

APPENDIX 2 – PHOTOGRAPHIC RECORD



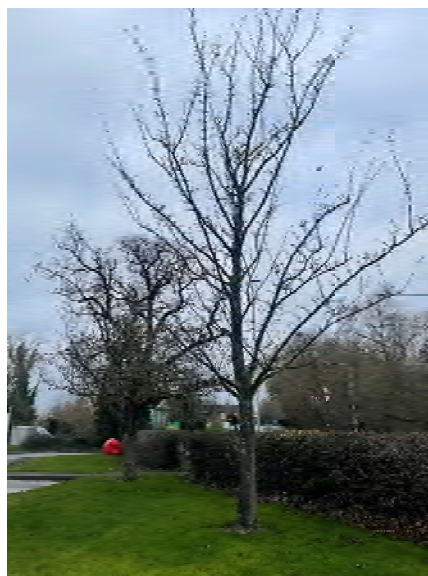
T1-T5 inclusive, H1



T12-T15 inclusive, G1



T8-T11 inclusive, H1



T16, T17, H1



T18, T19



W1



H2



T20



G3



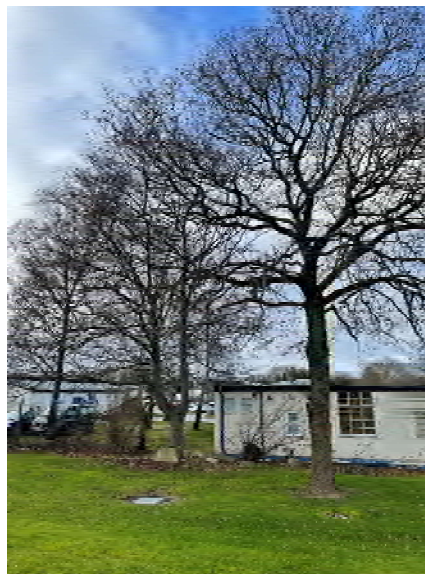
H3



G5, H5



G7, T26



T28, T29



T31, T32, G11, G12



T28 bark loss



G12, G9



T28 bark loss



T28 tension fork, buckling



T29



T30



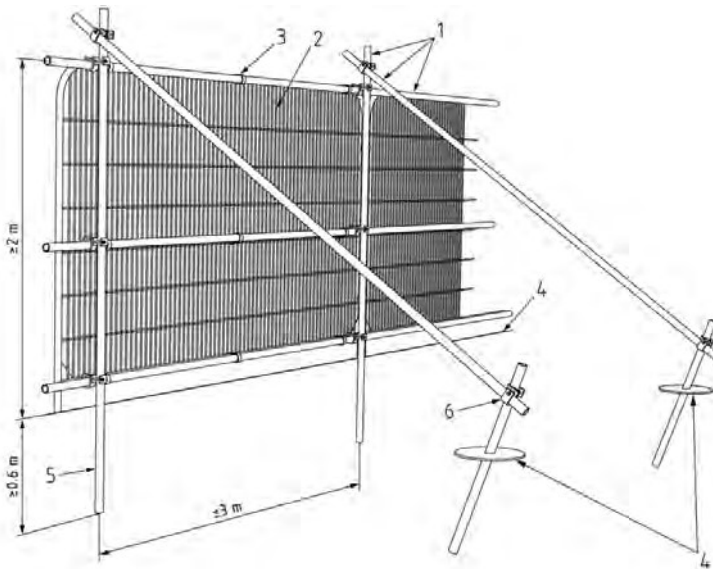
T31, T32



G12

APPENDIX 3 – EXAMPLES OF TREE PROTECTION SYSTEMS

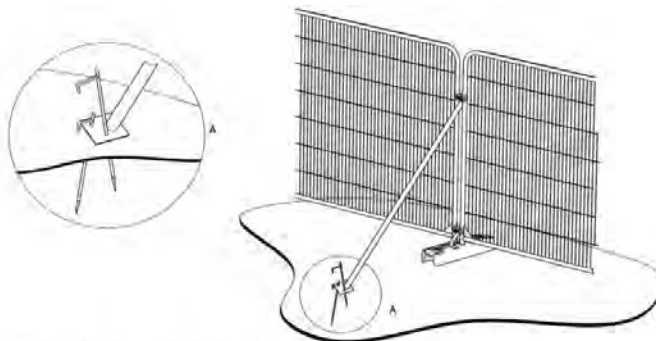
(Extracts taken from BS5837: (2012), “Trees in relation design, demolition and construction – Recommendations”.)



