

**Protective Fencing**

To be erected prior to the commencement of all works on site, and retained in place throughout construction.  
**Default specification:** To comprise either 2.4m wooden site hoarding, or a 2.3m high scaffolding framework comprising of vertical and horizontal framework, well braced to resist impacts, with uprights to be spaced at a maximum of 3.0m intervals and driven into the ground by a minimum of 600mm. On this, standard anti-climb welded mesh panels are to be securely fixed to each other with at least two scaffold clamps and to the scaffold framework with wire.  
**Secondary Specification:** To comprise of 2m tall welded mesh panels on rubber or concrete feet. Panels are to be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The panels should be supported on the inner side by stabilizer struts, which should be attached to a base plate and secured with ground pins.  
 All weather notices should be erected at regular intervals on the weld mesh panels with words such as "Construction exclusion zone - Keep out".

**Construction Exclusion Zone**  
**KEEP OUT**  
 Do not move this fence

(TOWN & COUNTRY PLANNING ACT 1990)  
**TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECT OF A TREE PRESERVATION ORDER. CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION**  
 ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY



**Ground boarding**

New temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil.

Note The ground protection might comprise one of the following:

- a) for pedestrian movements only, a single thickness of 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;
- b) for pedestrian-operated plant up to a gross weight of 2t, 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;
- c) for wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. 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.

For situations other than those described in a) or b), the ground boarding is to be designed by a suitably qualified person to an engineering specification in conjunction with arboricultural advice, to be able to support the expected loading to be placed upon it.

In all cases, the objective of the ground boarding is to avoid compaction of the soil beneath, so that tree root function remains unimpaired.

**Supervised Excavation**

All excavations within and immediately adjacent to RPAs are to be undertaken under direct on-site arboricultural supervision.

Any roots that are to be cut will be cleanly severed by the project arboriculturalist using a suitable hand saw or secateurs. The edge of all excavation closest to the retained trees will be covered over with damp hessian to prevent drying out, and where necessary be shuttered to prevent soil collapse or contamination by concrete. If appropriate soil beneath the depth of the excavation may be sheet piled, regular piled or have individual piles installed.

**Manual excavation:**  
 Excavations within the RPAs will be initially undertaken by hand under direct on-site arboricultural supervision to a minimum of 600mm deep (to be confirmed by the project arboriculturalist), whether its is for proposed foundations, hard surfacing or underground services. The soil is to be loosened with the use of a fork or pick and/or air-spade and then cleared with a shovel and/or the aid of an air-spade and air-vac.

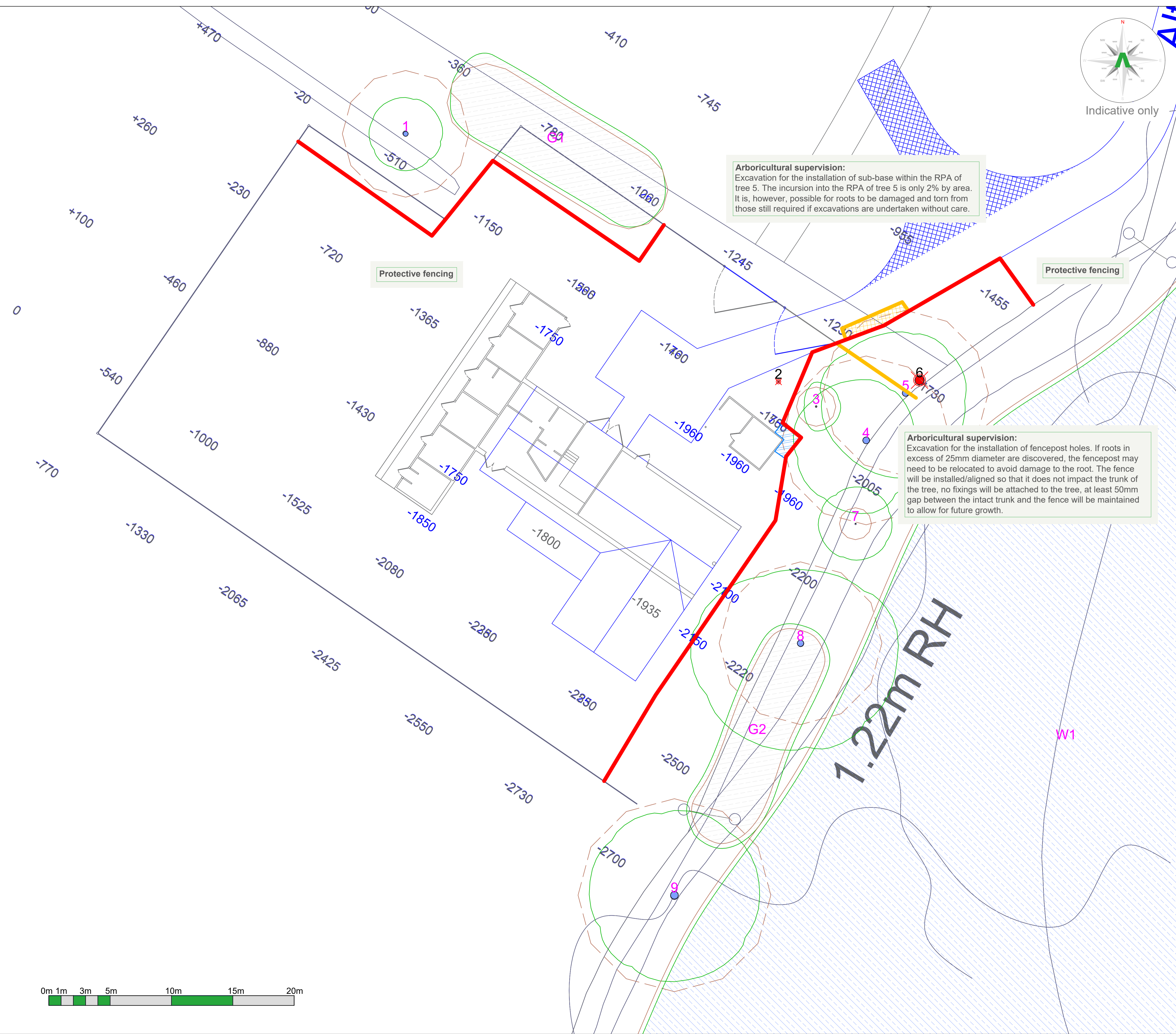
**Mechanical excavation:**  
 Excavation within the RPAs will consist of a mixture of mechanical and manual excavation. Where an excavator is used it will be fitted with a suitably sized toothless grading bucket, using a grading / scraping motion rather than digging. During each motion the excavator will not be permitted to remove no more than 10 - 20mm deep of soil in any one pass. If any roots are discovered, mechanical excavation will immediately be stopped and manual excavation will take over to expose the root. Upon the root being uncovered and either severed or protected the excavations can then continue. Any excavator or other machinery that is to be used will be situated outside of the RPAs of all retained trees or on top of a suitable ground protection.  
 Where an excavator or any other machinery is to be used within RPAs or beneath canopies the project arboriculturalist will clearly instruct the operator about what they want and expect to happen prior to any works may commence.

