

Tree Protection Plan

Site - Leiros Park
Project Ref - 295.5
Drawing Title - Tree Protection Plan
Drawing Scale - 1:1250 @ A2 Print

Key : Tree Protection Methods

- Temporary Tree Protective Fencing (High Risk) - (Not to be altered without prior approval from the Local Planning Authority)
- Temporary Site Hoarding Fencing (Low Risk) - (Not to be altered without prior approval from the Local Planning Authority)
- Construction Exclusion Zone (No access, storage of any building material or equipment at any time for the entire construction period)
- Trees to be removed to facilitate construction work (See Section 5.2 for details)
- Trees surgery operations required - to BS3998:2010 Tree works Recommendations (See Section 5.4 for details)
- Excavation work to be carried out under the supervision of an Arboriculturist (Clean root pruning, use of hand tools, airspade and toothless bucket on small excavator (2500kg))

Please Note:
Arboricultural Method Statement:
MUST be followed in sequence, include site supervision by an Arboriculturist where specified and adhered to at all times. Details can be found in Section 6 of this report. Noncompliance with this method statement may result in planning enforcement action or prosecution.

KEY

BS 5837:2012 Tree Quality (Individual Tree)

- Category A (High)
- Category B (Moderate)
- Category C (Low)
- Category U (Poor) (*Unsuitable for retention*)

Tree Key

- Tree Species (Common Tree Name)
- Tree ID (T - Individual Tree, G-Tree Group, A-Tree Area, W-Woodland, H-Hedgerow)
- Tree ID (T - Individual Tree, G-Tree Group, A-Tree Area, W-Woodland, H-Hedgerow)
- Root Protection Area (RPA) (A layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority)
- Shade Pattern - shade pattern not shown on plan (*Varies depending on height and crown spread of tree*)

Definitions of BS5837:2012 Categories for Trees, Woodlands and Hedgerows (Colour Coded):

- A** - Those of high quality with an estimated remaining life expectancy of at least 40 years. (*Suitable for retention*)
- B** - Those of moderate quality with an estimated remaining life expectancy of at least 20 years. (*Suitable for retention*)
- C** - Those of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm. (*Suitable for retention*)
- U** - Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. (*Unsuitable for retention*)

Tree Protective Fencing (High Risk)

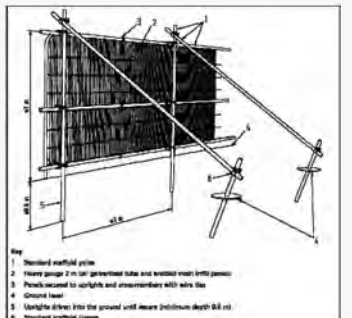
- Trees for removal to be identified from the drawing and marked by an arboriculturist.
- No vehicles to enter the grass verge or root protection zone during tree removal or fencing installation/removal.
- Fencing to be installed prior to any construction works (including demolition, materials delivery works compound installation).
- The location of the tree protective fencing is indicative only and must not be directly measured from the plan. Its true location must be surveyed accurately on site and where applicable be measured from the tree centre by the stated dimension value.
- Fencing to remain in place until all construction works have ceased.

BS5837: 2012 Recommendations (extract)

- 6.2.2 - Barriers
- 6.2.2.1 - Barriers should be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained tree(s). Barriers should be maintained to ensure that they remain rigid and complete.
- 6.2.2.2 - The default specification should consist of a vertical and horizontal scaffold framework, well linked to resist impacts, as illustrated in Figure 2. The vertical tubes should be spaced at a maximum interval of 3m and driven securely into the ground. Once this framework, welded mesh panels should be securely fixed.

Fencing Specification

The fencing will comprise of standard GS7/Heras styled steel self-supporting security fencing panels. The panels must be securely clamped together. They must be secured to the ground with robust steel stakes to a depth of 600mm. These are securely clamped to the panels. The use of steel mesh panels in conjunction with just clamps and self supporting bases is not acceptable for use. They must be secured to the ground with stakes to prevent movement. Where stated, additional bracing of the panels must use angled scaffolding poles to prevent further movement (see diagram).



Why Is Fencing Erected Around Trees?

- The major cause of damage to trees on construction sites is due to soil compaction.
- Roots use the spaces between soil particles to obtain Oxygen, Water and Nutrients.
- Heavy plant and machinery compresses (compacts) the soil, squeezing out the air spaces and preventing root function.
- A compacted soil structure will stay compacted.
- Consequently the tree suffers and will show signs of branch die-back.
- Symptoms such as die-back may take several years to appear.
- Soil compaction over roots can be prevented by maintaining a fenced exclusion zone over the tree roots.
- The exclusion zone is calculated using British Standard 5837.
- Protective Fencing is installed around the calculated area.
- Protective Fencing is a condition of planning approval. If it is removed or repaired the construction firm is in breach of a condition and may be subjected to legal action.