



ARBORICULTURAL METHOD STATEMENT

CLIENT - The Chestnut Group
PROJECT - The Maltings
DOC. REF - P1910-AMS01 V1
PLANNING REF - n/a
DATE OF ISSUE - 12/10/2022

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PURPOSE OF DOCUMENT

This document details the methodology behind the installation of any required tree protection measures, and any demolition and construction activities with the potential to cause harm to the site's trees.

The methods outlined in this document must be implemented as per this document. Failure to do so may result in a breach of planning or significant fines.

ARBORICULTURAL DOCUMENT REGISTER

Planning Documents		Version Issued							
Document	Ref.	V0	V1	V2	V3	V4	V5	V6	V7
Tree Survey Report	P1910-TS01		X						
Arb. Impact Assessment	P1910-AIA01		X	X					
Arb. Site Plan (Existing)	P1910-ASP01		X						
Arb. Site Plan (Proposed)	P1910-ASP02	X	X	X					

Technical Documents		Version Issued							
Document	Ref.	n/a	V1	V2	V3	V4	V5	V6	V7
Arb. Method Statement	P1910-AMS01		X						
Tree Protection Plan	P1910-TPP01		X						

1. GENERAL INFORMATION

1.1. USE OF DOCUMENT

- 1.1.1. This document has been produced to assist key design and construction personnel in ensuring the satisfactory protection of all important trees present within the development site.

1.2. SITE

- 1.2.1. The site discussed within this report is located at:

The Maltings
The Street
Weybourne
Norfolk
NR25 7SY

2. ADMINISTRATIVE DETAILS

2.1. SCOPE OF DOCUMENT

- 2.1.1. This document consists of the following:

- Arboricultural Method Statement

- 2.1.2. Appendices included with this report are:

- Tree Protection Plan (P1910-TPP01)
- CEZ Notice
- Schedule of Arboricultural Supervision

2.2. PROJECT CONTACTS

Role	Name	Telephone	Email
Arboricultural Consultant	Ligna Consultancy Ltd	01284 598008	benjamin@lignaconsultancy.co.uk
Client	The Chestnut Group	-	-

2.3. AUTHOR

- 2.3.1. Jennifer Sinclair is a Technical member of the Arboricultural Association. She has worked in arboriculture for over twelve years, including supervisory roles

undertaking both domestic and commercial arboricultural work. She possesses a level 3 extended diploma in arboriculture and is currently furthering her academic knowledge by undertaking a level 6 professional diploma in arboriculture. A full CV and list of experience and CPD is available on request.

2.4. LIMITATIONS

- 2.4.1. Any engineering solutions presented within this document are recommendations for their suitability from an arboricultural viewpoint. The architect and structural engineers should make the final decision on the suitability of the methods advised.
- 2.4.2. Information provided by third parties, considered in the creation of this report, is assumed to be correct.

2.5. COPYRIGHT

- 2.5.1. This report was prepared for use by the Clients and their contractors for planning purposes. The report and its appendices may not be copied, modified, or distributed beyond the necessary parties without the written consent of Ligna Consultancy Ltd

3. RESPONSIBILITIES

3.1. DISTRIBUTION

- 3.1.1. It is important to ensure everyone involved in the planning and design of the proposed development is aware of this report and has access to a copy as soon as it is released.

3.2. RESPONSIBILITIES

- 3.2.1. Successful implementation of tree protection measures and long-term tree retention depends on coordination between the client and key personnel involved in the development.

- 3.2.2. The client and agent shall ensure that:

<ul style="list-style-type: none"> The site manager and all other personnel are provided with this document.
<ul style="list-style-type: none"> All planning conditions relating to underground works, services, trees, and landscaping are cleared before development commences.
<ul style="list-style-type: none"> All requirements of this Tree Protection Plan are adhered to.
<ul style="list-style-type: none"> The site manager is updated of any approved changes or variations to this document

- 3.2.3. The client and site manager shall ensure that:

<ul style="list-style-type: none"> A copy of this document with the plan is easily accessible for site personnel to refer to before and during the time construction activity is taking place.
<ul style="list-style-type: none"> All personnel working on the site are made aware of the tree protection plan and arboricultural method statements covering any activities they will undertake. This duty includes delegating the task of briefing personnel in the absence of the site manager.
<ul style="list-style-type: none"> The tree protection measures are left in place until the construction phase of development is completed, except with the written consent of the LPA.
<ul style="list-style-type: none"> Site personnel are updated of any approved changes or variations to the approved tree protection measures.
<ul style="list-style-type: none"> All personnel must work in accordance with this document at all times,

or in accordance with approved variation.

