



Arboricultural Method Statement

50 Chestnut Road, Loggerheads, Market Drayton, Shropshire TF9 4BL
Tel: 01630 673216 Mob: 07813 808174 Web: www.oldoaktreecare.co.uk

**New Block
Maelor School
Penley
Wrexham
LL13 OLU**

Specifying the requirements that must be carried out to maximise the protection to trees that are to be retained on, or adjacent to, the site throughout the construction phase of development.

Commissioned by:

Craig Taylor
Gareth Morris Construction

Prepared by:

David Bailey
BSc (hons), M.Arbor.A, cert.Arb.(RFS)

Survey date:
4th April 2020

Report date:
6th April 2020

Revision 1

Contents

1.0	Aims and Requirements
2.0	Basic useful facts
3.0	Avoiding damage
4.0	Sequence of events
5.0	Method statement
6.0	Conclusion
7.0	Appendix A: Tree Work and Plan PC20/377TWP
8.0	Appendix B: Tree Protection Plan PC20/377/TPP
9.0	Appendix C: Tree categories from BS5837:2012
10.0	Appendix D: Examples of Protective Fencing from BS5837:2012
11.0	Appendix E: Sign for Fencing Panel
12.0	Appendix F: Tree Raw Data

This report is written for the use of the client. It is not to be divulged, sold, hired or lent to anyone who is not involved in the contents of this report without my written consent. No part of this document is to be used without reference to and access to the whole document.

1.0 Aims and Requirements

- 1.1 This Arboricultural Method Statement (AMS) is prepared to ensure retained trees are adequately protected before and throughout the construction phase of the development.
- 1.2 Planning permission is sought from Wrexham County Borough Council (P/2020/0121) for the building of a new block.
- 1.3 An AMS has been requested by the Council to ensure trees on site are not damaged by the development.
- 1.4 Construction activities close to trees requires an AMS to be produced to ensure they are protected at all times during construction work. There are several trees on site, which considerably add to the character and setting.
- 1.5 Care of retained trees is to comply with planning requirements and is to ensure the amenity provided by retained trees to the area is not damaged.
- 1.6 It is recognised that, sometimes, trees on building sites can be easily and avoidably damaged by construction activities.
- 1.7 This AMS aims to guide developers and contractors in the best way possible to protect trees that are required for retention due to their arboricultural, landscape and wildlife importance or added financial value to the finished development.

- 1.8 A designated person, usually the site foreman, is to be made responsible for the seeing through of this method statement. They should understand and be happy with all aspects of the requirements of it, being able to explain the needs of the AMS to all staff and contractors. The author is always available to be contacted by telephone concerning any issues relating to trees before or during the construction process. A copy of the AMS should always be available on site.
- 1.9 Differing amounts of information and explanation will be required for differing trades and areas of work. Obviously, trees present more difficulties to those working on the foundations of buildings, where roots can constrain building work, rather than a plasterer working inside a new building. However, all need to be aware of the need to avoid damage to trees both directly, or indirectly.
- 1.10 Should the correct sequence and manner of operations not be followed, it may result in damage to trees, which could be held as a breach of planning consent or damage to a tree with a preservation order. This could have legal consequences. Of most importance is the need to install well designed and casually unmoveable protective fencing before any work or deliveries begin on site.
- 1.11 **Experience shows that lack of timely installation of suitably designed and placed immovable protective fencing and its retention throughout the construction phase is the primary reason for damage to trees, enforcement notices, forced stops to work and expensive remediation programmes. Correctly placed, constructed and maintained fencing prevents the majority of common problems. However, diligent care for trees is not wholly associated with the correct application of protective fencing and close attention should be paid to protecting trees at all times.**
- 1.12 If, at any time, there appears to be a problem with trees or damage is likely to happen to them, then the work should not be carried out and the opinion of an arboriculturist sought.



