

THIS REPORT MUST BE AVAILABLE TO ALL PERSONS WORKING OR VISITING THE DEVELOPMENT SITE THROUGHOUT CONSTRUCTION AND MUST BE PART OF THE ON-SITE RISK ASSESSMENT AND CONSTRUCTION METHOD STATEMENT.

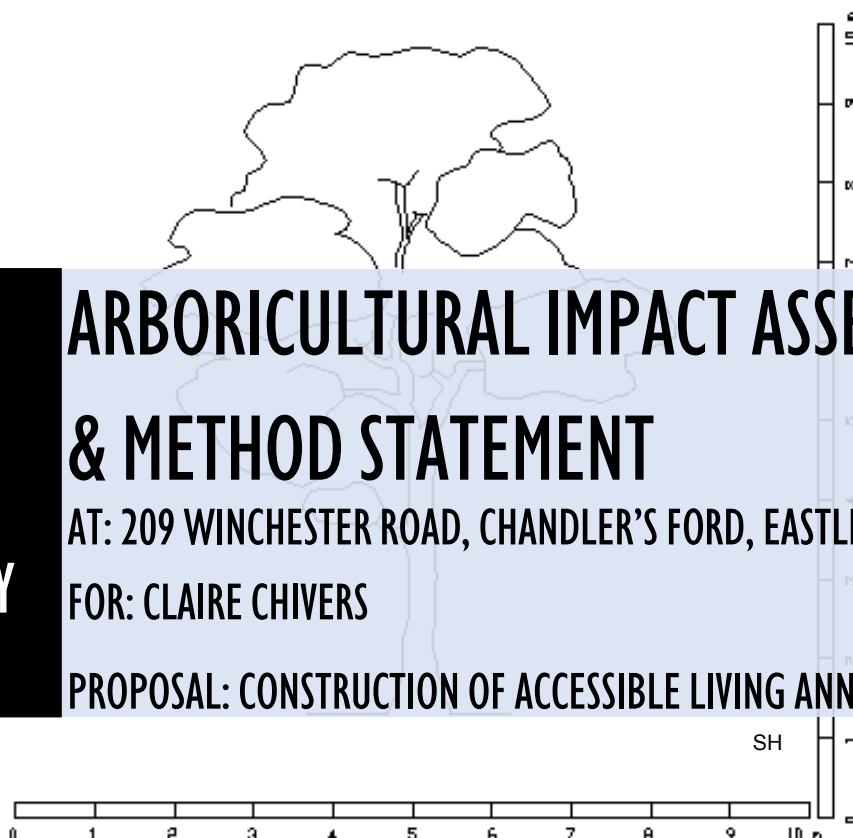
**GWYDION'S
TREE
CONSULTANCY**

ARBORICULTURAL IMPACT ASSESSMENT & METHOD STATEMENT

AT: 209 WINCHESTER ROAD, CHANDLER'S FORD, EASTLEIGH, SO53 2DX

FOR: CLAIRE CHIVERS

PROPOSAL: CONSTRUCTION OF ACCESSIBLE LIVING ANNEX



Ref: GH2284

18/08/2022

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SUBJECT TO PLANNING APPROVAL

A PRE-COMMENCEMENT SITE MEETING SHOULD BE HELD AND ATTENDED BY THE DEVELOPER'S ARBORICULTURAL CONSULTANT & THE DESIGNATED SITE FOREMAN TO DISCUSS DETAILS OF THE WORKING PROCEDURES. A REPRESENTATIVE FROM THE LOCAL AUTHORITY MAY REQUEST ATTENDANCE AT THE MEETING.

An Arboricultural Supervision statement, the contents of which are to be discussed and agreed at the pre-commencement meeting, is to be submitted to the Local Planning Authority, in writing, after every supervision event.

THIS REPORT SHOULD BE READ IN FULL

All working methods within this report should be followed, in accordance with the approved planning application and related approved documents.

Alterations between additional drawings, specifications or structural engineer's details relating to this report are to be referred immediately to Gwydion's Tree Consultancy.

Work should only be undertaken from Local Authority approved drawings.

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1. Purpose of this document

This document gives information to the user, regarding the planning process for the site in relation to trees. The report gives an audit of trees growing within close proximity to the proposed development.

The Arboricultural Impact Assessment identifies which trees can be retained and assesses any impact from the proposal upon these trees. It also demonstrates that it is possible to incorporate specific retained and newly planted trees into the development.

The Arboricultural Method Statement details how retained trees should be protected throughout the demolition and construction phases of this development.

2. Normative references

The principle guiding document for this report is British Standard 5837 – 2012 'Trees in relation to design, demolition and construction – Recommendations'.

Other documents may be used to guide this report into areas of finer detail, for example:

- Tree work – Recommendations BS3998 – 2010
- National Joint Utilities Group (NJUG) Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees, Volume 4 issue 2, London: NJUG, 2007

NB

This report does not give guidance on building near trees, hedgerows and shrubs in shrinkable soils [National House Building Council (NHBC) guidance in relation to trees, chapter 4.2], as this should be addressed during the Building Regulations phase, unless otherwise requested.

3. Instruction received

Instructions were issued to Gwydion's Tree Consultancy from Claire Chivers, to provide an Arboricultural Impact Assessment and an Arboricultural Method Statement relating to the proposed development of the site.

4. Site inspection and description

The site was inspected on 10/08/2022. To collect digital measurements, a Leica Disto D8 laser measurer was used. Survey limitations are detailed within Appendix 6. The plans provided did not include all trees within adjacent sites. These tree locations have been plotted using the laser measurer, thus no guarantee can be given for their precise location.

There are eight individual trees and two groups of shrubs / trees, located within close proximity to the proposed dwelling. These trees, including those which grow outside the site's curtilage, are detailed within this report. The trees, visible from public vantage points, are to be considered an asset within the localised built environment and landscape. A rear garden occupies the planned proposal site. The site's topography is consisting of a decline from south-east to north-west. All dimensions of the trees are measured where possible and estimated where there is lack of access.

5. Development Design

This proposal comprises of construction of an accessible living annex. Elements of the proposed construction, which may have implications upon the trees, have been considered within this report.

6. Information received

The final plans received of the proposal, were drawn by Temple Ford Design. All the plans within this report are based upon the above-mentioned documents. All measurements must be checked with these and any other appropriate documents.

7. Local Planning Authority validation and controls

It is uncommon that Local Planning Authorities (LPA) will validate planning applications if there are trees within close proximity to the proposal, without the submission of an Arboricultural Method Statement or Arboricultural Impact Assessment.

Tree work, to trees covered by a Tree Preservation Order (TPO) and/or within a Conservation Area (CA), will either need formal consent through a Tree Work Application or through specific detail within an Arboricultural Report, if relating directly to an approved Planning Application. Trees, which are not covered by a TPO and/or within a CA, but which are located within the red line of the proposal, may be a material consideration and should be subject to the design principles of the proposal. Thus, the possible retention and/or works to these trees need to be considered at an early stage of the design.

It must be noted that, if trees are protected by a TPO or CA, and may be affected by the proposal, it is essential that this report be submitted as part of the Planning Application. Works to trees covered by either a Tree Preservation Order or within a Conservation Area, must have formal consent from the LPA.

Accidental, mechanical, or deliberate damage to retained trees growing within or in adjacent sites to the proposal site is prohibited.

8. Best practice

This report guides how to use best practice and it is recommended to use the advice as an integral part of both the phased construction method and the on-site risk assessment. Otherwise, there may be a case for the Local Authority to serve an enforcement notice for a breach in planning control, against which enforcement action may be taken.

All specified tree work, in Appendix 4, must be undertaken by a competent arboriculturist holding nationally recognised qualifications and suitable insurance. Furthermore, any tree work undertaken must be in accordance with British Standard 3998 – 2010, 'Tree Work - Recommendations'.

9. Arboricultural Impact Assessment

9.1. Summary

The Arboricultural Impact Assessment identifies which trees can be retained and assesses any impact from the proposal upon these trees. It also demonstrates that it is possible to incorporate specific retained trees into the development.