**Arboricultural Supervision**

- The arboricultural consultant will be required to attend site to directly supervise all demolition and construction works that have to be undertaken within the root protection areas. This will include:
1. Pre-commencement site meeting.
  2. Location of protective measures.
  3. Supervised excavations for installation of hard surfacing and edging within notional RPA of tree no.5.
  4. Supervised excavations for the installation of fence posts with the RPAs of trees 4 & 5.
  5. Any demolition and/or excavations within or adjacent to RPAs, including foundations, hard surfacing or underground services (a non-exhaustive list).
  6. Arboricultural sign off and removal of protective measures.

**Arboricultural Method Statement**

Please refer to Arbttech Consulting Ltd. Tree Schedule and Arboricultural Method Statement, for full details on all surveyed trees and how all aspects of the the development maybe implemented without detriment to retained trees.



**Arboricultural supervision:**  
 Excavation for the installation of sub-base within the RPA of tree 5. The incursion into the RPA of tree 5 is only 2% by area. It is, however, possible for roots to be damaged and torn from those still required if excavations are undertaken without care.

**Arboricultural supervision:**  
 Excavation for the installation of fencepost holes. If roots in excess of 25mm diameter are discovered, the fencepost may need to be relocated to avoid damage to the root. The fence will be installed/aligned so that it does not impact the trunk of the tree, no fixings will be attached to the tree, at least 50mm gap between the intact trunk and the fence will be maintained to allow for future growth.

**Tree Work Schedule**

No.	Species	Works	Category
2	Common Hawthorn	Fell tree to ground level, remove stump	C1
8	Common Hornbeam	Fell tree to ground level, remove stump	U

All tree work is to be undertaken in accordance with British Standard BS 3998:2010 Tree work - Recommendations.  
 All arising's are to be removed and the site is to be left as found. Care is to be taken of the ground around retained trees to make sure that it does not become compacted as a result of tree surgery operations. No equipment or vehicles such as timber lorries, tractors, excavators or cranes shall be parked or driven beneath the crowns of any retained trees, to prevent subsequent compaction and root death.

Rev:	Date:	Notes:
A	28/08/19	Tree work schedule

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**Project:**  
 SPARROW FARM,  
 NEWGATE STREET VILLAGE,  
 HERTS,  
 SG138QR

**Client:**  
 TRISTAN WILTSHIRE

**Drawing:**  
 Tree Protection Plan

**Based on:**  
 1731-07g

**Drawing No:** Arbttech TPP 01 **Rev:** A

**Date:** July 2019 **Scale:** 1:150 @ A1 **Drawn:** JCH

**Key:**

Tree Nos.:	1	Tree Canopies:	Trunks:
RPAs:	Category 'A' trees:	Category 'B' trees:	Category 'C' trees:
Category 'B' groups:	Category 'C' trees:	Category 'C' groups:	
Trees to be removed:	Existing site plan:	Proposed site plan:	
Protective fencing:	Ground boarding:	Arboricultural supervision:	Excavations:

All dimensions should be checked on site. No dimensions are to be scaled from this drawing. Please notify us of any discrepancies found. Arbttech Consulting Ltd. cannot be held responsible for inaccuracies in the base drawing in which this plan is based. This drawing is designed to reflect the principles of the layout or design only, and relates only to the protection of trees. This drawing is not to be read as a definitive part of the engineering or construction design or method statement. An architect or structural engineer should be consulted over any matters of construction, detailing or specification, and for any standards or regulatory requirements relating to proposed structures, hard surfacing or underground services. This drawing was produced in colour - a monochrome copy should not be relied upon.  
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