3.3. PROCEDURES FOR INCIDENTS

3.3.1. If any breach of the approved tree protection measures occurs the site manager must:

- The Local Planning Authority Tree officer or other Planning Officer and the Author of this report shall be notified.
- The site manager must be informed immediately.
- Swift action must be taken to halt the breach and prevent any further breach.
- Damage mitigation measures appropriate to the scale of the incident will be deployed where required.

3.4. PROHIBITED ACTIVITIES

3.4.1. The following must not be carried out under any circumstances:

- Cutting down, uprooting, damaging or otherwise destroying any retained tree.
- Lighting a fire within 10 metres of the canopy of any retained tree.
- Equipment, signage, fencing, tree protection barriers, materials, components, vehicles or structures shall not be attached to or supported by a retained tree.
- Mixing cement, chemical toilets and other use or storage of anything that would be harmful to trees shall not take place within, or close to a Root Protection Area (RPA). The distance away from the RPA must be sufficient, and the slope of the site must be such that contamination of soil in the RPA would not occur if there were spillage, seepage or displacement.
- No plant or equipment or vehicle with a hydraulic arm such as a mini digger shall be operated within striking distance of the stem and branches or the RPA of any retained tree unless otherwise specified in this report.

3.4.2. No alterations or variations shall be made to the approved tree protection measures without written approval from the LPA.

4. PHASING

4.1. PHASING OF DEVELOPMENT

4.1.1. The development should be carried out in the following order (see table 1) unless otherwise agreed in writing with the LPA. Each step should be completed before moving onto the next.

4.1.2. The general responsibilities described in section 3 of the report must be implemented for the entire time that the site is undergoing development related works. However, the additional precautions detailed in the following arboricultural guidance notes (AGN) must be implemented at the stage indicated below.

Stage	Arboricultural Guidance Note	Plan
Facilitative Tree Works	* Works should be undertaken by suitably qualified and insured arborists, in line with 'BS 3998:2010 Tree Work. Recommendations'	Arb Site Plan (Proposed) (P1910-ASP02 V1)
Pre-Commencement	AGN1 – Installation of Tree Protection Barriers AGN2 – Installation of Temporary Ground Protection	Tree Protection Plan (P1910-TPP01 V1)
Site Clearance & Demolition		
Groundworks & Installation of Foundations	AGN3 – Installation of No-Dig 3D Cellular Carpark Surfacing	Tree Protection Plan (P1910-TPP01 V1)
Construction		
Removal of Tree Protection Measures	* Tree protection measures may be removed	
Landscaping		

Table 1 – Timing and implementation of specific arboricultural measures

5. TREE WORKS

5.1. TREE WORK REQUIREMENTS

5.1.1. The following tree work should be undertaken following acceptance of planning permission. These works should be undertaken by suitably qualified and insured arborists.

5.1.2. Work specification:

Tree Ref.	Tree Works
T2	Crown lift eastern and southern crown to provide 4.5m clearance with the ground.
T11	Remove
T14	Crown lift to provide 3.5m clearance with the ground and reduce by 2m in height and laterally.
T15	Crown lift to provide 3.5m clearance with the ground and reduce by 2m in height and laterally.
T17	Remove
G1	Crown lift southern crown to provide 4-4.5m clearance with the ground and reduce by 1-2m.
S4	Remove

Table 2 – Facilitation Tree Works

5.1.3. The location of the trees can be seen on the Arboricultural Site Plan (P1910-ASP02). Trees selected for removal will be shown with a dashed canopy outline.

6. ARBORICULTURAL GUIDANCE NOTES

AGN1 – INSTALLATION OF TREE PROTECTION BARRIERS

OUTLINE

Tree protection barriers must be installed so as to ensure that damage does not occur to the rooting areas, stems, and canopies of retained trees.