9.2. Impact on trees

(1) Root Protection Area (RPA)

The Tree Constraints Plan GH2284a, Appendix 1, designates the Root Protection Area (RPA), from British Standard 5837-2012. The RPAs of the trees are marked as circles. The Tree Constraints Plan informs the proposal's architects, designers and planners, on how best to place the development within the trees' proximity, without being detrimental to either the health of the trees, or the relationship with the location's character and amenity. The RPA has been calculated by using the formulas detailed within BS5837-2012, paragraph 4.6, annex C.

The trees have been categorised for their quality through the assessment in Appendix 3. This report will demonstrate that, with carefully located Tree Protection and good management of the proposal site, there will be limited to no compromising disruption to the existing retained trees. The Tree Protection Plan GH2284b, Appendix 1, details the measures required to ensure that valuable retained trees are protected throughout the implementation of construction activities.

(2) Tree work & recommended tree planting

Tree work has been scheduled in [Appendix 4](#), within the Preliminary Management Recommendations (works recommended as scheduled works), or within the Development Recommendations (works required as a necessity of the proposal).

No tree planting has been recommended within this report. However, sufficient space is available for new tree planting, throughout the site. To secure the planting of trees, specific provisions must be made within any approved Landscaping Scheme, or through a Condition within an Approved Decision Notice.

(3) Tree Protection

Tree Protection fencing and temporary Ground Protection will be needed on site, to protect the valuable retained trees. Plan GH2284b details locations requiring protection.

The Tree Protection safeguards the theoretical Root Protection Area (RPA) of the natural ground and hard landscaping outside the proposed footprint, for all retained trees within the site.

Throughout the proposal, it would be good working practice to monitor the condition of the fencing every five days and assess whether it is still fit for purpose, or whether it requires maintenance. It is advised that the Tree Protection be added to the on-site risk assessment and the Tree Protection fencing should also have a specific on-site *Fixed Scaffolding Safety Checklist*.

(4) Specific construction technique appraisal

Information required prior to commencement of construction

A person with relevant experience, must design the details relating to the services and rainwater soakaways/holding tanks, or waste pumps, and Cellular Confinement System driveway. These must include accurate locations of installation, including cross-sections, detailing levels of existing / proposed finished levels and construction method statements for each specific operation, which will be required prior to or at the pre-commencement meeting. Written approval of the design, in relation to trees, should be acquired from the developer's acting Arboricultural Consultant or the LPA Arboricultural Officer.

Services and rainwater soakaways/holding tanks, or waste pumps

A structural / drainage engineer with relevant experience should design the service locations and rainwater disposal, to ensure minimal impact upon retained and proposed tree planting.

- Services should be constructed outside the tree Root Protection Areas (RPA), where possible and located a minimum of 2 m away from any new, or proposed, tree planting (unless otherwise agreed with the Local Planning Authority and Arboricultural Consultant with specific provisions are applied).
- Upon agreement, if service routes travel through areas of tree RPA, they should be dug by hand. If tree roots are encountered less than 25 mm in diameter, they may be pruned back, making a clean cut with a suitable sharp tool (e.g. bypass secateurs or handsaw), except where they occur in clumps. Roots which are either over 25 mm in diameter or occurring in clumps should be severed only following consultation with an Arboricultural Consultant.
- This work shall be undertaken, having notified the site's acting Arboricultural Consultant of the contractor's intent to proceed, to allow for site supervision to occur upon commencement.
- No new manholes or inspection covers should be constructed within the tree RPA, unless otherwise agreed.
- All gutters, rainwater downpipes and drains must have gutter or drain guards to reduce the risk of blockage from tree-related debris.

Excavation with caution

This working method will reduce the risk of indiscriminately damaging tree roots and valuable soil. The area requiring excavation is depicted in plan GH2284b as a yellow polygon and is located within the theoretical Root Protection Area (RPA) of tree T5. The amount of Root Protection Area (RPA) removed by this proposed construction is only 0.8%, which is minimal and unlikely to compromise the tree's health and stability.

- The area detailed for excavation must be undertaken with caution, using hand-operated tools only, allowing for a more detailed and observant excavation. Excavation using mechanically driven machinery, will inevitably cause fracturing damage to tree roots and disruption to the surrounding soil structure.
- If mechanically driven machinery is required, the site's acting Arboricultural Consultant must be informed, prior to commencement, of the contractor's intent to proceed, to allow for site supervision to occur.
- If tree roots are unearthed, they are to be pruned back to the edge of the excavation making a clean cut with a suitable sharp tool (e.g. bypass secateurs

or handsaw). If tree roots are left exposed for more than one day, they should be covered in dry hessian sacking or similar material to avoid desiccation and frost.

- If a concrete mix, or a chemical substance is to be used in direct contact with the newly excavated soil face, a lining of impermeable chemical-resistant plastic should be used as a separation barrier, thus reducing the risk of dangerous leachates from contaminating the soil and/or compromising tree roots.

Cellular Confinement System (CCS)

The CCS protects tree roots from the damaging effects of compaction and desiccation, whilst creating a stable, reliable load-bearing surface for vehicular/foot traffic. A structural engineer or person with relevant experience should design the CCS. An illustrative design of the CCS required is detailed in Figure 6, plan GH2284b. The location of the CCS is marked as a polygon with a hexagonal pattern. Some areas of CCS have been covered with Ground Guards throughout construction, which has been illustrated as a hexagonal pattern with a light-blue background.

- The installation of the CCS should be undertaken at the end of the project, see Phased Development.
- This work shall be undertaken, having notified the site's acting Arboricultural Consultant of the contractor's intent to proceed, to allow for site supervision to occur upon commencement.
- The depths (to be confirmed) of the CCS should be 75+ mm for the footpath sub-base.
- Existing hardstanding shall be removed using hand-operated tools. Surface vegetation can be removed with either the use of a suitable pesticide specific to vegetation and not harmful to the tree/shrub root systems, or by removing the top 50 mm of vegetation and humus only.
- Notwithstanding the submitted engineers' details, all vehicles shall be restricted to the areas outside the trees' Root Protection Area (RPA).
- All materials for construction must be lifted and installed by hand. However, if there is a requirement for the use of a vehicle within the trees' RPA, the machine must be supported by Ground Guards, or work from an area of newly completed access driveway.
- It is imperative that the same type of stone be utilised for the CCS infill.
- The entire area of CCS should be covered with a porous wearing course and must be detailed within any hard landscaping scheme.
- A guide to use of Cellular Confinement Systems near trees can be [downloaded here](#).

(5) Indirect Constraints from the proposal upon retained trees

Excluding trees on clay soils, the indirect constraints resulting in future pressure for tree removal, is nominal.

The location of the proposed is partially below the canopy of Ash tree T8. The footprint of the proposed is located within an existing garage / shed footprint, which has been built using conventional strip foundations. Due to the design of the existing foundation, it more likely that tree roots have grown around, rather than below, the foundation. Thus, the construction of the proposed within the footprint of the existing, is unlikely to cause root damage to the tree. Minor pruning of

the Ash tree is presently required to create a 2 m separation from the existing garage / shed roof. Upon construction of the proposed, the same tree work will be required. In addition, it must be noted that this tree has Ash Dieback (*Hymenoscyphus fraxineus*) and has an estimated safe useful life expectancy of <10 years.

The annex will be accommodation which is ancillary to the main residential dwelling and used for this purpose, with accessibility for wheelchair users. It will also provide future security as families plan for ageing relatives or children returning to live at home after university. The annex does not form a separate unit of accommodation in its own right. The occupant will still share the use of the main facilities of the dwelling.

There is a recommendation (BR209 Site Layout Planning for Daylight and Sunlight), that the windows, on walls within 90° due south, receive some direct sunlight within the summer months, with a reduction during the winter months. Due to the separation between the trees and the proposed dwellings, there will be adequate direct sunlight penetrating these areas.

Upon minor pruning, sufficient separation from the retained trees exists, to both undertake construction of the annex and manage future general maintenance. With the latter in mind, this report has recommended that the use of Gutter Guards be incorporated within the finished proposal.

The proximity of trees to the proposed dwellings should not be classified as an indirect constraint.

