

**Ground Protection**

**Tree Protection Fencing**

**NOTES** - Where works to trees are proposed on site, or to overhanging vegetation to enable construction, this shall be undertaken by qualified tree surgeon in accordance with the requirements of BS3998:2010, prior to the installation of Protective Fencing.

Retained trees and vegetation, either within the site or on adjacent land, shall be protected where necessary during works by 2300mm high mesh panel (Heras type) fencing secured to a scaffold tubing framework or supported on a suitable base pinned into the ground and connected by none tamper fixings.

Protective fencing shall be erected outside the canopy drip-line or beyond the minimum Root Protection Area (RPA) distance wherever possible. The tree works & fencing works shall be carried out prior to any demolition, groundworks, construction works.

Laminated, waterproof A4 signs shall be fixed to the fence posts at 10m intervals bearing the words 'CONSTRUCTION EXCLUSION ZONE - NO STORAGE OR OPERATIONS WITHIN FENCED AREA' as per the example on the plan.

**PROTECTION OF CONSTRUCTION EXCLUSION ZONE**

Inside the exclusion area of the fencing, the following prohibitions shall apply: -

- No mechanical excavation whatsoever.
- No excavation by any other means without arboricultural site monitoring.
- No hand digging without a written Method Statement approved in writing by the Project Arborist.
- No lowering of levels for any purpose (except removal of grass sward using hand tools).
- No construction of a sealed hard surface - except where agreed with the Project Arborist.
- No storage of plant or materials.
- No storage or handling of any chemical, including cement washings.
- No vehicular access.

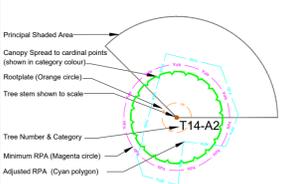
No fire lighting. In addition to the above, further precautions are necessary adjacent to trees: -

- A 10m separation distance shall be observed between any tree and substances injurious to tree health, including fuel, oil, bitumen, cement (including cement washings), builders' sand, concrete mixing and other chemicals.
- No fire shall be lit such that flames come within 5m of tree foliage; this shall be taken to mean a fire separation distance of 20m from any tree's canopy.

ALL WORKS AFFECTING TREES SHALL BE SUBJECT TO THE REQUIREMENTS OF BS5837:2012.

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**Individual Tree Symbols**



**Tree Protection Methods**

**Construction Exclusion Zone (CEZ)**  
Indicated by the red Net Hatching. These are 'NO-GO ZONES' for site works, storage and operatives. To be protected by appropriate Fencing and/or Ground protection. These areas shall be identified with signage.



**Tree Precautionary Zone (TPZ)**  
Indicated by Blue shading. Tree root activity is likely in these areas and will need to be appropriately protected before the start of the works. Materials and methods need to limit excavation, root loss or damage to soils.



**High Risk Tree Protection Fencing Type 1 (TPF)**  
Indicated by the red line. This is to be provided by Braced Heras Fencing or solid panels. Post-holes shall be excavated by powered hand auger or low ground-pressure plant working of ground protection or outside the Precautionary Zone.



**DO'S TREE PROTECTION DON'TS**

Trees add value to the site, provide shade, improve habitat, improve air quality and are typically protected as part of any planning approval, so their protection is in everyone's interest to avoid costly stoppages and damage.

**TREE ROOTS**

Spread out a lot further than the branches over a large area and are usually found close to the surface of the soil, making them susceptible to damage.



To help trees survive any proposed changes a minimum amount of undisturbed rooting area needs to be protected or provided to help the tree feed itself and survive this can easily be done by creating a Construction Exclusion Zone. These are normally detailed on a Tree Protection Plan or detailed within an Arboricultural Method Statement. Please look at these before you start work to understand what fencing and ground protection are to be used where.



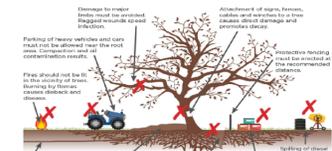
- Tree Protection is not a puzzle, everything you need is on the Tree Protection Plan or can be found in the Arboricultural Method Statement.
- Before work starts erect and maintain the correct fencing and ground protection.
- Tree protection is usually a planning condition and breaches can result in a stop notice, prosecution or fines.

Tree damage can be avoided, if in doubt ask for help. Help avoid costly shut downs and financial penalties.

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**TREES ROOTS**

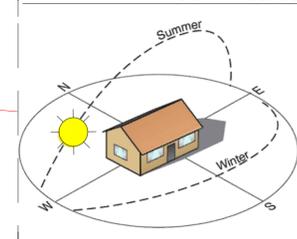
Many people believe tree roots extend as deep as the tree is high, or simply plug into the ground like a carrot, which is untrue. We must all avoid any unauthorised damage to trees. The use of properly positioned protective fencing can prevent tree deaths occurring.



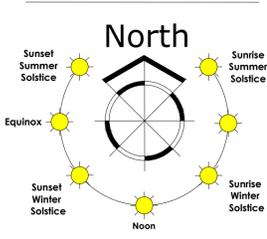
**RESULTS OF BREACHING THE CEZ**

- **Soil Compaction** Starves roots of oxygen and nutrients and increases water run off the site.
- **Excavation** Cuts or damages the roots, which can affect a tree's health or stability.
- **Turf or Soil Removal** Even shallow excavations can remove or damage fine feeder roots.
- **Canopy/Branch Damage** Limits food production and encourages pest or disease.
- **Chemical Spill Including Cement** Kills roots, starving the tree oxygen, water and nutrients.
- **Fires** Scorch and burn leaves, stems and branches.

**Indicative Sun Path / Altitude**

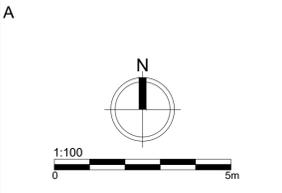


**Indicative Sun Rise / Set**



Notes:  
Plan is based upon the supplied topographical Survey Plan. Copies of this plan are available in CAD Formats .dwg & .dxf upon request.

Revision	Description
12/07/2023	Preliminary Issue



**Hemingway Design House**

Project: **Upper Quarry Road**

Title: **Tree Protection Plan**

Drawing No: **BA23077TPP** Status: **P**

Scale: **1:100 @ A1**

Date: **12/07/2023**

Drawn By: **MM** Check: **SB** Approved: **SB**



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