. Beyond this, marginal decreases in RPAs might result if there are no other areas suitable for rooting within the 15m radius.

The trees' RPAs are shown on the tree constraints plan in the colour of their corresponding categories

No.	Species	Category	RPA Radius	RPA Area
T1	Ash	U	7.45m	174.39m²
G2	Ash, Goat Willow	C	1.08m	3.66m²
G3	Goat Willow, Blackthorn & Field Maple	C	1.14m	4.08m²
T4	Field Maple	C	3.06m	29.42m²
G5	Goat Willow & Field Maple	C	3m	28.28m²
T6	Oak	B	6.6m	136.87m²
G7	Goat Willow, Elder & Blackthorn	U	1.2m	4.52m²
T8	Goat Willow	U	5.96m	111.61m²
G9	Ash	C	1.44m	6.52m²
T10	Field Maple	B	12.6m	498.82m²
G11	Elder	C	0.94m	2.78m²
G12	Ash	C	2.54m	20.27m²
G13	Ash	C	1.08m	3.66m²
T14	White Willow	U	11.4m	408.33m²
T15	Dead	U	4.2m	55.42m²
T16	Cherry	C	1.94m	11.83m²
G17	Blackthorn & Hawthorn	C	0.85m	2.27m²
G18	Cherry	C	2.4m	18.1m²
G19	Pear	C	1.14m	4.08m²
T20	Pear	B	8.6m	232.38m²
H21	Leyland Cypress	C	1.46m	6.7m²
T22	Portuguese Laurel	C	5.16m	83.66m²
T23	Cider Gum	C	3.12m	30.59m²
G24	Apple	C	1.68m	8.87m²
G25	Oak	B	6.48m	131.93m²
T26	Oak	C	6m	113.11m²
T27	Oak	U	6.96m	152.2m²
T28	Oak	A	10.2m	326.89m²
T29	Horse Chestnut	C	5.83m	106.79m²
T30	Oak	B	7.56m	179.58m²
T31	Silver Birch	C	3.48m	38.05m²
T32	Oak	C	5.64m	99.95m²
T33	Oak	B	9.72m	296.85m²
G34	Oak, Horse Chestnut, Ash & Hawthorn	C	3m	28.28m²
T35	Oak	B	9.72m	296.85m²

No.	Species	Category	RPA Radius	RPA Area
T36	Oak	B	7.04m	155.72m²
G37	Oak & Ash	C	4.8m	72.39m²
G38	Oak, Hawthorn & Horse Chestnut	C	3.6m	40.72m²
G39	Hawthorn	C	1.92m	11.58m²
T40	Sycamore	C	4.42m	61.38m²
T41	Oak	C	3.84m	46.33m²
W42	Ash, Oak, Hawthorn, Hazel, Goat Willow, Horse Chestnut & Lawson Cypress	B	4.8m	72.39m²
T43	Ash	C	7.57m	180.05m²
G44	Blackthorn	C	0.6m	1.13m²
G45	Ash, Oak, Elder & Hawthorn	C	2.4m	18.1m²
G46	Oak	B	3m	28.28m²
G47	Oak	B	6m	113.11m²
G48	Oak	C	9.6m	289.57m²
T49	Oak	B	10.2m	326.89m²
T50	Oak	C	9.6m	289.57m²
H51	Blackthorn, Hawthorn & Field Maple	C	1.2m	4.52m²
H52	Blackthorn, Field Maple & Hawthorn	C	0.6m	1.13m²

Appendix 3 Tree constraints plan

T23
Cider Gum

G39 Hawthorn

G37
Oak, Ash

G38
Mixed Species

G2
Ash & Goat
Willow

G13
Ash

T4
Field
Maple

T6
Oak

G7
Mixed Species

G3
Mixed Species

T1
Ash

T36
Oak

G46
Oak

H51
Mixed Species

T35
Oak

T33
Oak

H52
Mixed Species

BOB LANE

T31
Silver Birch

G34
Mixed Species

T30
Oak

T29
Horse
Chestnut

T32
Oak

T28
Oak

T27
Oak

T26
Oak

G25
Oak

N

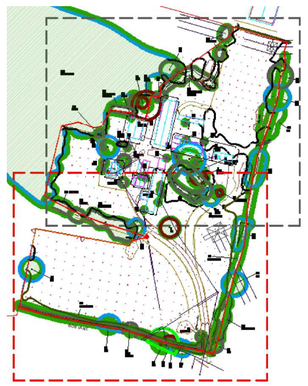
0 1 2 3 4 5 6 7 8 9 10 15 20
1:200 scale in m