9.3. **Impact on local landscape character and visual amenity in relation to trees**

The felling of trees within group G1 is desirable, as their original purpose of separating a vegetable garden from a formal lawned garden is now obsolete. However, their loss will have limited detrimental effect on the local character and visual amenity in relation to trees.

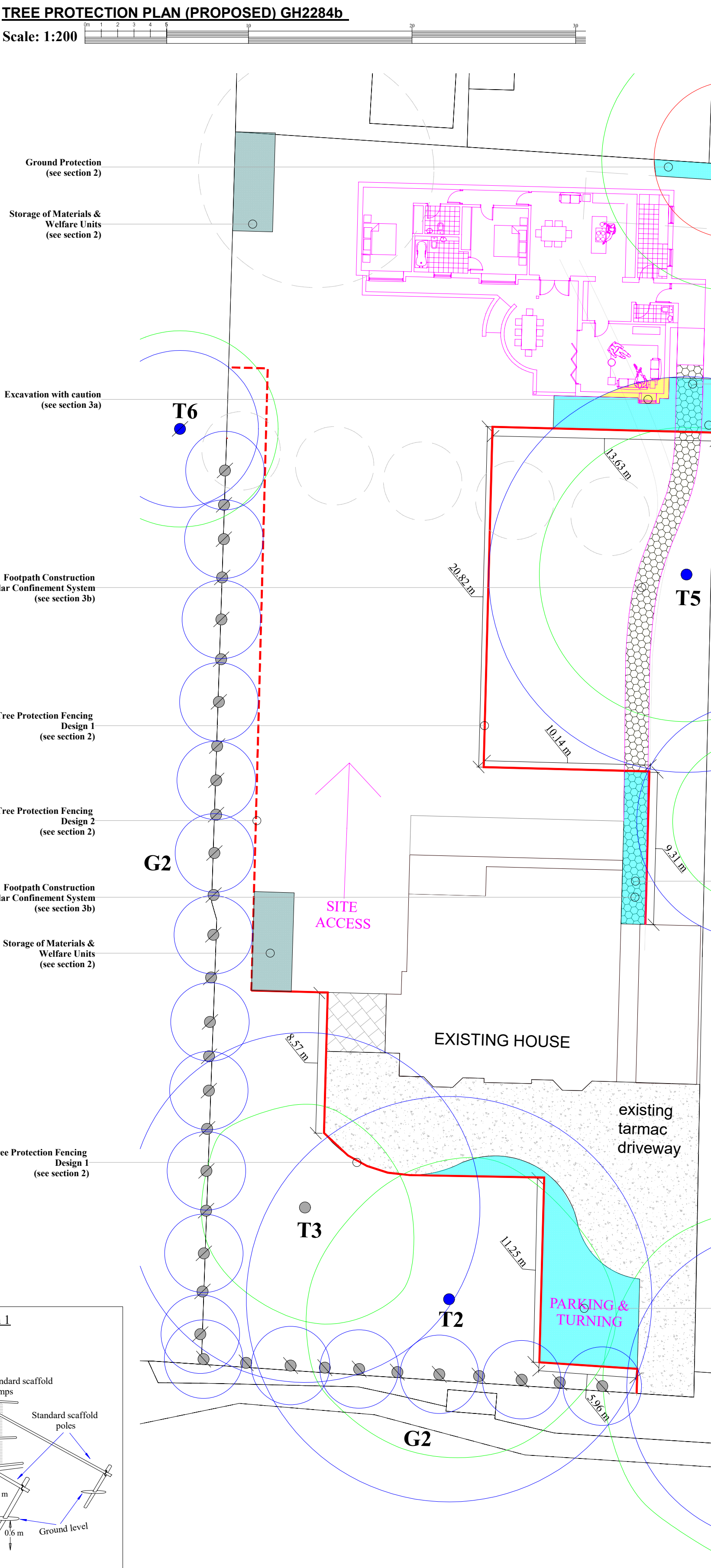
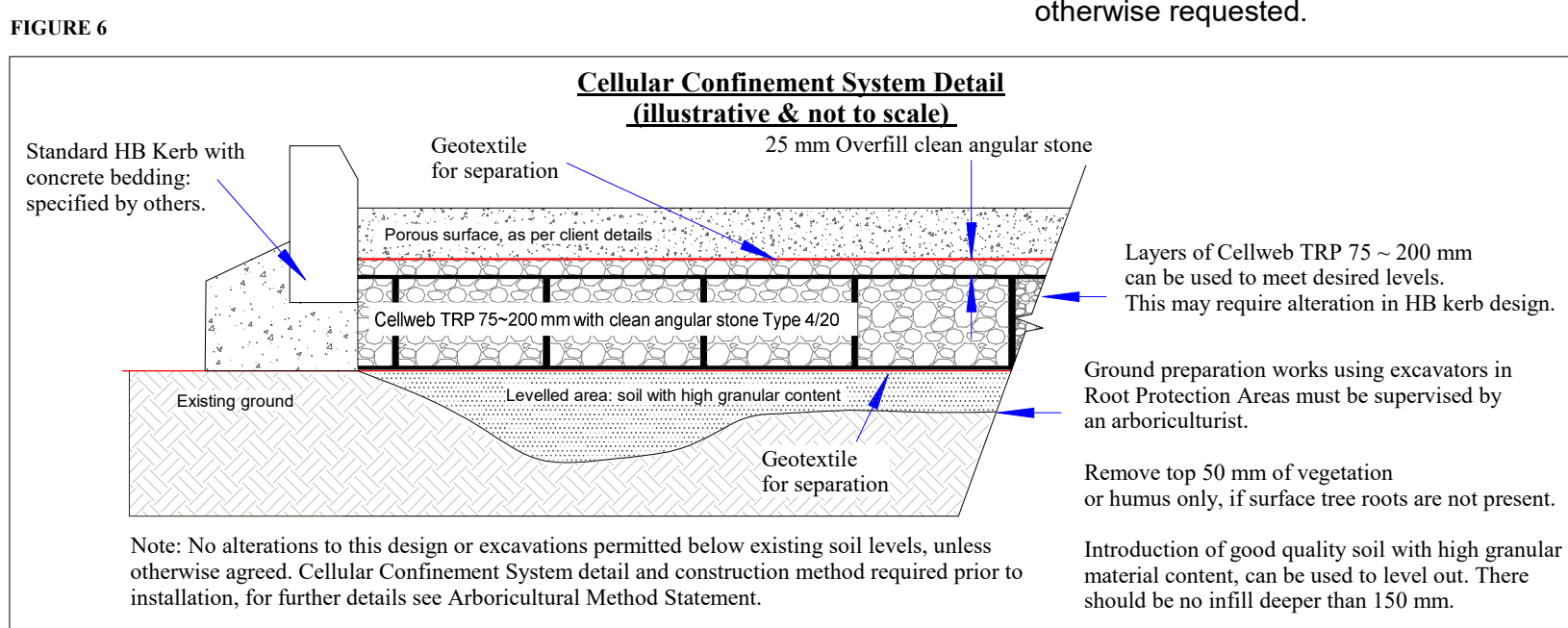