2.0 Some basic useful facts

- 2.1 Trees can be a controversial and problematic issue in construction areas, frequently because of myths, which are often wrong.
- 2.2 Tree roots do not mirror the above-ground part of the tree. Roots are unlikely to be found deeper than one metre in the soil as they need oxygen as well as water and nutrients. The roots will spread much further than the crown of the tree, often further than twice the extent of the crown. Roots at distance from the trunk are most usually very thin.
- 2.3 In areas that make rooting difficult, such as the urban environment, trees can and do adapt their rooting to best utilise whatever resources they can find. This may involve rooting to much deeper depths, or solely in one direction, wherever the most favourable rooting conditions can be found.
- 2.4 A design tool called the root protection area (RPA) is used to show where, if all other roots outside it were to be lost, an area of rooting could be preserved to ensure the tree has enough rooting area to survive. Although RPAs can sometimes be moved around a little, this rooting area will need to be protected from any damage.
- 2.5 Roots require un-compacted soil where air, water and nutrients can easily be reached. Therefore, RPAs on a building site are fenced off to prevent any damage to this now small island which the tree will be reliant upon.
- 2.6 It doesn't take much to compact the soil to a point where a tree will find it very difficult to utilise. Just a couple of passes in a vehicle over an unprotected rooting area can do this.

3.0 Avoiding damage

- 3.1 The designated person, usually the site foreman, is responsible for the trees on site. They should plan to work carefully and logically. Any operation that could damage trees should be carried out in a way so that no damage occurs. If damage is likely and no other method can be envisaged, an arboriculturist should be consulted before the operation takes place.
- 3.2 For the sake of clarity, all trees identified in the report should be treated as being covered by a tree preservation order (TPO). In any case, trees to be retained on site will need to be correctly cared for as part of the planning conditions.

- 3.3 Wilfully damaging, cutting down, uprooting or killing a tree protected by a TPO is a criminal offence, carrying a maximum fine of £20 000.
- 3.4 RPAs are to be left alone. No attempt should be made to use them as building stores, parking areas, wash out areas, footpaths or refuse piles.
- 3.5 Should a need to enter an RPA occur, then this should be done by the responsible person or under their supervision.
- 3.6 No trenching should occur within the RPA unless this is done using trenchless techniques. Set off and retrieval pits should be outside of any RPA.
- 3.7 Any fires should be lit at least 10 metres away from the crown of any tree and anything burnt should be done so on a hot fire, to reduce smoke and combust the material more effectively, reducing the possibility of noxious fumes for both plants and animals.

4.0 Sequence of events

- 4.1 The order of events should be:
 - 1. Pre-commencement discussions with arboriculturist
 - 2. Tree work
 - 3. Setting out of protective fencing and ground protection
 - 4. Construction work
 - 5. Removal of protective fencing

5.0 Method Statement

5.1 Pre-commencement discussions with arboriculturist

- 1. Before any activity takes place on-site, a meeting will occur between the site foreman who will be responsible for day to day tree protection, all employees of the construction firm and the overseeing arboriculturist. This could take place as a site meeting or over the phone as a conference call.
- 2. The main points of the conversation will include explanations of basic tree requirements, root architecture, methods to prevent damage and a run-through of the method statement.



3. Pertinent points that should be brought up are outlined below:
4. The legal requirements driving tree protection.
5. Importance of maintaining protective fencing and ensuring damage does not occur within RPAs by compaction or poisoning.
6. Methods of working to ensure tree protection and ease of the operation.
7. Areas for parking, storage of plant, fuel and equipment.
8. Possible unexpected occurrences which may require the advice of an arboriculturist.
9. Contact details for an arboriculturist should be available at all times to construction staff.

5.2 Tree Work

1. Required tree work is shown in table 1.

Tree No.	Species	Action
Po4	Poplar	Remove. Decay and honey fungus. Kill off stump by hand removal of new shoots.
Po6	Poplar	Remove. Significant decay in the stem. Kill off stump by hand removal of new shoots.