Key:

- Tree canopy - all categories
- RPA of a category 'A' tree - high quality
- RPA of a category 'B' tree - moderate quality
- RPA of a category 'C' tree - low quality
- RPA of a category 'U' tree - tree that cannot realistically be retained due to its condition
- T1 — Tree (T), group (G), hedge (H) or woodland (W) number

Notes:

1. *This drawing is based on topographical survey ref: SE Surveying 016 01 22. Some additional trees have been plotted by measurements taken on site.*
2. *Please check if Tree Preservation Order (TPO) protection applies to trees before carrying out trees works - TPOs might have been made after the date of this drawing, or the online planning mapping service might not have been up to date at the date of this drawing.*
3. *The shape of root protection areas (RPAs) have been modified adjacent to Bob Lane. For on site trees, no change to the overall area of each RPA has been made up to a maximum distance of 15m from the trunk. Beyond this, marginal decreases in the areas of RPAs might result if there are no other areas suitable for rooting within the 15m radius.*
4. *This drawing was originally produced in colour.*
5. *OS data Crown© Copyright 2023 OS Licence 100065074.*
6. *Copyright St Aubyn Tree Consultancy.*



REV	Description	Date
0	Preliminary issue	28.03.2023

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Project: TWINEHAM COURT FARM, BOB LANE, HAYWARDS HEATH, WEST SUSSEX RH17 5NH

Title: TREE CONSTRAINTS PLAN 1 OF 2

Scale	Date	Drawn by
1:200 @ A0	MAR 2023	AStA

Drawing Number: STA 2078 TCP TWINEHAM COURT FARM REV -

N

0 1 2 3 4 5 6 7 8 9 10 15 20

1:200 scale in m

W42
Mixed Species

T43
Ash

G44
Blackthorn

T15
Dead

T14
White
Willow

G12
Ash

G45
Ash, Oak, Elder,
Hawthorn

T50
Oak

G17
Blackthorn &
Hawthorn

T16
Cherry

T49
Oak

G18
Cherry

T40
Sycamore

T41
Oak

G13
Ash

G48
Oak

H21
Leyland
Cypress

G13
Ash

G13
Ash

G13
Ash

T20
Pear

G19
Pear

G11
Elder

T10
Field
Maple

T22
Portuguese
Laurel

G13
Ash

G9
Ash

G5
Goat Willow &
Field Maple

G24
Apple

G13
Ash

T8
Goat
Willow

G47
Oak

T23
Cider Gum

G39 Hawthorn

G2
Ash & Goat
Willow

G7
Mixed Species

G37
Oak, Ash

G38
Mixed Species

G13
Ash

T6
Oak

T4
Field
Maple

G3
Mixed Species

Key:

- Tree canopy - all categories
- RPA of a category 'A' tree - high quality
- RPA of a category 'B' tree - moderate quality
- RPA of a category 'C' tree - low quality
- RPA of a category 'U' tree - tree that cannot realistically be retained due to its condition
- T1 — Tree (T), group (G), hedge (H) or woodland (W) number

Notes:

1. *This drawing is based on topographical survey ref: SE Surveying: 016 01 22. Some additional trees have been plotted by measurements taken on site.*
2. *Please check if Tree Preservation Order (TPO) protection applies to trees before carrying out trees works - TPOs might have been made after the date of this drawing, or the online planning mapping service might not have been up to date at the date of this drawing.*
3. *The shape of root protection areas (RPAs) have been modified adjacent to Bob Lane. For on site trees, no change to the overall area of each RPA has been made up to a maximum distance of 15m from the trunk. Beyond this, marginal decreases in the areas of RPAs might result if there are no other areas suitable for rooting within the 15m radius.*
4. *This drawing was originally produced in colour.*
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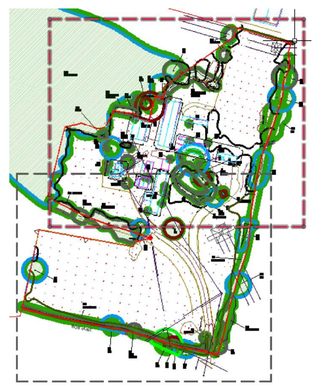