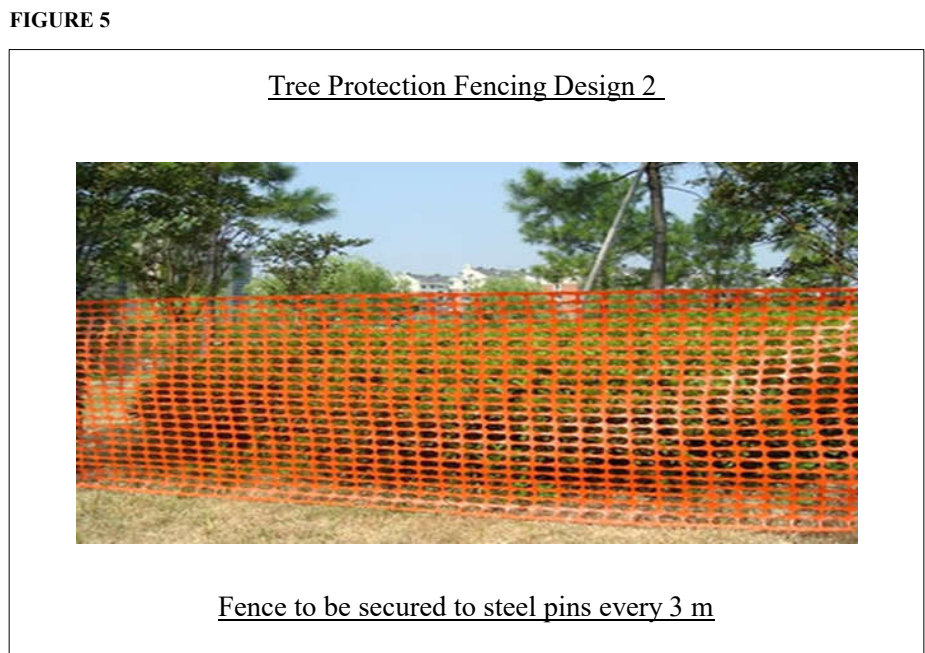
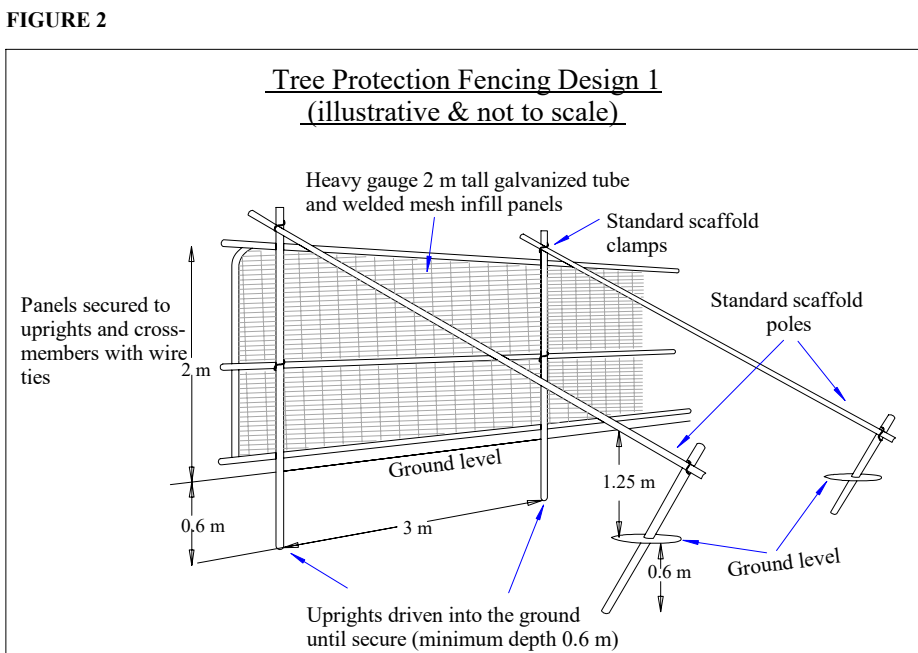
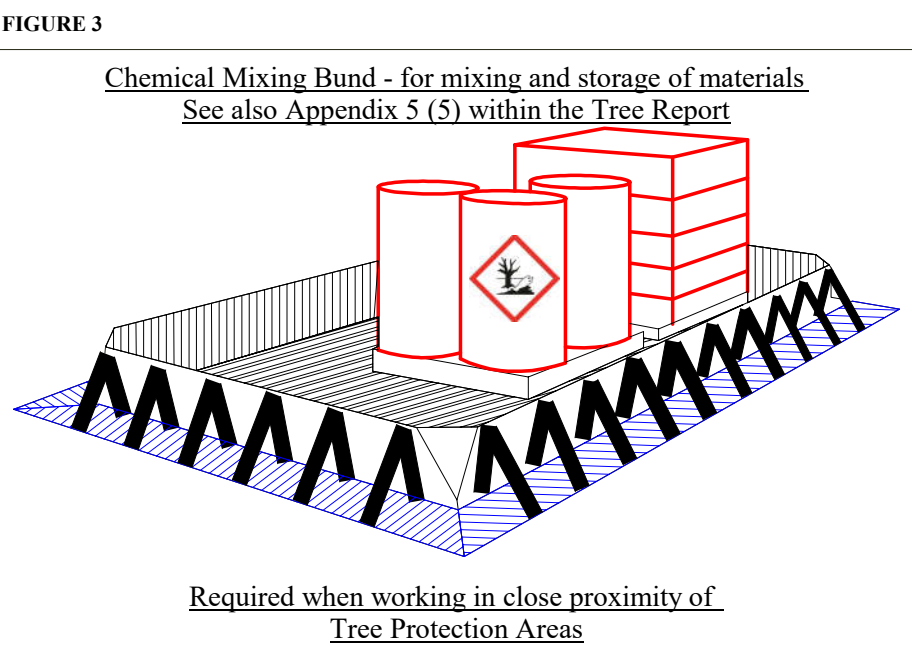
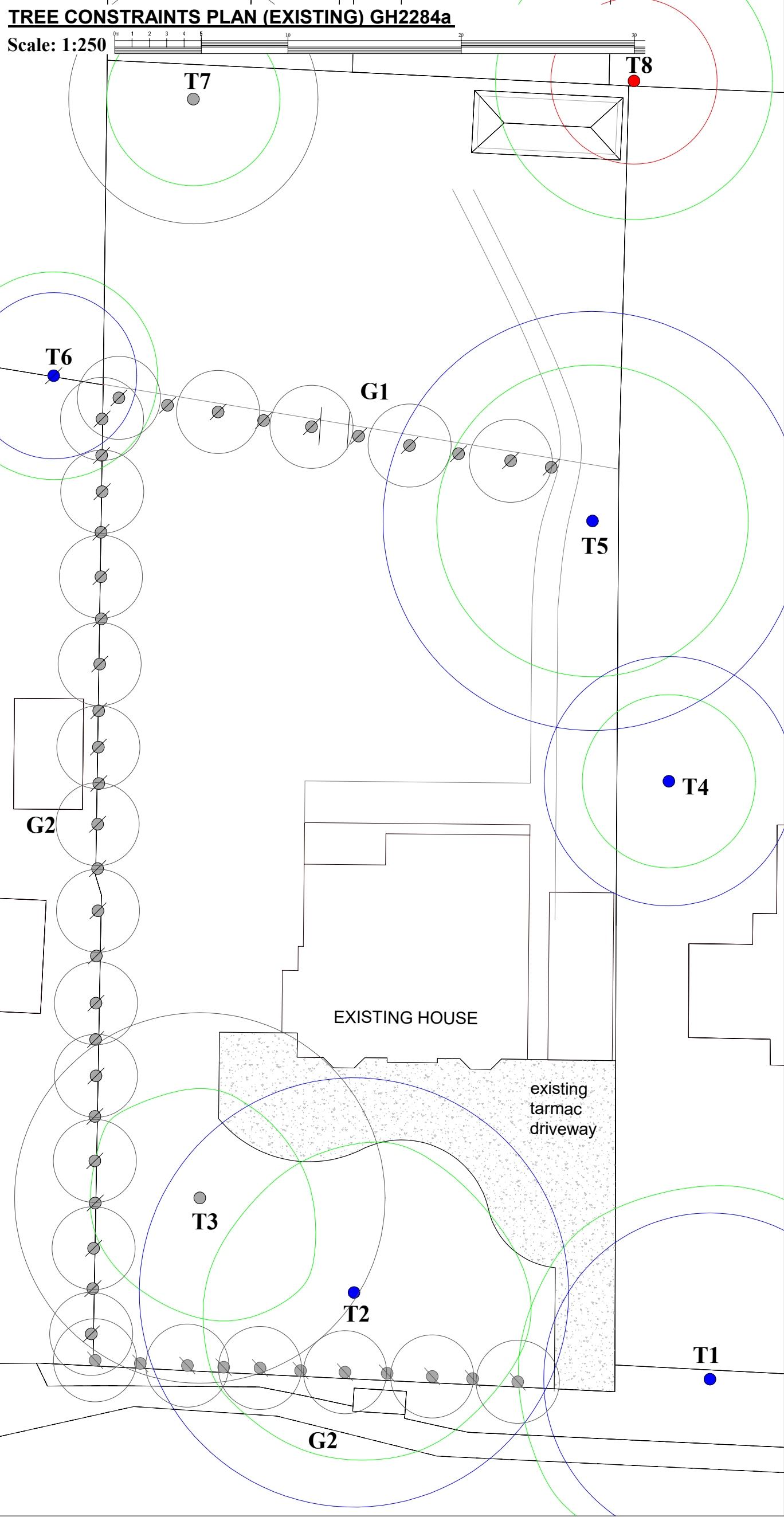
Adequate space for new tree planting is available. With good species selection and planting locations, any replacement trees will enhance the landscape. To secure the planting of trees, specific provisions must be made within any approved Landscaping Scheme, or through a Condition within an Approved Decision Notice.