Table1: Tree Work

2. A plan is found in Appendix A giving all details of tree work. This plan can be used to gain quotes from tree contractors.
3. Po4 is a large poplar which has been pollarded in the near past. A significant line of decay is found within the tree on the northern aspect and rhizomorphs of honey fungus are present.
4. Po6 is a similar tree to Po4 with a similar decay pattern. No rhizomorphs are detected but it is very likely that this tree has been infected by honey fungus.

5. Should the crowns of these trees continue to develop, a point will come within the not too distant future where both trees will fail. They should both be felled. The stump should be killed off by staff at the school removing new sprouts if, or as, they develop from the stump. A systemic herbicide is not to be used as it may 'flash-over' from the roots of the treated trees to the healthy roots of other poplars.
6. Tree work should ideally take place before the building has been constructed to offer the easiest access to the work area. It could be carried out after the development if necessary. However, the work should be completed within a year of this report.
7. This area is naturally a good area for the tree planting and the use of longer-lasting species such as oak, lime or beech would be a good way to replace the lost trees. The other poplars on-site, although appearing to be healthy and without significant defects, are not trees characterised as having long lives. Because of the presence of honey fungus, no tree planting should take place before a period of two years has elapsed since the felling of the trees and the planting. Planting should be carried out to best practice to ensure new trees get the best start.
8. All tree work is to take place to best practice as set out in BS3998:2010 Tree Work: Recommendations. Contractors are to hold public liability and employer's liability to £5 million minimum.
9. I am happy to offer any advice on the proposed tree work or replanting. Please contact me should you have any queries.
10. Vehicles and plant relating to tree work should be parked outside of the indicated RPAs.

5.3 Setting out Tree Protection

1. Protective fencing should be used to protect areas where access is temporarily forbidden during the construction phase. **Experience shows that poor attention to the timely and correct installation of protective fencing is the main reason for damage to trees, enforcement notices or forced stops to building projects concerning trees.** Correctly placed and constructed protective fencing, positioned at the right time will prevent the vast majority of tree issues causing disruption to the build.



2. Before any plant, machinery, site buildings or materials arrive on site, the protective fencing should be installed.
3. The protective fencing should comply with the specifications as set out in BS5837:2012 Trees in relation to design, demolition and construction: Recommendations (Appendix D).
4. The positioning of protective fencing is shown in Appendix B. Grass and soil is to be protected where it meets hard surfaces. The fence is to abut all fences, or hedges securely to ensure they cannot be moved. Fencing of a similar design will be used to secure the site.
5. As well as the temporary protective fencing, a secure compound is to be created next to the tennis courts. All deliveries, storage and mixing is to take place here. There are no trees in the vicinity.
6. Should the design need to be altered for site-specific circumstances, the approval of the project arboriculturist and LPA will need to be specified in writing.
7. Areas protected by protective fencing are not to be used as storage, parking or waste disposal areas. The run-off from washings is not to enter into protective areas.
8. Prior to groundwork preparation, levelling, excavations or any demolition, photographs should be taken and sent to the overseeing arboriculturist and confirmation sent to the LPA tree officer that fencing is fit for purpose and in place.

5.4 Construction Work

1. The main construction work can now begin.
2. Services to the facilities should be dug without entering RPAs.
3. During the building work, builders' vehicles are to be parked away from RPAs. Protective fencing is not to be moved to create parking or storage areas.
4. All deliveries are to drop materials into the storage area. The storage area is within a gated compound next to the tennis courts. There are no trees close to this compound.

5. A mixing area is to be designated with an impermeable floor and a bund of at least 50mm. All mixing of materials should take place here to prevent run-off or washings contaminating the RPA of trees. The mixing area will be within the site compound.
6. A 50-litre spill kit designed to absorb fuel, engine oil, hydraulic oil and water should be on-site and available for use at all times.
7. Parking will take place either in the site compound or within the existing parking facilities of the school
8. Every second fencing panel should have the sign, shown in Appendix E, fixed to it. It should be laminated to ensure it is weatherproof.
9. Should protective fencing be damaged, it should be repaired immediately.