INSTALLATION METHODOLOGY

- i) The barriers shall be installed and removed in accordance with the timing of operations in section 4.1 and laid out in accordance with the appended Tree Protection Plan.
- ii) The “CEZ Notice” provided, should be used to create weather-proof notices that must be attached to the tree protection barriers at suitable intervals.
- iii) If any panel or support becomes damaged, immediate reinforcement must occur by adding panels in, compliant with the specification detailed below.
- iv) The default heavy-duty tree protection barrier specification is a vertical and horizontal scaffold framework, braced to resist impacts, as per *Figure 1*. The vertical tubes are spaced at a maximum interval of 3 metres and these are driven securely into the ground. Welded mesh panels are securely attached to the frame. During installation, it is important to consider the position of below ground services and structural roots, which must not be damaged. Where these constraints prevent the use of this specification, an alternative specification is given below.
- v) Alternative heavy-duty tree protection barrier design - 2-metre-tall welded mesh panels standing in rubber or concrete feet joined using a minimum of two anti-tamper couplers installed, so they can only be removed from inside the protected area. The fence couplers should be spaced at least 1 metre apart, but uniformly across the whole barrier. These panels must be supported within the protected area with struts attached to a base plate secured by ground pins as per *Figure 2a*.
- vi) Where the fencing is installed above retained hard surfacing and/or it is otherwise not feasible to use ground pins (e.g. due to underlying services or structural roots), the struts can be mounted on a block tray as per *Figure 2b*.
- vii) Arboricultural Sign-off – Following the installation of the barriers, the project’s arboricultural expert must confirm that they have been correctly laid out.

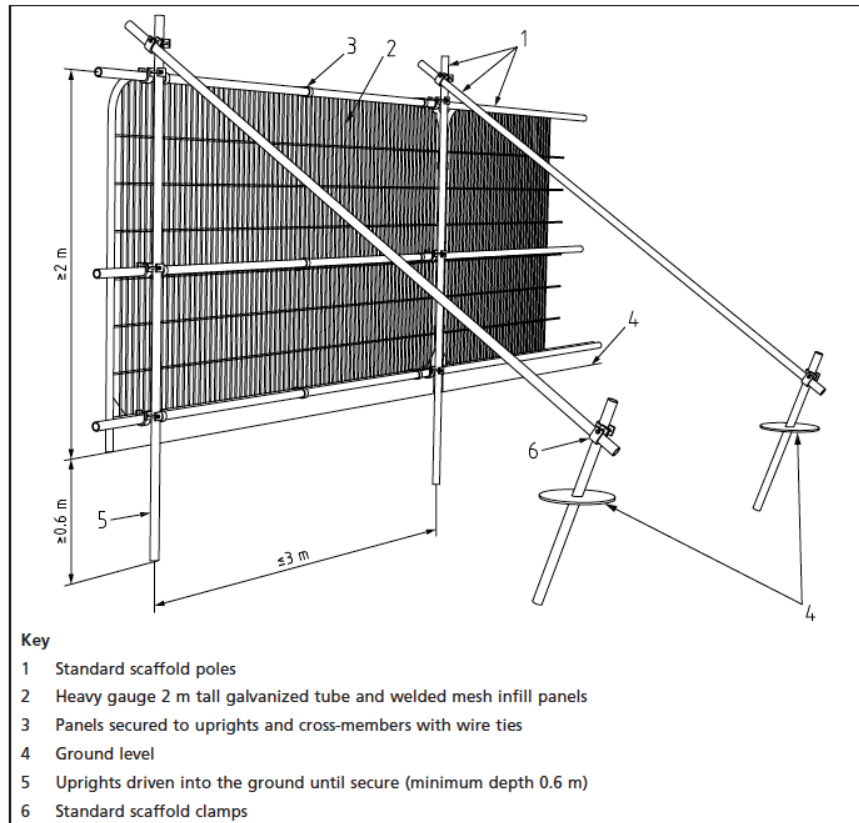


Figure 1 – Conventional tree protection barrier specification (source - BS 5837:2012 Section 6)