Through careful management of the site, throughout development until completion, the retained trees shall both enhance the proposal and continue to augment the existing local landscape.

For further details relating to Tree Protection, including the Arboricultural Method Statement, see plan GH2284b.

Appendix 1

- **Tree Constraints Plan** **GH2284a**
- **Tree Protection Plan** **GH2284b**
Arboricultural Method Statement



TREE CONSTRAINTS PLAN - LEGEND

Tree Location & Number	● T1 & G1
Canopy Spread	—
Trees not detailed on plans provided	Ø

British Standard 5837:2012 Tree Categories Key

●	BS 5837:2012 Category B Tree Root Protection Area
●	BS 5837:2012 Category C Tree Root Protection Area
●	BS 5837:2012 Category U Tree Root Protection Area

TREE PROTECTION PLAN - LEGEND

Tree Location & Number	● T1 & G1
Trees not detailed on plans provided	Ø
Trees for Removal	○
Canopy Spread	—
Root Protection Area	○
Proposed Structures	—
Tree Protection Fencing Design 1 (see section 2)	—
Tree Protection Fencing Design 2 (see section 2)	---
Ground Protection (see section 2)	■
Excavation with caution (see section 3a)	■ = 0.8 % T5% RPA
Footpath Construction Cellular Confinement System (see section 3b)	■
Storage of Materials & Welfare Units (see section 2)	■
Location of surface water service routes, Soakaway Electricity, Gas, Broadband and Water, including Foul water (see section 4)	—

Site Address:
209 Winchester Road
Chandler's Ford
Eastleigh, SO53 2DX

Client:
Claire Chivers

Document Titles:
Tree Constraints Plan GH2284a
Tree Protection Plan GH2284b
Arboricultural Method Statement

Rev. 00 **Paper Size and Scale:** A1 - As Plan
Date: 17/08/2022 **Project Ref:** GH2284
Drawing Ref: GH2284a & GH2284b

IMPORTANT NOTICE
This plan is based on the plans and/or site layout plans provided. All measurements must be checked with these plans and appropriate documents. All dimensions to be checked on site prior to commencement of work. Differences between drawings, specifications or structural engineer's details are to be referred immediately to Gwydion's Tree Consultancy. Work should only be undertaken from local authority approved drawings. For further information see associated report GH2284

THIS PLAN SHOULD BE VIEWED IN COLOUR

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Arboricultural Method Statement GH2284

- 1. Phased Development in relation to Tree Protection – in order of events A to L**
 - A.** A person with relevant experience, must design the details relating to the services and rainwater soakaways/holding tanks, or waste pumps (section 4), and Cellular Confinement System footpath (section 3b). These must include accurate locations of installation, including cross-sections, detailing levels of existing / proposed finished levels and construction method statements for each specific operation, which will be required prior to or at the pre-commencement meeting. Written approval of the design, in relation to trees, should be acquired from the developer's acting Arboricultural Consultant or the LPA Arboricultural Officer.
 - B.** Pre-development meeting to discuss Tree Protection, setting out & specific construction techniques
 - C.** tree work - see Tree Survey Schedule within Arboricultural Report GH2284
 - D.** installation of Tree Protection measures - see section 2
 - E.** Pre-commencement meeting, post installation of Tree Protection measures including the chemical storage/mixing bund, (detailed within Figures 1, 2, 3, 4 & 5, section 2 and plan GH2284b), and prior to construction. The pre-commencement meeting should be held and attended by the developer's Arboricultural Consultant and the designated site foreman to discuss details of the working procedures. A representative from the Local Planning Authority may request attendance at the meeting.
 - F.** additional Tree Protection - see section 9.2(4) & Appendix 5(1) within Arboricultural Report GH2284
 - G.** specific construction technique - see section 3a: excavation with caution
 - H.** services installation - see section 4
 - I.** main construction & main construction completion
 - J.** specific construction technique - see section 3b: Cellular Confinement System footpath
 - K.** removal of Tree Protection measures - see section 5
 - L.** landscaping - see Appendix 5 (8) within Arboricultural Report GH2284

RB = Arboricultural Supervision required

The project manager will give the Arboricultural Consultant at least 48 hours' written notice prior to any Arboricultural Supervision activity. If there is a specific request from a representative of the LPA wishing to attend, 7 days' notice shall be required. An Arboricultural Supervision statement will be submitted to the Local Planning Authority, in writing after each supervision event.

- 2. Tree Protection Measures** see also section 9.2(4) & Appendix 5 within Arboricultural Report GH2284
 - a) Excavation with caution**
The area requiring excavation is depicted in plan GH2284b as a yellow polygon and is located within the theoretical Root Protection Area (RPA) of tree T5.
Working Method: The area detailed for excavation must be undertaken with caution, using hand-operated tools only. If tree roots are unearthed, they are to be pruned back to the edge of the excavation making a clean cut with a suitable sharp tool (e.g. bypass secateurs or handsaw). If tree roots are left exposed for more than one day, they should be covered in dry hessian sacking or similar material to avoid desiccation and frost. If a concrete mix, or a chemical substance is to be used in direct contact with the newly excavated soil face, a lining of impermeable chemical-resistant plastic should be used as a separation barrier.
Reason: Excavation using mechanically driven machinery, will inevitably cause damage to tree roots and soil structure. The use of hand-operated tools allows for a more detailed and observant excavation. This working method will reduce the risk of damaging shallow tree roots and valuable soil. The use of a chemical-resistant plastic will reduce the risk of dangerous leachates, from the chemical mixture, contaminating the soil and/or compromising tree roots.
 - b) Cellular Confinement System (CCS)**
Illustrative design of the CCS required is detailed in Figure 6, plan GH2284b. The location of the CCS is marked as a polygon with a hexagonal pattern. A structural engineer with relevant experience should design the CCS, as detailed within section 1A.
Working Method: This work should be undertaken, having notified the site's acting Arboricultural Consultant of the contractor's intent to proceed, to allow for site supervision to occur upon commencement. Notwithstanding the approved design and construction method statement (section 1A), the installation of the CCS should be undertaken at the end of the project, see Phased Development, section 1. All vehicles should be restricted to the areas outside the trees' Root Protection Area (RPA). Existing hardstanding should be removed using hand-operated tools. Surface vegetation can be removed with either the use of a suitable pesticide specific to vegetation and not harmful to the tree/shrub root systems, or by removing the top 50 mm of vegetation and humus only. All materials for construction can be lifted and installed by hand. However, if there is a requirement for the use of a vehicle within the trees' RPA, the machine must be supported by Ground Guards section 2, or work from an area of newly completed access footpath. The depths (to be confirmed) of the CCS cells are recommended to be 75+ mm for the final driveway sub-base, with a +/- 75 mm surface wearing course. It is imperative that the same type of stone be utilised for the CCS infill. The entire area of CCS should be covered with a porous wearing course and must be detailed within any hard landscaping scheme.
Reason: The CCS protects tree roots from the damaging effects of compaction and desiccation, whilst creating a stable, reliable load-bearing surface for vehicular traffic.