5.5 Removal of protective fencing

1. Only when all construction work including hard landscaping has ceased and all plant, site buildings, skips, building spoil and spares are removed from the site, can protective fencing be removed.
2. Care should be taken to extract poles or pins driven into the ground in a smooth manner without tearing them out of the soil which could damage roots.
3. Vehicles collecting protective fencing should remain on the road or hard standing and not enter RPAs.

6.0 Conclusion

- 6.1 The diligent following of this method statement will ensure the trees are successfully retained and remain healthy into the future. The advantages of this are that the site retains these large trees and users of the site will appreciate the maturity brought to the buildings, creating pleasant and amenable surroundings. Mature trees on a site will increase the value of the new buildings.
- 6.2 Should any questions or queries concerning this method statement or trees on-site, in general, occur, please feel free to contact me.

The data, views and opinions of this report relate to the survey undertaken on the date shown and do not take into account the effects of weather conditions, vandalism or accidental damage. Neither can the effects of tree surgery work, poorly executed or which does not comply with BS3998:2010, be predicted. Old Oak Tree Care cannot accept any liability in connection with any of these factors. This report becomes out of date and in need of renewal two years from the survey date.



Appendix A

New Block, Maelor School,
Penley, Wrexham.

Tree Work Plan
Showing all trees, crown dimensions, tree
categories and root protection areas (RPAs)

SCALE :
1 : 500

@ A3

DATE :
14/04/2020

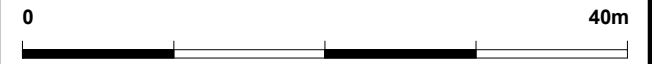
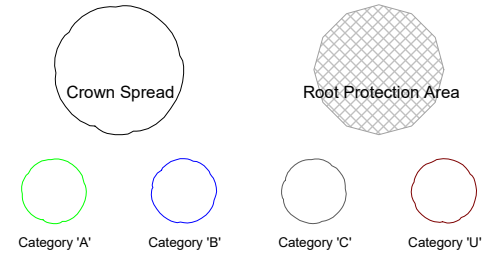


David Bailey Old Oak Tree Care 01630 673216
07813 808174 oldoaktree@talktalk.net

©2020 Old Oak Tree Care
This plan is to be reproduced in colour
B+W copies will not contain all information