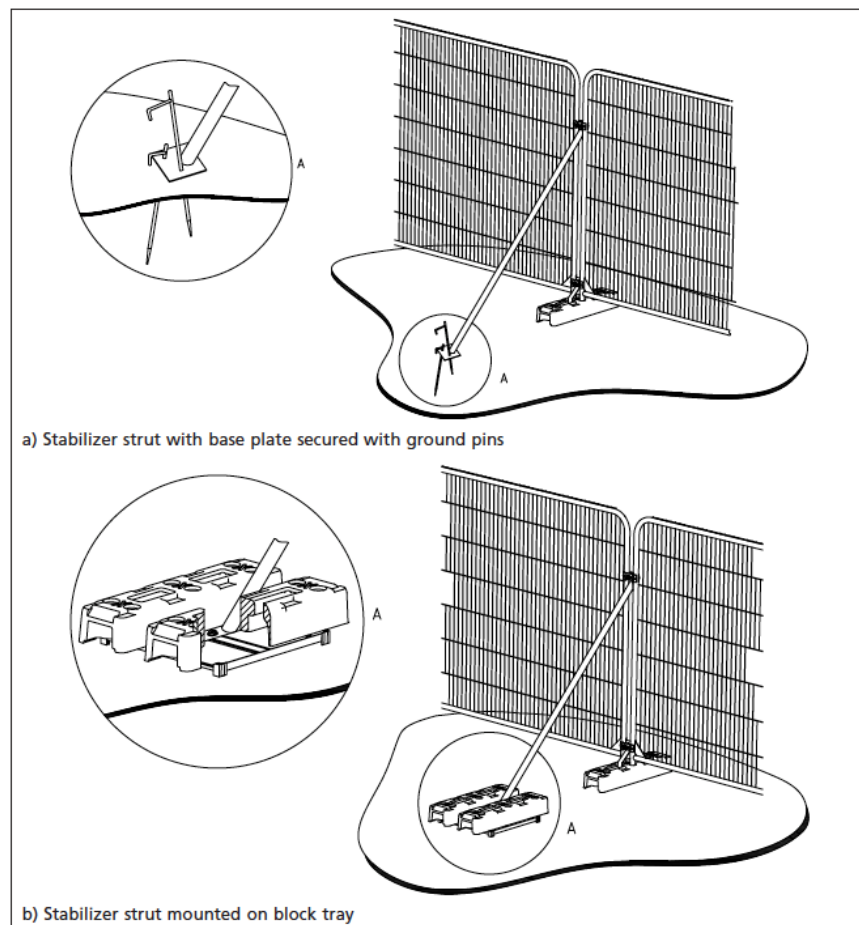


Figure 2 – Above ground stabilising systems (source - BS 5837:2012 Section 6)

RECOMMENDED PRODUCTS

Product Type	Product Name	Supplier	Website
Tree Protection Barriers	Heras	Heras	https://www.heras-mobile.co.uk/fencing/mesh-panels

AGN2 – INSTALLATION OF TEMPORARY GROUND PROTECTION

OUTLINE

Prior to the start of any construction activities, temporary ground protection measures must first be installed as per the associated Tree Protection Plan. This will prevent any construction traffic from causing compaction damage to tree roots during the construction process.

INSTALLATION METHODOLOGY

- i) A geotextile membrane must be laid over the area to be protected with temporary ground protection.
- i) A compression layer of 100mm deep coarse building sand or woodchip must be spread over the geotextile membrane.
- ii) Interlocking ground protection matting or two overlapping layers of 12mm thick plywood must then be installed atop the compressive layer.
- iii) Once installed, this should be signed-off by the project's arboricultural consultant.

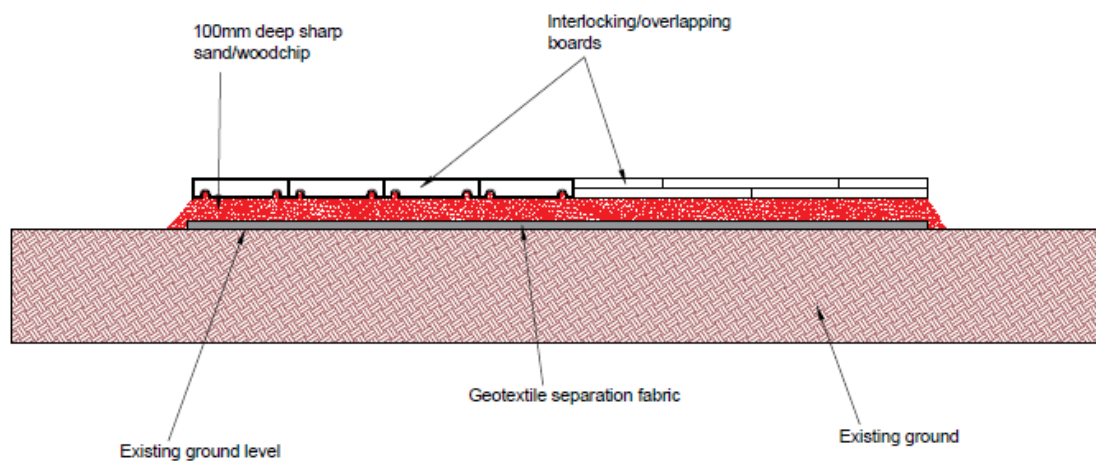


Figure 3 – Diagram of temporary ground protection setup.