REV	Description	Date
0	Preliminary issue	25.03.2023

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Client: TELBRIDGE PROPERTIES LTD

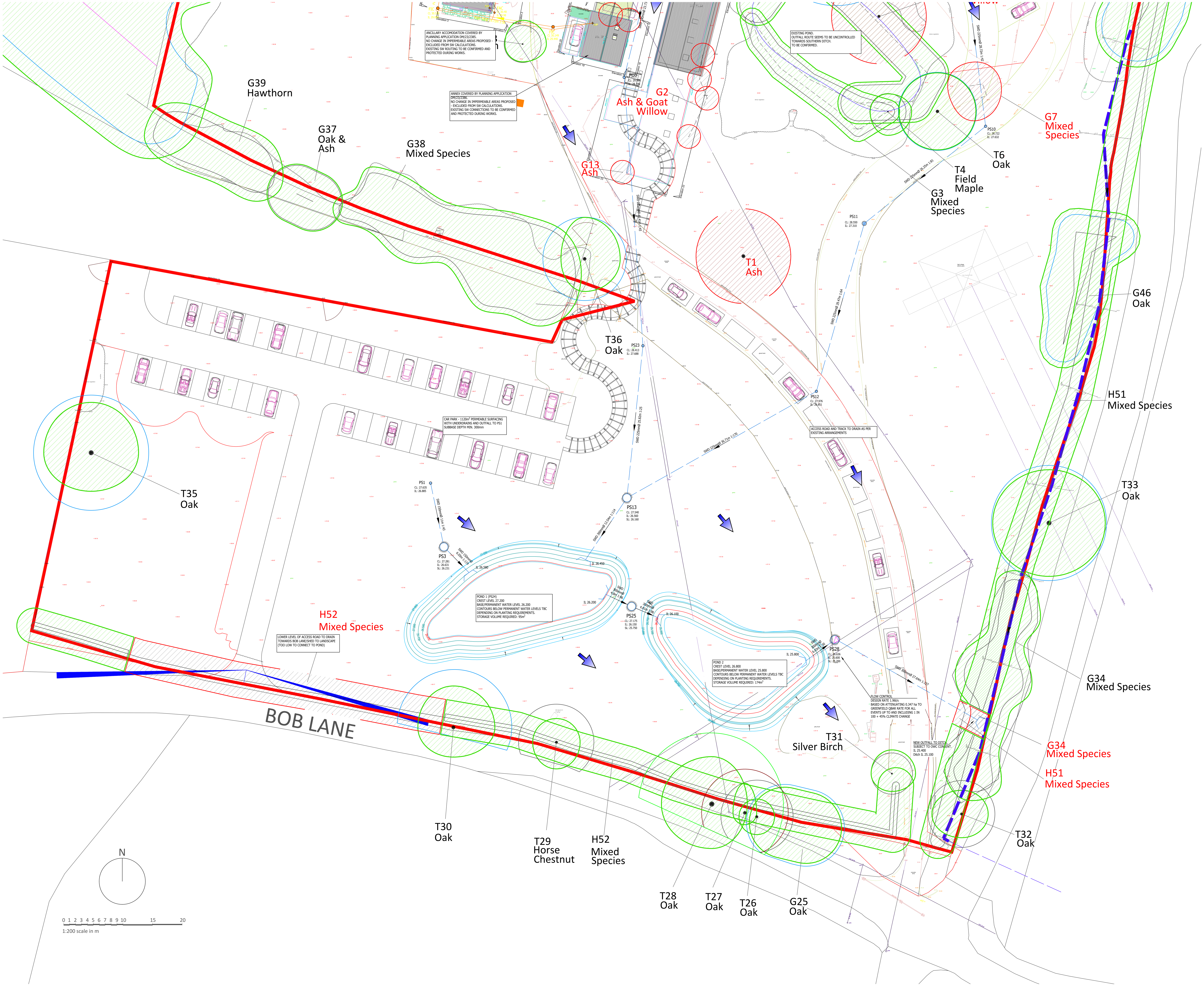
Project: TWINEHAM COURT FARM, BOB LANE, HAYWARDS HEATH, WEST SUSSEX RH17 5NH