Map reference:
PC20/377/TWP

Legend



Tree Work

1) Fell Po4 - pollarded poplar with decay
and honey fungus

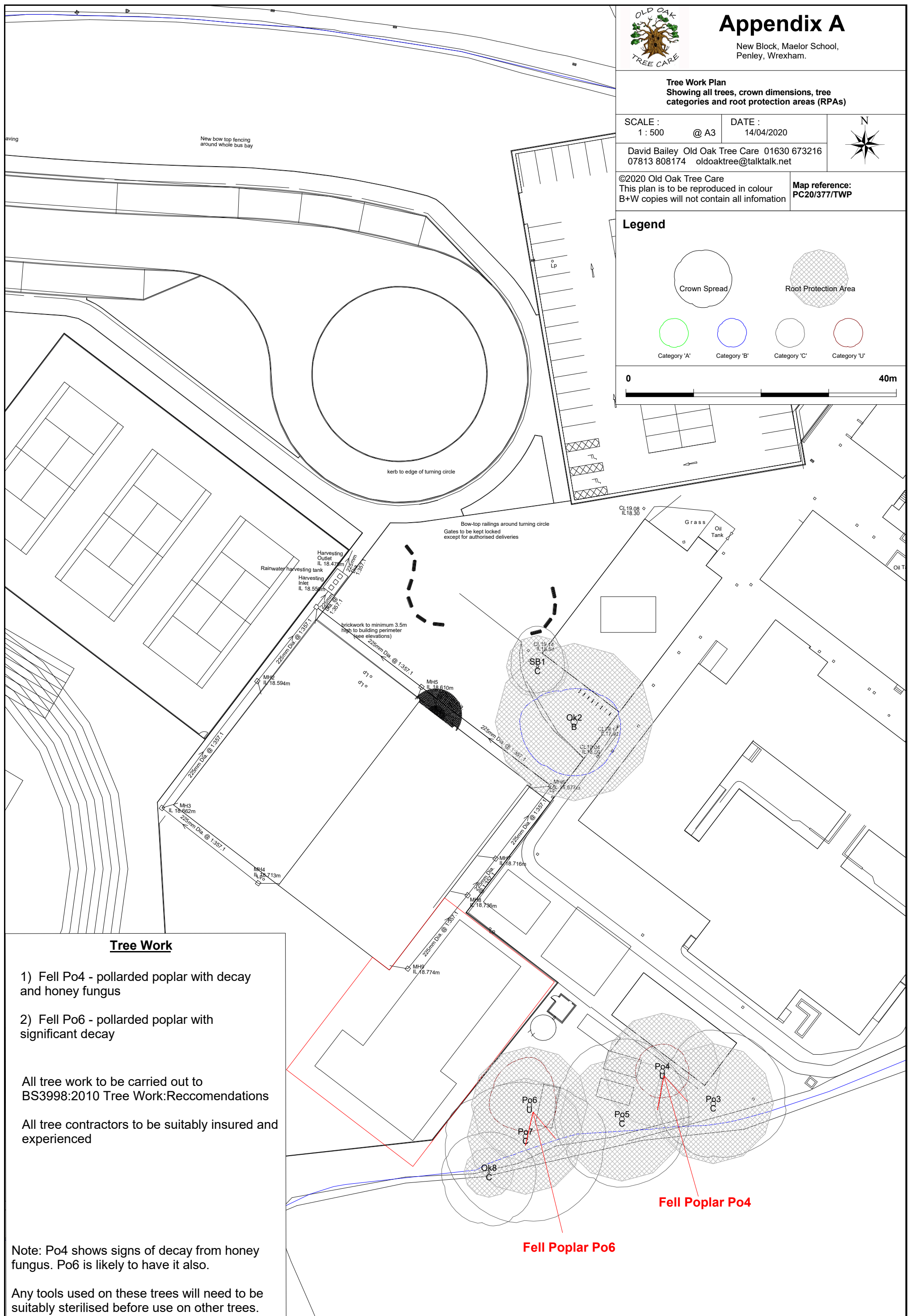
2) Fell Po6 - pollarded poplar with
significant decay

All tree work to be carried out to
BS3998:2010 Tree Work:Recommendations

All tree contractors to be suitably insured and
experienced

Note: Po4 shows signs of decay from honey
fungus. Po6 is likely to have it also.

Any tools used on these trees will need to be
suitably sterilised before use on other trees.





Appendix B

New Block, Maelor School,
Penley, Wrexham.

Tree Protection Plan
Showing all retained trees, crown dimensions, tree
categories, RPAs and protective fencing

SCALE :
1 : 500

@ A3

DATE :
14/04/2020



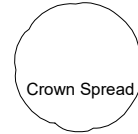
David Bailey Old Oak Tree Care 01630 673216
07813 808174 oldoaktree@talktalk.net

©2020 Old Oak Tree Care
This plan is to be reproduced in colour
B+W copies will not contain all information

Map reference:
PC20/377/TPP

Legend

Protective Fencing



Crown Spread



Root Protection Area



Category 'A'



Category 'B'



Category 'C'



Category 'U'