AGN3 – INSTALLATION OF NO-DIG 3D CELLULAR SURFACING

OUTLINE

New surfacing is to be installed within the RPAs of T12, T14, T15, and G1, therefore, specialist no-dig surfacing is to be used.

A no-dig 3D cellular system allows for robust surfacing to be installed within a root protection area without harming the roots and overall health of retained trees. These systems ensure that minimal soil compaction occurs during installation and use.

Owing to the nature of no-dig surfacing, the FSL of the driveway will be increased by >150mm (minimum cellular system depth). Owing to this, any areas of adjacent standard construction surfacing will need to be raised to match.

The selected system must be specified by the manufacturer and installed as per their instructions. The following guidance is intended as an outline only.

INSTALLATION METHODOLOGY

- iv) Ground protection may be removed in the areas that are to be surfaced. Once removed, no machinery or vehicles may be present on the unprotected ground at any time.
- v) A geotextile membrane will be laid over the area to be surfaced (see manufacturer's recommendations).
- vi) The cellular system (150mm Cellweb TRP) will be spread out and pinned into the ground. Wooden edge retention boards will then be pinned into place.
- vii) The pinned down geocells must then be filled with a 20-40 / 4-20mm clean crushed stone (confirm exact spec. with manufacturer). This will be achieved with any machinery working forward onto the surface as it is constructed (known as "rolling out").
- viii) The system can now have a porous finishing surface added above (indicative cross section below).

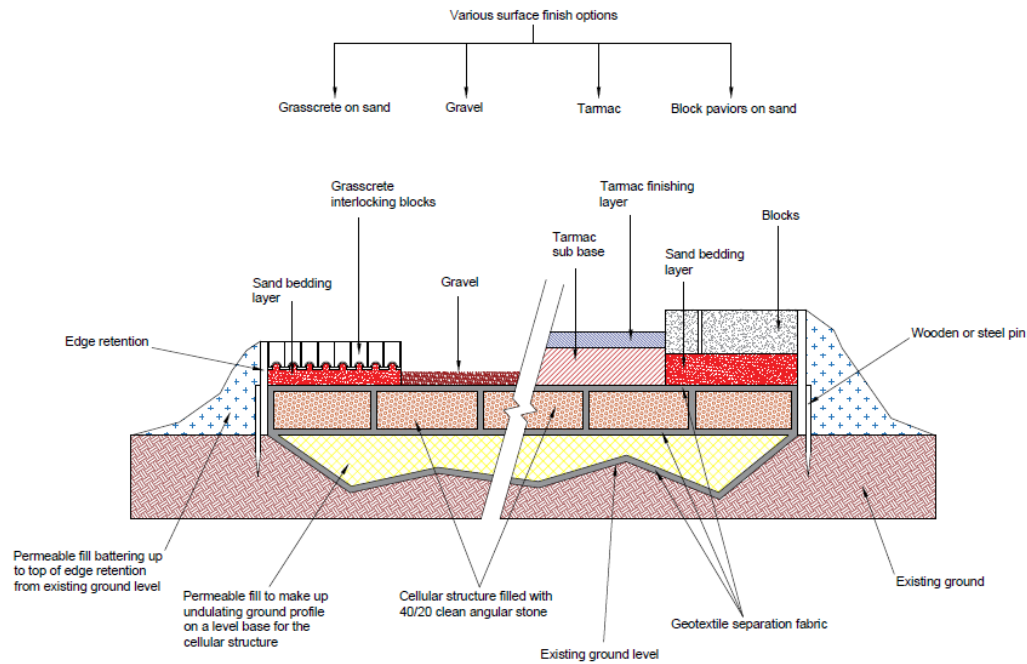


Figure 4 - Diagram showing the methodology behind the installation of three-dimensional cellular matting (Cellweb)

RECOMMENDED PRODUCTS

Product Type	Product Name	Supplier	Website
3D Cellular Confinement System	Cellweb TRP	Geosynthetics	http://www.geosyn.co.uk/product/cellweb-tree-root-protection

