

Example Tree Protection Fencing Sign

Tree Protection Area

Keep Out!

ALL TREES ENCLOSED BY THIS BARRIER ARE PROTECTED BY PLANNING CONDITIONS (TOWN & COUNTRY PLANNING ACT 1990) AND ARE THE SUBJECTS OF A TREE PRESERVATION ORDER, CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION

THE FOLLOWING MUST BE OBSERVED BY ALL PERSONNEL

- THE PROTECTIVE FENCING MUST NOT BE MOVED
- NO PERSON SHALL ENTER THE PROTECTED AREA
- NO MACHINE OR PLANT SHALL ENTER THE PROTECTED AREA
- NO MATERIALS SHALL BE STORED IN THE PROTECTED AREA
- NO SPOIL SHALL BE BEPOSITED IN THE PROTECTED AREA
- NO EXCAVATION SHALL OCCUR IN THE PROTECTED AREA

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY

L-Shape wall and Gabion wall construction

Walls to be constructed as shown on the inset images top right.

'Toe' of the L-shaped wall to be facing north towards property.

Before excavation for wall foundations, a ground saw will be run in the position shown by the blue line to cleanly sever possible roots to a depth of 600mm.

Excavations to be undertaken from the north and west of the proposed wall and only up to the extent of this sawn line. Any exposed roots will be cut by hand cleanly using hand tools to the face of the excavated soil.

An impermeable membrane will be installed between concrete and soil within the RPA to avoid leachates affecting retained roots.

Zone of Infringement (ZOI)

The proposal impacts on T21's Root Protection Area by an estimated 8.7% which allows for a 2m batter from the back of the 2m high L-shaped wall, a 3.65m batter from the back of the 2.4m high gabion wall (to allow for 45° batter from base of foundation) and 2m batter for the 750mm high gabion wall.

See inset wall design cross sections.

This infringement is thought to be defensible using traditional techniques if adequate fencing and ground protection is installed to prevent damage to the remaining RPA.

The effect on the tree is assumed to be minimal as the RPA could in reality be smaller due to the trees past management, i.e pollarding at a height of 9m.

Sequence for tree Protection during Development.		
Construction Phase	Key Elements to be Agreed	Phase Sign Off & Reporting
PHASE 1 PRE-DEVELOPMENT STAGE	- Access, Protection, Methods & Materials - Tree survey to improve safety & viable access. - Location & method of Tree Protection Measures and the creation of the Construction Exclusion Zones (CEZ). - Location of site compound, WCs, materials storage, soil heaps and waste. - Protection methods and material changes within the Tree Precautionary Zones (TPZ).	- Record of meeting circulated to interested parties. - Protection methods to be SIGNED OFF by Project Arborist following installation and BEFORE COMMENCEMENT of the project. - Record site inspection circulated to interested parties.
PHASE 2 DEVELOPMENT STAGE	- Protection methods and techniques. - Equipment for groundworks. - Access to adopt low impact excavation. - Preventing soil changes. - Continuing access and material changes within the Tree Precautionary Zone. - Continuing access and material changes within Construction Exclusion Zone.	- Record of meeting circulated to interested parties. - Protection methods to be SIGNED OFF by Project Arborist BEFORE COMMENCEMENT. - Record of site inspection circulated to interested parties.
PHASE 3 FINAL DEVELOPMENT STAGE	- Sequence of Tree Protection removal. - Areas of Cultivation & Soil Level changes. - Methods of cultivation. - Materials & storage.	- Record of meeting circulated to interested parties. - Landscaping to be SIGNED OFF by Project Arborist BEFORE COMMENCEMENT. - Record of site inspection circulated to interested parties.
PHASE 4 POST-DEVELOPMENT STAGE	- The health state of the retained and new trees. - Identify site amelioration or works to help improve or maintain tree health and safety.	Record of site inspection circulated to interested parties.



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.

TREES ROOTS

Many people believe tree roots extend as deep as the tree is high, or simply plug into the ground like 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.

Warning

Construction site

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.