- 3. Specific construction techniques (within RPA)**
 - a) Excavation with caution**
The area requiring excavation is depicted in plan GH2284b as a yellow polygon and is located within the theoretical Root Protection Area (RPA) of tree T5.
Working Method: The area detailed for excavation must be undertaken with caution, using hand-operated tools only. If tree roots are unearthed, they are to be pruned back to the edge of the excavation making a clean cut with a suitable sharp tool (e.g. bypass secateurs or handsaw). If tree roots are left exposed for more than one day, they should be covered in dry hessian sacking or similar material to avoid desiccation and frost. If a concrete mix, or a chemical substance is to be used in direct contact with the newly excavated soil face, a lining of impermeable chemical-resistant plastic should be used as a separation barrier.
Reason: Excavation using mechanically driven machinery, will inevitably cause damage to tree roots and soil structure. The use of hand-operated tools allows for a more detailed and observant excavation. This working method will reduce the risk of damaging shallow tree roots and valuable soil. The use of a chemical-resistant plastic will reduce the risk of dangerous leachates, from the chemical mixture, contaminating the soil and/or compromising tree roots.
 - b) Cellular Confinement System (CCS)**
Illustrative design of the CCS required is detailed in Figure 6, plan GH2284b. The location of the CCS is marked as a polygon with a hexagonal pattern. A structural engineer with relevant experience should design the CCS, as detailed within section 1A.
Working Method: This work should be undertaken, having notified the site's acting Arboricultural Consultant of the contractor's intent to proceed, to allow for site supervision to occur upon commencement. Notwithstanding the approved design and construction method statement (section 1A), the installation of the CCS should be undertaken at the end of the project, see Phased Development, section 1. All vehicles should be restricted to the areas outside the trees' Root Protection Area (RPA). Existing hardstanding should be removed using hand-operated tools. Surface vegetation can be removed with either the use of a suitable pesticide specific to vegetation and not harmful to the tree/shrub root systems, or by removing the top 50 mm of vegetation and humus only. All materials for construction can be lifted and installed by hand. However, if there is a requirement for the use of a vehicle within the trees' RPA, the machine must be supported by Ground Guards section 2, or work from an area of newly completed access footpath. The depths (to be confirmed) of the CCS cells are recommended to be 75+ mm for the final driveway sub-base, with a +/- 75 mm surface wearing course. It is imperative that the same type of stone be utilised for the CCS infill. The entire area of CCS should be covered with a porous wearing course and must be detailed within any hard landscaping scheme.
Reason: The CCS protects tree roots from the damaging effects of compaction and desiccation, whilst creating a stable, reliable load-bearing surface for vehicular traffic.
- 4. Services (electricity, gas, water, foul water & broadband)**
Services and rainwater soakaways/holding tanks, or waste pumps should be constructed outside the tree Root Protection Areas (unless otherwise agreed and specific provisions are applied). A structural / drainage engineer with relevant experience should design the service locations and rainwater disposal; see section 1A. All gutters, rainwater downpipes and drains must have gutter or drain guards to reduce the risk of blockage from tree-related debris.

- 5. Removal of Tree Protection**
The removal of any Tree Protection can only take place upon completion of Phased Development and upon completion of the project, or under agreement with the acting Arboricultural Consultant. Written consent may be required from the Local Planning Authority to undertake such an operation.
Note:
This report does not give guidance on building near trees, hedgerows, and shrubs in shrinkable soils [National House Building Council (NHBC) guidance in relation to trees, chapter 4.2], as this should be addressed during the Building Regulations phase, unless otherwise requested.

Appendix 2: Tree Survey Schedule Key BS5837-2012

Column 1 – (Tree No.) = Tree Number as marked on site plan and/or tag

Column 2 – (Species) = Common name and/or Latin name

Column 3 – (HT) = Approximate tree height in metres

Column 4 – (DBH) = Stem diameter in millimetres at 1.5 metres above adjacent ground level. For trees with multi-stems, the DBH calculation will be used from within BS5837-2012, and methodology detailed within the Tree Schedule.

Column 5 – (CS) = Canopy spread, measured approximately, using the 4 cardinal points of the compass measured in metres.

Column 6 – (BH) = Approximate height of the lowest secondary, or primary branch of the canopy above ground level in metres, with cardinal points from the compass detailing the location

Column 7 – (CH) = Approximate height of the lowest part of the canopy above ground level in metres, with cardinal points from the compass detailing the location

Column 8 – (Age) = Age class, Y- Young, SM – Semi Mature, EM – Early mature, M – Mature, OV – Over mature

Column 9 – (Condition) = Tree's overall condition denoted by Good/Fair/Poor. Condition description indicates the effect of defects on health and stability of tree

Column 10 – (Recommendations) = Preliminary management recommendations
= Development recommendations

Column 11 – (ERC in Years) Estimated Remaining Contribution (<10, <20, <30, 40+)

Column 12 – (RPA) = Minimum Root Protection Area, as calculated from BS5837-2012 and mark as a radius of a circle on the tree constraints and/or protection plan. The methodology to conclude the RPA is: an area equivalent to a circle with a radius 12 times the stem diameter, measured at 1.5 metres above ground level for a single-stem and for trees with more than one stem, arising below 1.5 metres above ground-level or stems with non-uniform growth pattern, the RPA calculation will be used from within BS5837 2012.

Column 13 – (BS. Cat) = British Standard 5837-2012 'Trees in relation to Construction' categories:
 Category A = trees of high quality, which make a substantial contribution
 Category B = trees of moderate quality, which make a significant contribution
 Category C = trees of low quality
 Category U = trees to be removed for sound arboricultural management
 (Further detail relating to these categories can be found within Appendix 3)

- 1) Estimated dimensions and details are identified by a symbol of '#'.
- 2) Where two categories are split by /, the first is the most significant e.g.
- 3) Fair / Poor means this tree's condition is between fair and poor but tending significantly more towards fair.
- 4) Due to specific legal designations, the trees maybe protected by law, (e.g. Tree Preservation Order and / or Conservation Area). Only when this document is approved through the planning process, can the Development Recommendations be undertaken.
- 5) Where Preliminary Recommendation tree work (e.g. 'branch removal'), differs to Development Recommendations (e.g. 'no work required'), the LPA may request through the development planning process that the submission of a separate tree work planning application be required to undertake the Preliminary Recommendation tree work. Contact Gwydion's Tree Consultancy if you require further information, or a specific designation search.

Appendix 3: British Standard Cascade Chart for Tree Quality Assessment

Category & definition (see Tree Survey Schedule)	Criteria		
Trees unsuitable for retention (see Note)			
Category U Those in such a condition that they cannot realistically be retained as living trees in context of current land use for longer than 10 years	- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that have become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) - Trees that are dead or are showing signs of significant, immediate and irreversible overall decline - Trees infected with pathogens of a significance to the health and/or safety of other trees nearby, or very low-quality trees suppressing adjacent trees of better quality NOTE <i>Category U trees can have existing or potential conservation value which it may be desirable to preserve</i>		
Trees to be considered for retention			
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remedial defects, including unsympathetic previous management and storm damage), such that they are unlikely to be suitable for beyond 40 years; or trees lacking the special quality necessary to merit category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value

Appendix 4: TREE SURVEY SCHEDULE

Tree No.	Species	Height (m)	Diameter @ 1.5 m (cm)	Compass	Canopy (m)	Branch Height (m)	Canopy Height (m)	Age	Condition	-Preliminary Recommendations -Development Recommendations	Estimated remaining (years)	Root Protection Area (mR)	British Standard Category (2012)
T1	Pedunculate Oak	#18	#80	N E S W	#11 12 #11 #11	6	4	M	<u>#Fair</u> -unable to completely assess neighbour's tree -Ivy clad -deadwood within canopy -tree visible from public vantage points	-no work -as preliminary recommendations	#<30	9.6	#B1/2
T2	Cedar Deodar	#22	103	N E S W	9 #9 9 7	6	4	M	<u>#Fair/Poor</u> -minor basal dysfunction east, bark platelets falling, boring insect frass within buttress roots, unclear tree morphology -deadwood within canopy -tree visible from public vantage points	-consider decay detection -remove deadwood -monitor for any increase in deadwood: if increase occurs contact arborist -as preliminary recommendations	#<30	12.4	#B1/2
T3	Pedunculate Oak	19	89	N E S W	6 7 6 7	5	4	M	<u>Poor\Fair</u> -epicormic shoots main stem, now forming branches with good foliage cover -canopy reduced in size, deadwood forming at reduction points -poor foliage cover upper canopy -starting to form lower canopy -potential to continue forming part of landscape	-remove deadwood -monitor for any increase in deadwood: if increase occurs contact arborist -as preliminary recommendations	<20	10.7	C/B2