7. APPENDICES

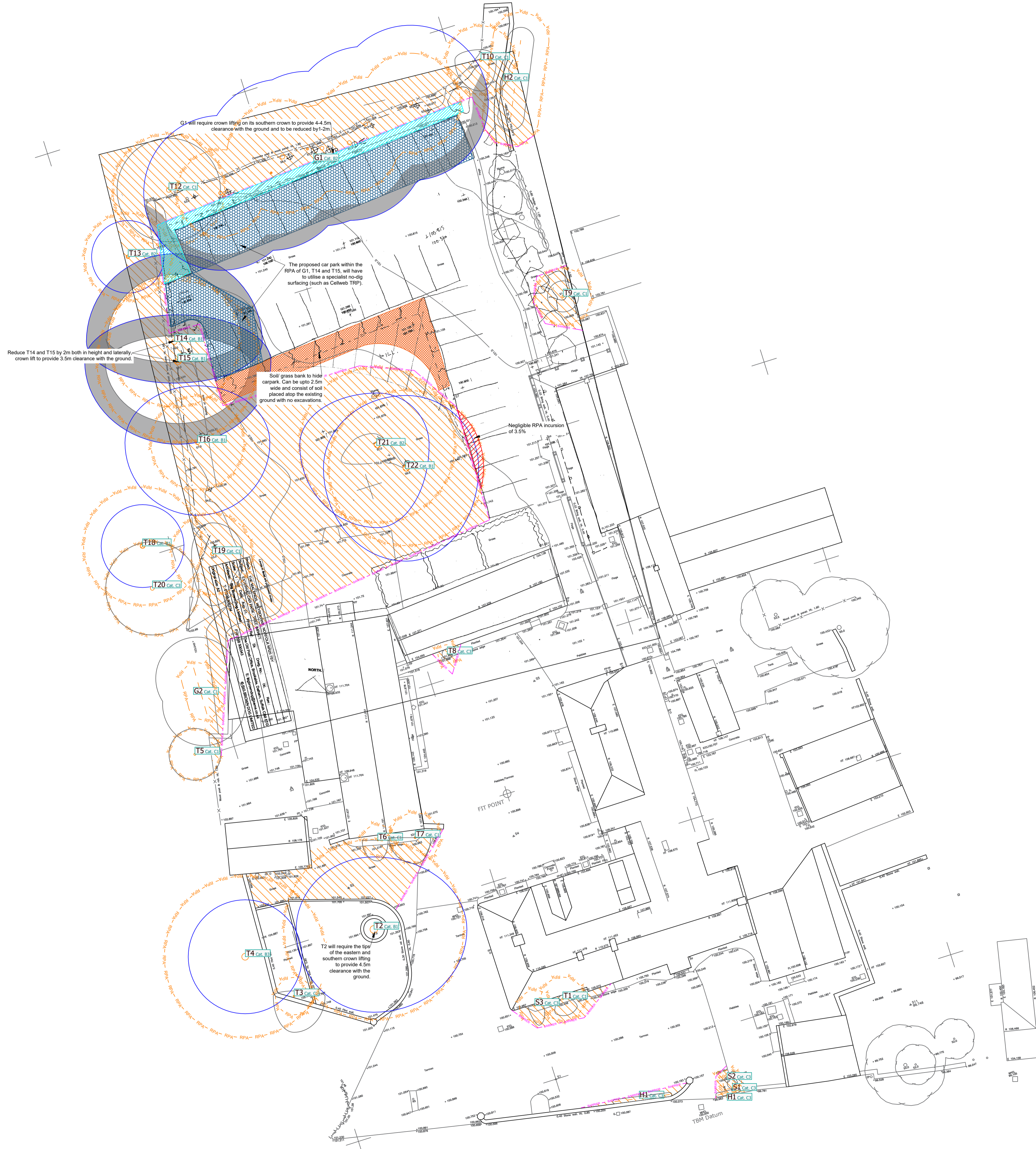
7.1. APPENDICES

7.1.1. The following appendices should be used in conjunction with this document:

Appendix	Document	Reference
1	Tree Protection Plan	P1910-TPP01 V1
2	CEZ Notice	n/a
3	Schedule of Arboricultural Supervision	n/a

APPENDIX 1

TREE PROTECTION PLAN



Reduce T14 and T15 by 2m both in height and laterally crown lift to provide 3.5m clearance with the ground.

Soil grass bank to hide carpark. Can be upto 2.5m wide and consist of soil placed atop the existing ground with no excavations.