Table 2 -Tree Protection Fencing (TPF) types.			
Protection Methods		Required	Phasing & Schedule
BARRIER – TPF1 TREE PROTECTION FENCING HIGH RISK AREAS			TPF1 – TREE PROTECTION FENCING. This is to be provided by Braced Harres Fencing or solid panels. Post-holes shall be excavated by poweraxe hand auger or low ground-pressure plant working of ground protection or outside the Precautionary Zone. - Tree Protection Fencing (TPF1) installed to protect trees prior to excavation or soil movement - Installed in High Risk Areas during Demolition and Build Phase.
	SITE MONITORING – PROJECT ARBORICULTURIST		 - Assessment to be undertaken as outlined in Table 2 Site Supervision Schedule - Findings circulated to all interested parties throughout the active project.

Tree Precautionary Zone (TPZ) Management within the Root Protection Area (RPA).			
Protection Methods		Required	Phasing & Schedule
GROUND PROTECTION – GP3 – PEDESTRIAN 			NODIG – GROUND PROTECTION GP3. If access for Pedestrians is required within the RPA, across grass, exposed soil or works are undertaken outside the existing hard surfacing near retained trees. Several methods can be used including: Proprietary Boarding installed with compressible sub-surface.
			SITE MONITORING – PROJECT ARBORICULTURIST

Construction Exclusion Zone (CEZ)

No soil level changes, regrading of soils, storage of materials/vehicles etc or fires within the CEZ.

Tree Precautionary Zone

If fencing is positioned within RPAs of retained tree T21, then fencing will adopt small diameter posts and holes will be protected with Visqueen or similar to limit leaching into the rootzone.

Fencing to be undertaken from Ground Protection Boarding type GP3 and only done after the main construction is complete, as part of the landscaping Phase.

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.

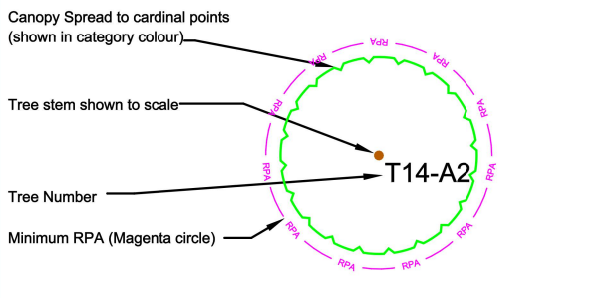
No fire lighting. In addition to the above, further precautions are necessary adjacent to trees: -

- 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



BS5837 - Conditional Colour Code

- A - High Quality Tree or Group
- B - Moderate Quality Tree or Group
- C - Low Quality Tree or group
- U - Unsuitable for Retention

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.

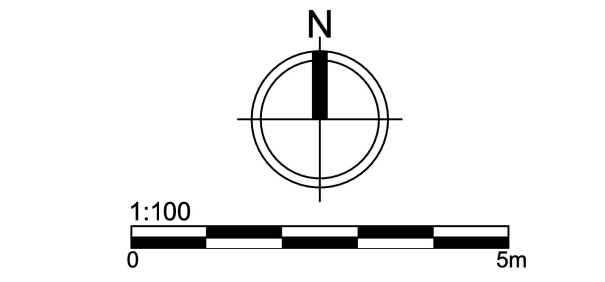
High Risk Tree Protection Fencing Type 1 (TPF1)
Indicated by the red line. This is to be provided by Braced Heras Fencing or solid panels. Post-holes shall be excavated by powered hand auger or low ground-pressure plant working of ground protection or outside the Precautionary Zone.

Tree Protection Fencing Distance Markers.
Magenta arrows with distance indicating offset distances from trees to fence lines

Zone of Infringement- (ZOI)
Indicated by Magenta shading. Areas of conflict within RPA's of retained trees.

Notes:
Plan is based upon the supplied topographical Survey Plan and the information within the Ecus Ltd BS5837 report ref: 19321 V4.0.
Copies of this plan are available in CAD Formats .dwg & .dxf upon request.

Revision	Description
B	05/11/2024 Retaining walls re-designed and repositioned



Client:	Newett Homes		
Benefit of:			
Project:	Condition 15 - Penistone Rd, Fenay Bridge		
Title:	Arboricultural Method Statement		
Drawing No:	BA230768AMS	Status:	P
Scale:	1:100 @ A1		
Date:	05/11/2024		
Drawn By:	TG	Checked:	SB

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