ARBORICULTURAL IMPACT ASSESSMENT & METHOD STATEMENT
AT: 209 WINCHESTER ROAD, CHANDLER'S FORD, EASTLEIGH, SO53 2DX
FOR: CLAIRE CHIVERS

Tree No.	Species	Height (m)	Diameter @ 1.5 m (cm)	Compass	Canopy (m)	Branch Height (m)	Canopy Height (m)	Age	Condition	-Preliminary Recommendations -Development Recommendations	Estimated remaining (years)	Root Protection Area (mR)	British Standard Category (2012)
T4	Yew	9	#60	N E S W	#5 #5 #5 5	4	4	M	<u>Fair/Poor</u> -unable to completely assess, neighbours' tree -maintained at current size -limited to no views from public vantage points	-no work -as preliminary recommendations	<30	7.2	B/C2
T5	Lime European	22	101	N E S W	9 #9 9 9	5	4	M	<u>Fair</u> -basal epicormic shoots -epicormic shoots throughout canopy -unable to assess upper canopy, due to extensive foliage -branch reduction throughout canopy, creating epicormic shoots -due to tree size visible from public vantage points	-remove basal epicormic shoots, and 30% of canopy epicormic shoots (canopy mass only, not overall size) -as preliminary recommendations	<30	12.1	B1
T6	Pedunculate Oak	#14	#40	N E S W	6 #6 #6 #6	5	5	M	<u>#Fair</u> -unable to completely assess, neighbours' tree -limited visibility from public vantage points, good future potential	-no work -as preliminary recommendations	#<30	4.8	#B/C1
T7	Bay Laurel	10	60	N E S W	#5 5 #5 #5	3	2	M	<u>Poor</u> -possibly clump planted -basal epicormic shoots, partly dead -ribbing on main stem -canopy bowl at 1.5 m -cavities within canopy bowl -historic formal planting, limited visibility	-crown-lift to create 3 m separation between ground level and first foliage -monitor for any foliage die-back -as preliminary Recommendations	<20	7.2	C2/1

ARBORICULTURAL IMPACT ASSESSMENT & METHOD STATEMENT
AT: 209 WINCHESTER ROAD, CHANDLER'S FORD, EASTLEIGH, SO53 2DX
FOR: CLAIRE CHIVERS

Tree No.	Species	Height (m)	Diameter @ 1.5 m (cm)	Compass	Canopy (m)	Branch Height (m)	Canopy Height (m)	Age	Condition	-Preliminary Recommendations -Development Recommendations	Estimated remaining (years)	Root Protection Area (mR)	British Standard Category (2012)
T8	Ash	#15	#40	N E S W	#8 #8 8 #8	4	4	M	<u>Poor</u> -unable to completely assess, neighbours' tree -Ash dieback present -tree in decline	-monitor for any increase in deadwood: if increase occurs contact owner -as preliminary recommendations	<10	4.8	U
G1	Lawson Cypress	<4	<20	N E S W	1 1 1 1	0	0	E M	<u>Poor\Fair</u> -formal hedge -originally separated vegetable patch from formal lawn -no longer serves purpose of visual screen as intended	-consider removal -remove	<30	2.4	C2
G2	Cherry Laurel	<4	<20	N E S W	1 1 1 1	0	0	< M	<u>Fair</u> -ownership unclear -good visual screen	-no work -as preliminary recommendations	<20	2.4	C2

FOR ADDITIONAL INFORMATION RELATING TO TREE WORK RECOMMENDATIONS, SEE TREE SURVEY SCHEDULE KEY: NOTES 4 & 5

PRUNING WORK TO TREES SHOULD FOLLOW THE GUIDANCE SPECIFIED WITHIN BS3998-2010

NO PRUNING WORKS TO BE UNDERTAKEN BEYOND THE CURTILAGE OF THE SITE BOUNDARY WITHOUT CONSENT OF THE LANDOWNERS

UPON COMPLETION OF DEVELOPMENT, RESURVEYING RETAINED TREES IS ESSENTIAL, TO ENSURE THEIR GOOD CONDITION AND READINESS FOR ADOPTION BY OWNERS.

Appendix 5: Site Management & Tree Protection

- (1) [Demolition of existing structures](#)
- (2) [Space required for plant, scaffolding and related access](#)
- (3) [Temporary structures \(including temporary services\)](#)
- (4) [Landscape Protection](#)
- (5) [Mixing and storage of materials](#)
- (6) [Avoidance of changes in ground levels](#)
- (7) [Activities within Protected Areas](#)
- (8) [Landscaping and related Tree Protection](#)

(1) Demolition of existing structures

Tree Protection shall be constructed and located as detailed within the Tree Protection Plan.

A laminated Construction Exclusion sign should be placed upon the fencing facing the proposal site and access routes, at 3 metre intervals.

Supervision will be needed prior to the commencement of the demolition and upon completion of constructing the Tree Protection, see Tree Protection Plan for details

A pre-commencement site meeting should be held and attended by the developer's Arboricultural Consultant and the designated site foreman, to discuss details of the working procedures. A representative from the Local Planning Authority may request attendance at the meeting.

The standing structures to be demolished should be removed by dragging back away from the retained trees and their protective fencing.

A 'banksman' (operations assistant) must be present to assist in the demolition/ground work process, by directing the machinery operator to ensure tree branches and Tree Protection are not damaged.

If any excavation is needed for capping the existing utility services within the Tree Protection areas, this should be undertaken with the supervision of the acting Arboricultural Consultant.

Tree stumps are to be ground out using a Stump Grinder, if they are located within tree Root Protection Areas, and not removed via excavation, unless under supervision of the site's acting Arboricultural Consultant.

Throughout the proposal, it would be advisable to monitor the condition of the Tree Protection fencing and Ground Protection and assess whether it is still fit for purpose, as detailed in section 2 of the Arboricultural Method Statement. It is also advisable to add Tree Protection to the on-site risk assessment and the protective fencing should have a Fixed Scaffolding Safety Checklist.

The details above should be incorporated within the demolition site-specific risk assessment and method statement.

Be aware of the control and disposal of plants that can harm livestock and the environment. There are severe restrictions and penalties for allowing contaminated soil or plant material to spread into the wild. Furthermore, Enforcement Notices can be issued if weeds are allowed to spread onto someone else's property, and prosecution is possible if animals suffer from eating these weeds. For further guidance follow this link: [Prevent harmful weeds and invasive non-native plants spreading](#).

(2) Space required for plant, scaffolding and related access

Sufficient necessary space surrounds the proposal, without the need to enter within the areas beyond the Tree Protection fencing.

In the event of a crane or telehandler being needed to install RSJs (Rolled Steel Joists) or to deliver construction materials, a 'banksman' will need to assist the machine driver, to cause no damage to valuable trees.

(3) Temporary structures (including temporary services)

These must be located outside the tree Root Protection Areas, unless otherwise agreed.

All temporary services should run above ground or be contained within the facility and managed as appropriate.

It may be possible to locate storage/units and welfare cabins within the Root Protection Areas of trees. However, to enable this, prior consent will be required from the developer's acting Arboricultural Consultant or the LPA's Arboricultural Officer and a working method statement produced, specific to the site's requirements.

(4) Landscape Protection

Tree Protection will prevent any tree root compromising activities within areas that it protects, thus protecting that immediate landscape. The protective fencing should only be removed in the last phase of development. For further details, relating to landscaping, see Appendix 5 (8).

(5) Mixing and storage of materials

Mixing of chemicals will be required near Root Protection Areas, where the use of a water-tight and chemical resistant bund will be essential.

Transportation around the site, of chemicals including cement, must be undertaken with caution and any spillage within the tree Root Protection Area (RPA) must be removed. Further guidance on spillages of chemicals must follow the on-site risk assessment and, if this requires removal of soil within the RPA, the site's acting Arboricultural Consultant must be informed prior to any excavation.

No uncured concrete should be poured or placed in direct contact with soil located adjacent to Tree Protection fencing. The washing out of cement mixers is prohibited, unless a foul water capture system is in place.