Negligible RPA incursion of 3.5%

T2 will require the tips of the eastern and southern crown lifting to provide 4.5m clearance with the ground.

Use of This Document

This document should be viewed in conjunction with the relevant arboricultural method statement and must be implemented as stated for the duration of the site's development. Failure to do so may result in breach of planning, and damage to protected trees, potentially resulting in fines. Any queries regarding the trees on site should be addressed by Ligna Consultancy Ltd 01284 598508 / info@lignaconsultancy.co.uk

Root Protection Areas

The enforcement of root protection areas (RPAs) is vital for the successful retention of a site's trees during the development process. RPAs that are not covered by ground protection must not be subjected to the following activities unless otherwise stated within the Tree Protection Plan or Arboricultural Method Statement:

- materials storage
- pedestrian / vehicular movement
- excavation or soil level increase
- installation of new surfacing
- car parking
- mixing of cement
- any other encroachment

Should any issues arise from the enforcement of root protection areas restricting necessary site works, the site manager should be informed, and the project's arboricultural contacted.

	Root Protection Area (RPA) - The natural area around each tree which should be left undisturbed during the development of the site.		Construction Exclusion Zone - No access allowed by any person, machinery, or material.
	Allowable RPA Incursion - Allowable incursion into the root protection area. Root pruning may be required (see Arboricultural Method Statement).		Root Pruning - Roots to be pruned. Root pruning may be required (see Arboricultural Method Statement).

Tree Protection Measures

	Tree Protection Barrier (TPB) - (Refer to Technical Specifications)		Tree Protection Barrier (TPB) - (Refer to Technical Specifications)		Stem Protection - (Refer to Technical Specifications)		Ground Protection - (Refer to Technical Specifications)
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Specialist Measures (Refer to Technical Specifications)

	No-Dig 3D Cellular System - (Refer to Technical Specifications)		Crate System - (Refer to Technical Specifications)		Pile/Scruphys Foundation - (Refer to Technical Specifications)		Specialist Foundation - (Refer to Technical Specifications)
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The Maltings

The Chestnut Group

Tree Protection Plan

Project Ref: P1910-TPP01 | V1 | Date: 12/10/2022

Scale: 1:200 - A1 | Drawn by: J. Sinclair

Proposed Site Plan

All dimensions should be checked on site. No dimensions to be relied upon for this drawing. Please refer to the Arboricultural Method Statement for further details. Ligna Consultancy Ltd is not responsible for any damage to trees or structures which may occur as a result of the works. The drawings are prepared for the purpose of the layout or design of the site and are not intended to be used for any other purpose.

An arboricultural method statement should be submitted to the local authority for approval. The arboricultural method statement should be submitted to the local authority for approval. The arboricultural method statement should be submitted to the local authority for approval.

This drawing was produced in AutoCAD. A professional copy should not be relied upon.

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APPENDIX 2 CEZ NOTICE

NO ENTRY



CONSTRUCTION EXCLUSION ZONE

This area contains trees which must be protected as part of the planning permission. Additional legal protection may also apply e.g. a Tree Preservation Order.

Removing or damaging trees in this area may be a breach in planning permission. Damage to protected trees may lead to a criminal conviction and / or a fine.

Should any issues arrive regarding the tree protection or its layout, please contact Ligna Consultancy Ltd for advice:

info@lignaconsultancy.co.uk
01284 598008

APPENDIX 3

SCHEDULE OF SUPERVISION

APPENDIX 3 – SCHEDULE OF ARBORICULTURAL SUPERVISION

Date:

Planning Ref:

This statement is to confirm that of has undertaken the following supervision activities for the development at The Maltings; ensuring that any deviation from the approved tree protection scheme is recorded and appropriate action is undertaken.

Liability for any failure of compliance will remain with the client.

Arboricultural Sign-Off

The correct installation of the approved tree protection measures must be confirmed by the project’s arboriculturalist in the table below. No further demolition or construction activities may occur until approval has been given by the project’s arboriculturalist.

Failure to abide by the following schedule may result in a breach of planning. Any deviation from the agreed upon protection measures must be reported to the project arboriculturalist immediately.

Activity	Date of Visit	Protection Measures Compliant	Remedial Action Required
Pre-commencement site meeting			
Sign-off of correct installation of tree protection measures (pre-construction)			
Installation of No-dig 3D Cellular System			



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