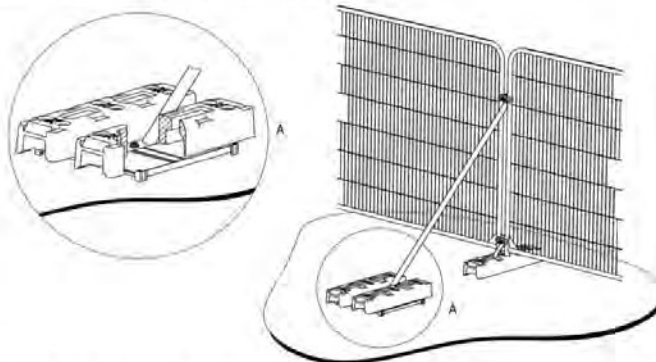
Key

- 1 Standard scaffold poles
- 2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
- 3 Panels secured to uprights and cross-members with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6 m)
- 6 Standard scaffold clamps

Default specification for protective barrier



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

APPENDIX 4 - GLOSSARY OF TERMS

Maturity

Newly planted - Not fully established and capable of being transplanted or easily replaced

Young - Establishing, usually with good vigour, still capable of being transplanted or replaced

Early mature - Established, usually vigorous and increasing in height

Semi-mature – Established with an overall height in excess of 4 metres and or a stem girth measurement (circumference) of 20 centimetres or larger;

Middle Age - Trees in the established growth stage of their life with the potential to continue increasing in size;

Mature - Trees that have reached their ultimate size, given their location and surroundings;

Over-mature - Fully mature, in last quarter of life expectancy, vigour decreasing

Condition

Good, Fair, Poor. An overall assessment of a tree's physiological and structural state.

Veteran

Trees that have biological, cultural or aesthetic value due to age and / or condition. Typically trees that may be living beyond their expected age range for their species.

BS 5837 Tree Quality Assessment

The tree quality assessment is based on four categories (A, B, C and U) are used to denote tree quality (A= High, B = Moderate, C = Low, U= Unsuitable for retention).

Subcategories (1-3) denote the specific function value of the trees and the reasoning behind the allocation of a specific category.

Root Protection Area (RPA)

The theoretical rooting area of a tree as defined in *BS5837: 2012*. RPA is allocated to ensure that a sufficient area is left undisturbed during development. It is provided as an area (m²) and as the radius of a circle (m) typically plotted from the centre of the stem.

Estimated Remaining Contribution

The approximate life expectancy as healthy functioning tree and relates to species and the condition of the tree at the time of survey.

Long > 40 years

Medium 20 – 40 years

Short – Medium 10- 20 years

Short - Imminent removal <10years

Adventitious or Epicormic shoots

Small branches that grow in clusters around the stem or base of a tree in an uncharacteristic fashion for a normally healthy tree, usually at the site of pruning wounds or as an indicator of stress.

Bifurcate

Divided into two branches or forks.

Buckling

Deformation of a structure subjected to a bending load Buttress zone, irreversible.

Chalara – Ash dieback

Chalara dieback of ash, also known as Chalara or ash dieback, is a disease of ash trees caused by a fungus called *Hymenoscyphus fraxineus*

Decurrent

The tree crown is borne on several major wide spreading limbs of similar size

Defect

A feature which detracts from the uniform distribution of mechanical stress, or which makes the tree mechanically unsuited to its environment.

Dieback

A condition in which a tree or shrub begins to die from the tip of its leaves or roots backwards, owing to disease or an unfavourable environment

Disease

A malfunction or destruction of tissues usually caused by pathogens.

Dominance

The tendency for a leading shoot to grow faster than the lateral shoots; also a tree that maintains a taller crown than its neighbours.

Excurrent

A well-defined central main stem to the crown, bearing branches which are limited in their length, diameter and secondary branching.

Flush-cut

A pruning cut which removes part of the branch bark ridge and or branch-collar.

Girdling root

A root which circles and constricts the stem.

Hazard beam

An upward curving part of a tree in which strong internal stresses may occur without being reduced by adaptive growth; prone to longitudinal splitting or may form a banana shaped crack.

Included bark (ingrown bark)

Bark of adjacent parts of a tree (usually forks, acutely joined branches or basal flutes) which is in face-to-face contact.

Infection

The establishment of a parasitic micro-organism in the tissues of a tree or other organism.

Lopping

Removal of large branches from a tree that does not follow natural target pruning practices

Natural target pruning

The siting of pruning cuts at the branch bark ridge with a cut of minimal surface area to allow quicker healing of the wound

Occlusion

The process of continual radial growth and healing of a wound which is progressively closed by the formation of new wood and bark around it.

Plant pathogen

Infectious organism that causes a disease on a plant. Although relatives of some plant pathogens are human or animal pathogens, most plant pathogens only harm plants. Plants are rarely cured of disease once infected.

Pollarding

The removal of the tree canopy, back to the stem or primary branches. The management regime is usually repeated as part of a regular management programme.

Primary branch

A major branch, of greater order than secondary branches.

Pruning

The removal or cutting back of lesser branches or twigs

Reactive Growth/Reaction Wood

Production of woody tissue in response to mechanical stresses

Root-collar

The transitional area between the stem/s and roots prior to development of a root flare or buttress.

Secondary branch

A branch, of lower order than primary branch.

Veteran tree

An aged old specimen that has features which increase its value as habitat for wildlife (dead wood, cavities etc.) irrespective of its chronological age and that is of interest biologically, culturally or aesthetically because of its age, size or condition, is usually of advanced age

Windthrow

The fall of a tree in high wind, blowing over of a tree at its roots.

Wound wood

Wood developing in response to a wound which gradually heals and occludes the wound.