Title: TREE CONSTRAINTS PLAN 2 OF 2

Scale	Date	Drawn by
1:200 @ A0	MAR 2023	AStA

Drawing Number: STA 2078 TCP TWINEHAM COURT FARM REV -

Appendix 4 Tree removals plan



Key:

- Tree canopy - all categories
- RPA of a category 'A' tree - high quality
- RPA of a category 'B' tree - moderate quality
- RPA of a category 'C' tree - low quality
- RPA of a category 'U' tree - tree that cannot realistically be retained due to its condition
- T1 Tree (T), group (G), hedge (H) or woodland (W) number
- Category 'C' tree to be removed
- Category 'U' tree to be removed

Notes:

1. *This drawing is based on St Aubyn Tree Consultancy Tree Constraints Plan ref: StA 2078 TCP Twineham Court Farm, G3 Architecture Proposed Site Layout/Block Plan ref: 2427.PL02 & GTA Event Venue Drainage Strategy 12391-1601 P2.*
2. *Please check if Tree Preservation Order (TPO) protection applies to trees before carrying out trees works - TPOs might have been made after the date of this drawing, or the online planning mapping service might not have been up to date at the date of this drawing.*
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REV	Description	Date
0	Preliminary issue	08.05.2024

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Project
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Title
TREE REMOVALS PLAN 1 OF 2

Scale	Date	Drawn by
1:200 @ A0	MAY 2024	AStA

Drawing Number
STA 2078 TRP TWINEHAM COURT FARM REV -

Twineham Court Farm

N

0 1 2 3 4 5 6 7 8 9 10 15 20
1:200 scale in m

Key:

- Tree canopy - all categories
- RPA of a category 'A' tree - high quality
- RPA of a category 'B' tree - moderate quality
- RPA of a category 'C' tree - low quality
- RPA of a category 'U' tree - tree that cannot realistically be retained due to its condition
- T1 — Tree (T), group (G), hedge (H) or woodland (W) number
- Category 'C' tree to be removed
- Category 'U' tree to be removed

Notes:

1. *This drawing is based on St Aubyn Tree Consultancy Tree Constraints Plan ref: StA 2078 TCP Twineham Court Farm, G3 Architecture Proposed Site Layout/Block Plan ref: 2427.PL02 & GTA Event Venue Drainage Strategy 12391-1601 P2.*
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REV	Description	Date
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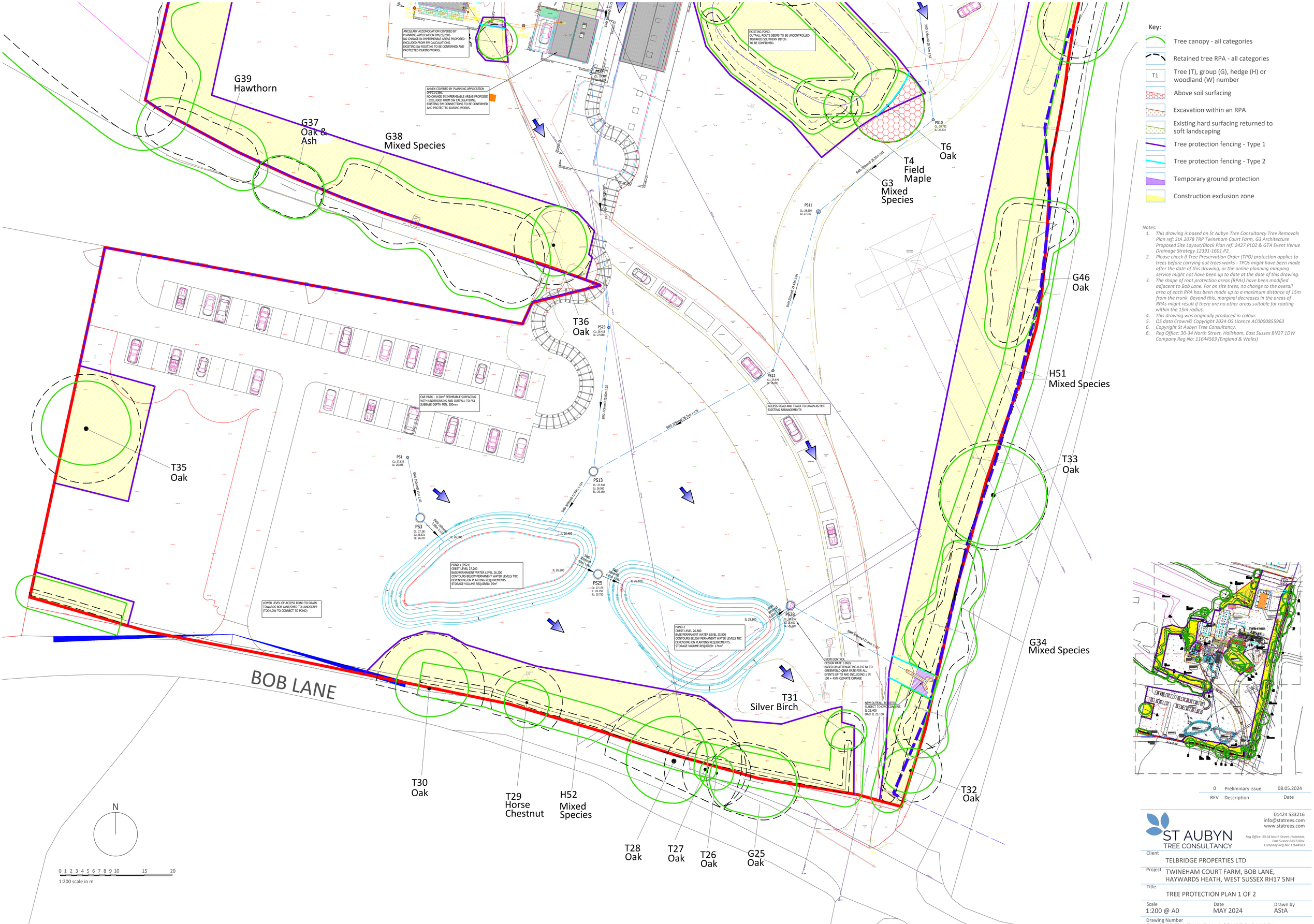
Title: TREE REMOVALS PLAN 2 OF 2

Scale	Date	Drawn by
1:200 @ A0	MAY 2024	AStA

Drawing Number: STA 2078 TRP TWINEHAM COURT FARM REV -

Appendix 5 Tree protection plan



Key:

- Tree canopy - all categories
- Retained tree RPA - all categories
- T1 — Tree (T), group (G), hedge (H) or woodland (W) number
- Above soil surfacing
- Excavation within an RPA
- Existing hard surfacing returned to soft landscaping
- Tree protection fencing - Type 1
- Tree protection fencing - Type 2
- Temporary ground protection
- Construction exclusion zone

Notes:

1. *This drawing is based on St Aubyn Tree Consultancy Tree Removals Plan ref: StA 2078 TRP Twineham Court Farm, G3 Architecture Proposed Site Layout/Block Plan ref: 2427.PL02 & GTA Event Venue Drainage Strategy 12391-1601 P2.*
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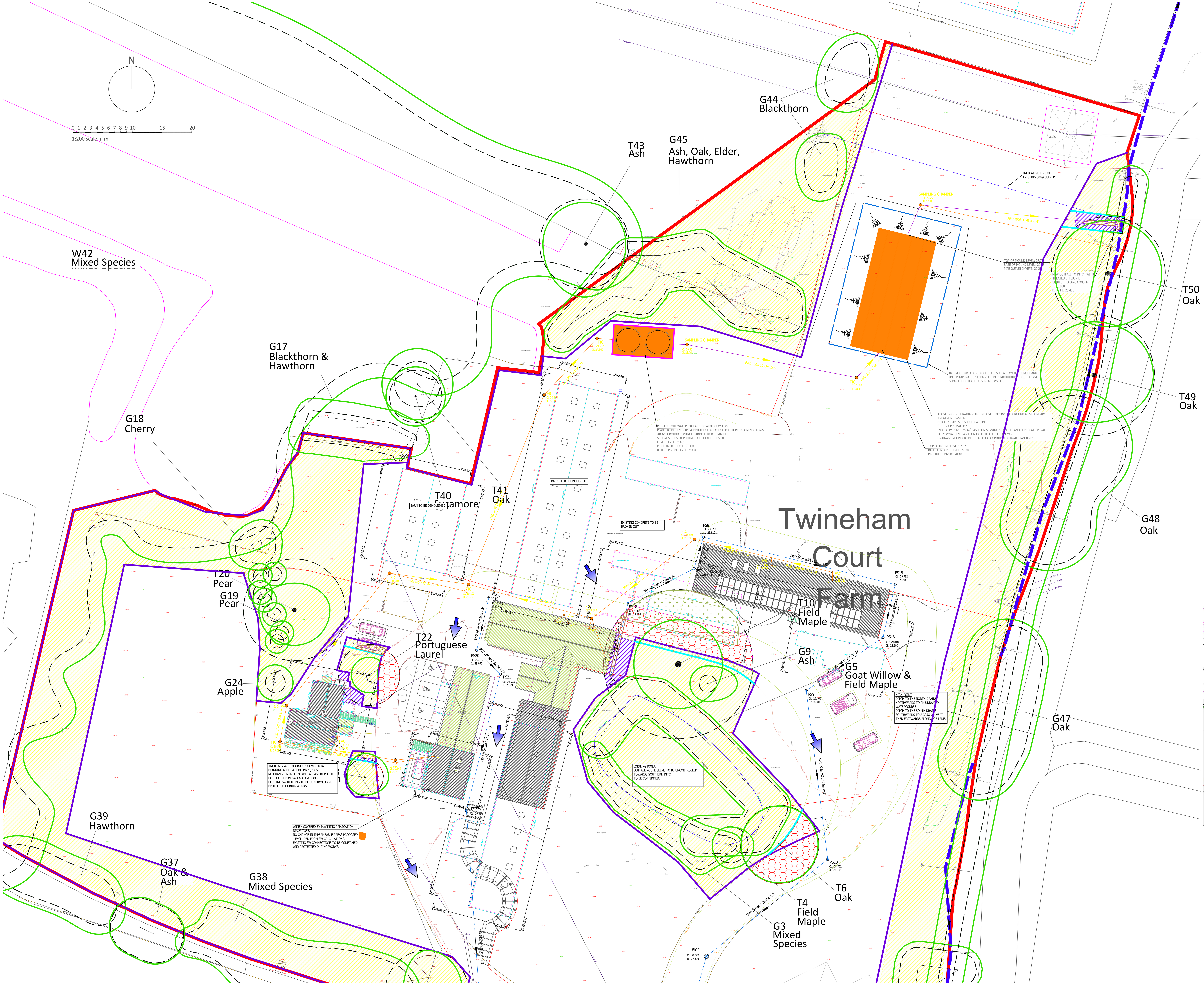
Client: TELBRIDGE PROPERTIES LTD

Project: TWINEHAM COURT FARM, BOB LANE, HAYWARDS HEATH, WEST SUSSEX RH17 5NH

Title: TREE PROTECTION PLAN 1 OF 2

Scale	Date	Drawn by
1:200 @ A0	MAY 2024	AStA

Drawing Number: STA 2078 TPP TWINEHAM COURT FARM REV -



Key:

- Tree canopy - all categories
- Retained tree RPA - all categories
- T1 Tree (T), group (G), hedge (H) or woodland (W) number
- Above soil surfacing
- Excavation within an RPA
- Existing hard surfacing returned to soft landscaping
- Tree protection fencing - Type 1
- Tree protection fencing - Type 2
- Temporary ground protection
- Construction exclusion zone

Notes:

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Title: TREE PROTECTION PLAN 2 OF 2

Scale	Date	Drawn by
1:200 @ A0	MAY 2024	AStA

Drawing Number: STA 2078 TPP TWINEHAM COURT FARM REV -

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Contact Details

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Site manager:	tbc