0 40m

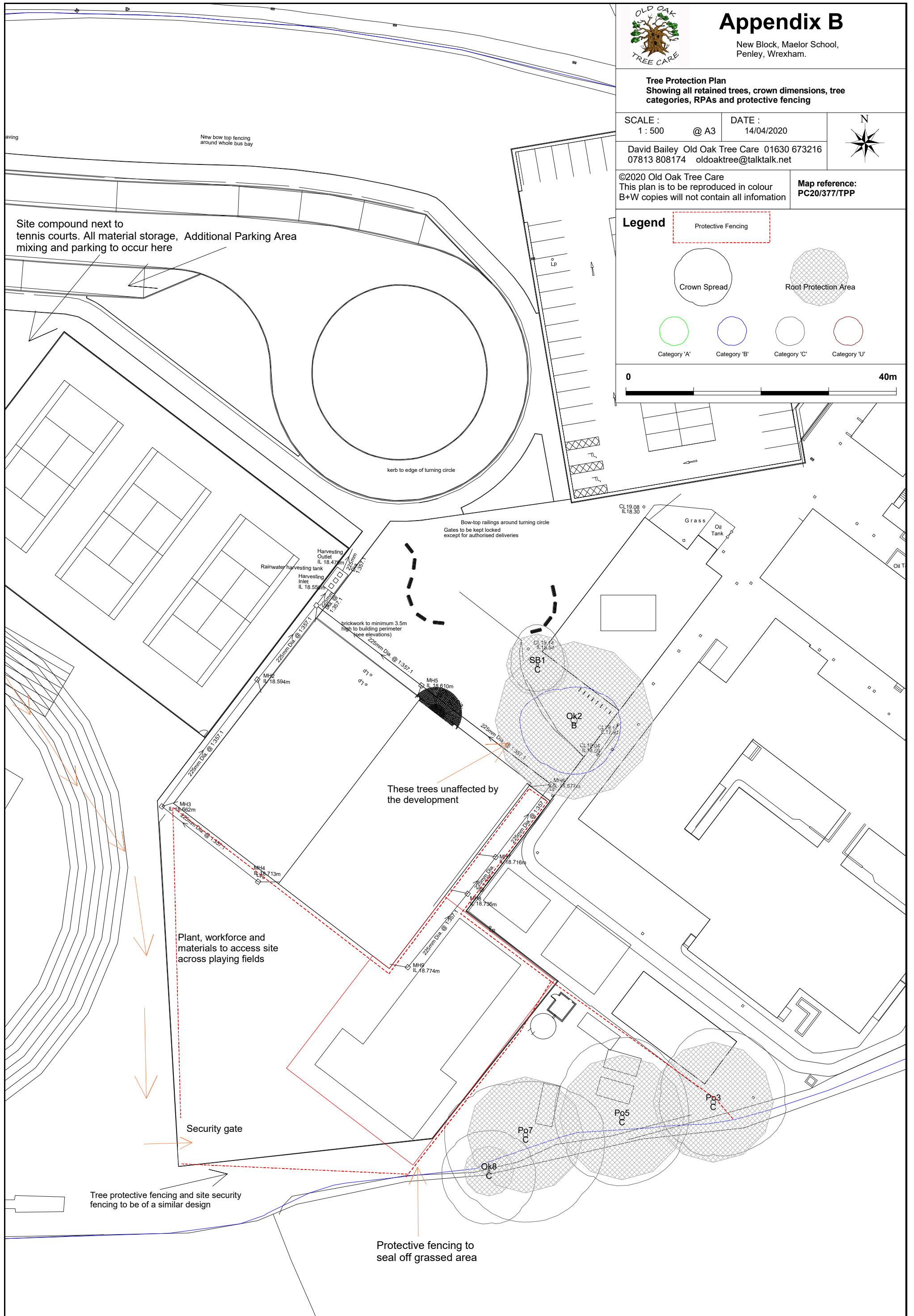


Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)	Identification on plan
Trees unsuitable for retention (see Note)		
Category 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	- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline - Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>	See Table 2
Trees to be considered for retention		
1 Mainly arboricultural qualities 2 Mainly landscape qualities 3 Mainly cultural values, including conservation		
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees with material conservation or other cultural value
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees with no material conservation or other cultural value