Within the proposal site there should be no burning or bonfires, of either waste or excess materials, generated from the implementation of the construction of this proposal, unless located a minimum of 15 m away from any tree, or tree canopy.

Any additional areas must be located outside the tree Root Protection Areas, unless otherwise agreed.

It may be possible to locate storage/units and welfare cabins within the Root Protection Areas of trees. However, in order to enable this, prior consent will be required from the developer's acting Arboricultural Consultant or the LPA's Arboricultural Officer and a working method statement produced, specific to the site's requirements.

There will be a requirement for mixing and storage of materials on site. It is very important to avoid any run-off from toxic materials into areas valuable for tree roots and potential tree root growth, which could compromise valuable trees. Further information can be found from within the links available here: [Environmental Practices](#).

(6) Avoidance of changes in ground levels

No changes in ground levels should occur within the areas designated for Tree Protection, unless otherwise stated, within this report.

(7) Activities within Protected Areas

If activities within protected areas are required, other than those stated within this report, consent will be needed from a representative of the Local Planning Authority and/or advice gained from the acting Arboricultural Consultant.

(8) Landscaping and related Tree Protection

If tree planting is desired, awareness of the guidance within BS8545 - 2014 Trees: from nursery to independence in the landscape – Recommendations, would be advisable. The general treatment of areas around newly-planted and existing trees should allow for adequate infiltration of water and free gaseous exchange, as well as reduction of water evaporation and the retention of an open soil structure to encourage root growth.

Care should be taken to ensure that grass or weed growth does not compete with young root growth by intercepting available water supply.

No major changes in levels should occur within areas designated for Tree Protection, unless mentioned within this report.

Surface vegetation can be removed with either the use of a suitable pesticide (see penultimate paragraph in this section below), specific to vegetation and not harmful to the tree/shrub root systems, or by removing the top 50 mm of vegetation and humus only (unless the tree has very shallow roots, advice should be sought from an Arboricultural Consultant). An assessment of the ground levels must be undertaken. If the ground is slightly uneven, the introduction of a good quality soil with high granular material content, can be used to level it out. There should be no infill deeper than 150 mm and this should only be used to infill up to the highest point of the existing ground. If the levels are more than 150 mm, advice should be sought from the acting Arboricultural Consultant.

The removal of hardstanding and or garden features within areas designated for tree root protection must be undertaken with caution. All works within these areas must be undertaken by hand, using hand tools only. If self-propelled machinery is required, advice relating to Tree Protection should be gained from the site's acting Arboricultural Consultant.

Retaining walls within areas designated for tree root protection, must be left in-situ, unless otherwise mentioned within this report. The removal of retaining walls may result in soil slip, which will potentially compromise the trees' health and condition, and/or become a health and safety risk for those using the area.

No new structures (other than those discussed within this report) e.g. retaining walls, footpaths or water features, should be built within the Root Protection Area of retained trees, without prior consultation with an Arboricultural Consultant.

The driving of vehicles over open ground, designated for planting, should be avoided, as it may cause soil compaction, which is not conducive to plant root growth and survival.

Tree / shrub stumps are to be ground out using a Stump Grinder, if they are located within tree Root Protection Areas, and not removed via excavation, unless under supervision of the site's acting Arboricultural Consultant.

Excavation, within designated Tree Protection, should be avoided. If it is unavoidable, it is advisable to discuss the proposed work with the site's acting Arboricultural Consultant. The operative should be mindful of tree roots and follow the guidance below.

If tree roots are encountered less than 25 mm in diameter, they may be pruned back, making a clean cut with a suitable sharp tool (e.g. bypass secateurs or handsaw), except where they occur in clumps. Roots which are either over 25 mm in diameter or occurring in clumps should be severed only following consultation with an Arboricultural Consultant, as such roots might be essential to the tree's health and stability. Further guidance to root pruning can be found within BS5837:2012 Trees in relation to design, demolition and construction - Recommendations. If a concrete mix, or a chemical substance is to be used in direct contact with the newly excavated soil face, a lining of impermeable chemical-resistant plastic shall be used as a separation barrier. This will reduce the risk of dangerous leachates, from the chemical mixture, contaminating the soil and/or compromising tree roots.

If pesticides are to be used to control unwanted plant growth, it must be ensured that they are not harmful to neither trees and shrubs of value, nor plant species designated for retention within either this report, or any other report, subject to this specific Planning Application. Follow this link for [Guidance on authorisation for pesticides used in Agriculture, Horticulture or the Home Garden \(Plant Protection Products\)](#).

It is also important to be aware of the control and disposal of plants that can harm livestock and the environment. There are severe restrictions and penalties for allowing contaminated soil or plant material to spread into the wild. Furthermore, Enforcement Notices can be issued if weeds are allowed to spread onto someone else's property, and prosecution is possible if animals suffer from eating these weeds. For further guidance follow this link: [Prevent harmful weeds and invasive non-native plants spreading](#).

Appendix 6: Survey Limitations and General Notes

- a) The tree survey has been carried out in relation to British Standard 5837-2012 'Trees in relation to design, demolition and construction – Recommendations' and may also assist in the landowner's duty under the Occupier's Liability Act 1984 and Common Law. To achieve the landowner's complete duty under the Occupier's Liability Act relating to trees, a tree hazard assessment survey of all the trees within the curtilage of the site should be carried out. This tree survey was carried out from ground level, identifying significant tree features which may have a significant bearing upon the condition and management of the trees, giving appropriate recommendations in relation to trees and development.
- b) Trees are living organisms subject to change. It is strongly recommended that they are regularly inspected for this reason.
- c) No guarantee can be given as to the absolute safety or otherwise of any individual trees. Extreme climatic events can cause damage to (or make unsafe) apparently healthy trees.
- d) Typical significant defects that are to be identified can be referred to in 'Principles of Tree Hazard Assessment and Management' by David Lonsdale, 'Tree Pests and Diseases' by the Arboricultural Association and 'The Body Language of Trees' by Claus Mattheck, published by The Forestry Commission, The Department of the Environment and the Arboricultural Association.
- e) The investigation may have been carried out on days with limited visibility and the report refers only to the conditions prevailing on the days that the trees were surveyed.
- f) No underground root investigations were carried out and the surveyor/consultant was not aware of any underground conditions of compaction or changes in ground levels or aeration or drainage which may affect the trees, nor of any service installations or any other excavations which may previously have taken place, and which may have caused damage to root systems.
- g) No responsibility can be accepted relating to the accuracy of the information received. No additional investigation was undertaken with regards to statutory designations, i.e. Tree Preservation Orders, Conservation Areas, SSSIs other than information and documents supplied by the client. Approval for felling or other works may require authorisation. Such authorisation is not the responsibility of the surveyor/consultant, unless instructed by the client to undertake such investigation and seek formal consent from the governing body.
- h) Wildlife issues are of significant concern to the general public. There needs to be a balance between the protection of wildlife and the need for safety when managing trees. The Wildlife and Countryside Act (1981) and Countryside Rights of Way Act (2000) give statutory protection to wild birds, bats, mammals, some invertebrates and plants. It is important to ensure that this legislation is properly considered when carrying out any works to trees.
- i) All nesting birds are protected in the UK under the Wildlife & Countryside Act 1981 (as amended). Tree work should be undertaken outside of bird nesting season (1st March - 31st August), unless a nesting bird survey is undertaken, either by the arborist, or by an ecologist.

Survey Limitations and General Notes (continued)

- j) In this instance, considering the size of the trees, their location and features, it is considered that there is a **MEDIUM** probability of bats using the more mature trees as a roost site, due to the features of the trees (cavities, loose bark, ivy, etc.). However, during the tree works the contractor should carry out the works with bats as an active consideration and follow the current industry best practice, e.g. Arboricultural Association Guidance Note 1 'Trees and Bats 2003' and British Standard 8596: Surveying for Bats in Trees & Woodland, with which competent tree contractors should be familiar.
- k) Prior to any works within this report being undertaken, a request must be made to the client, as to whether an Ecology Survey has been undertaken by a suitably qualified ecologist, that may have implications on this report's working method.
- l) Loss or alteration of any part of this report invalidates the entire report.
- m) This report is only valid for a three-year period from the date detailed upon the front cover and only for the proposed construction detailed within.