Figure 2 Default specification for protective barrier

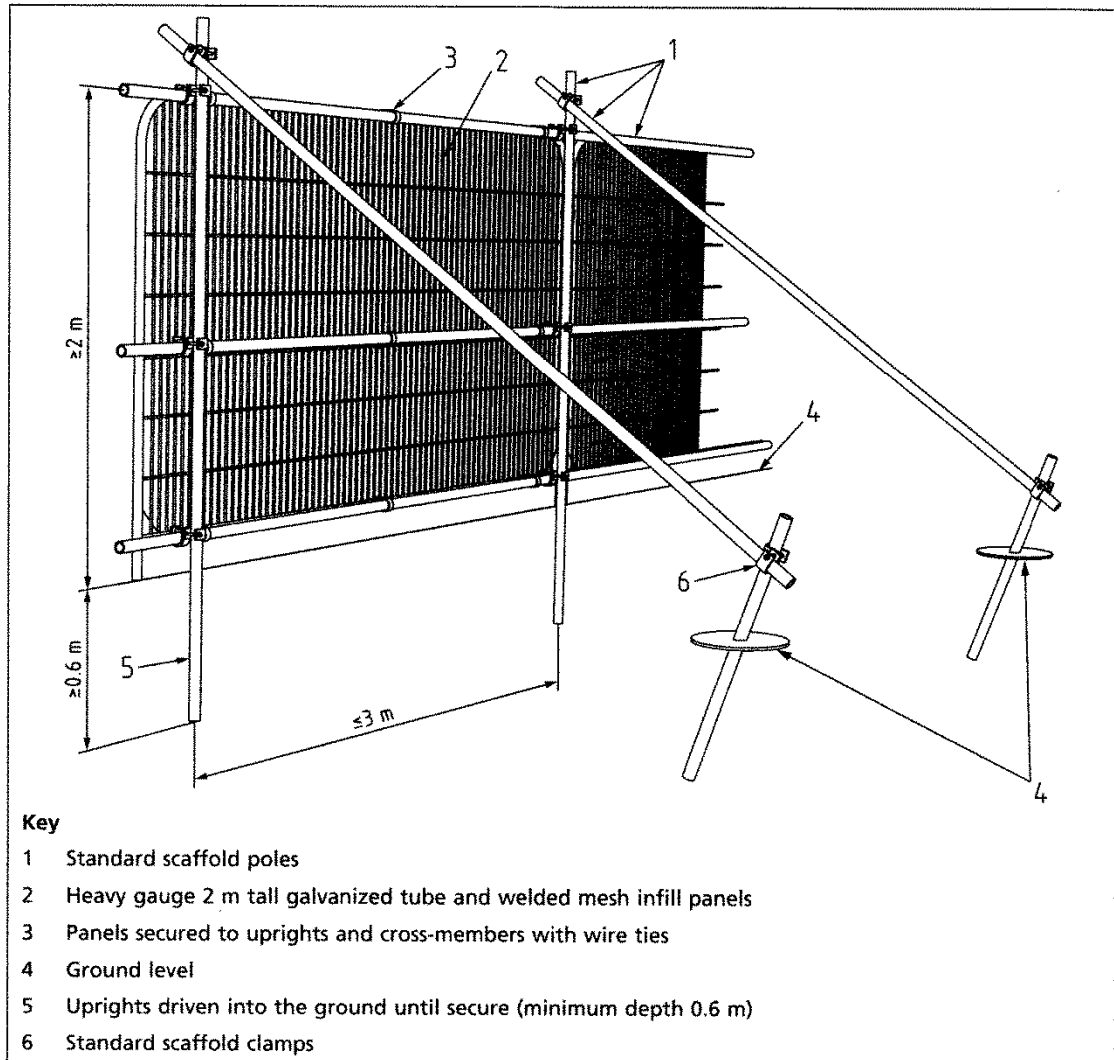
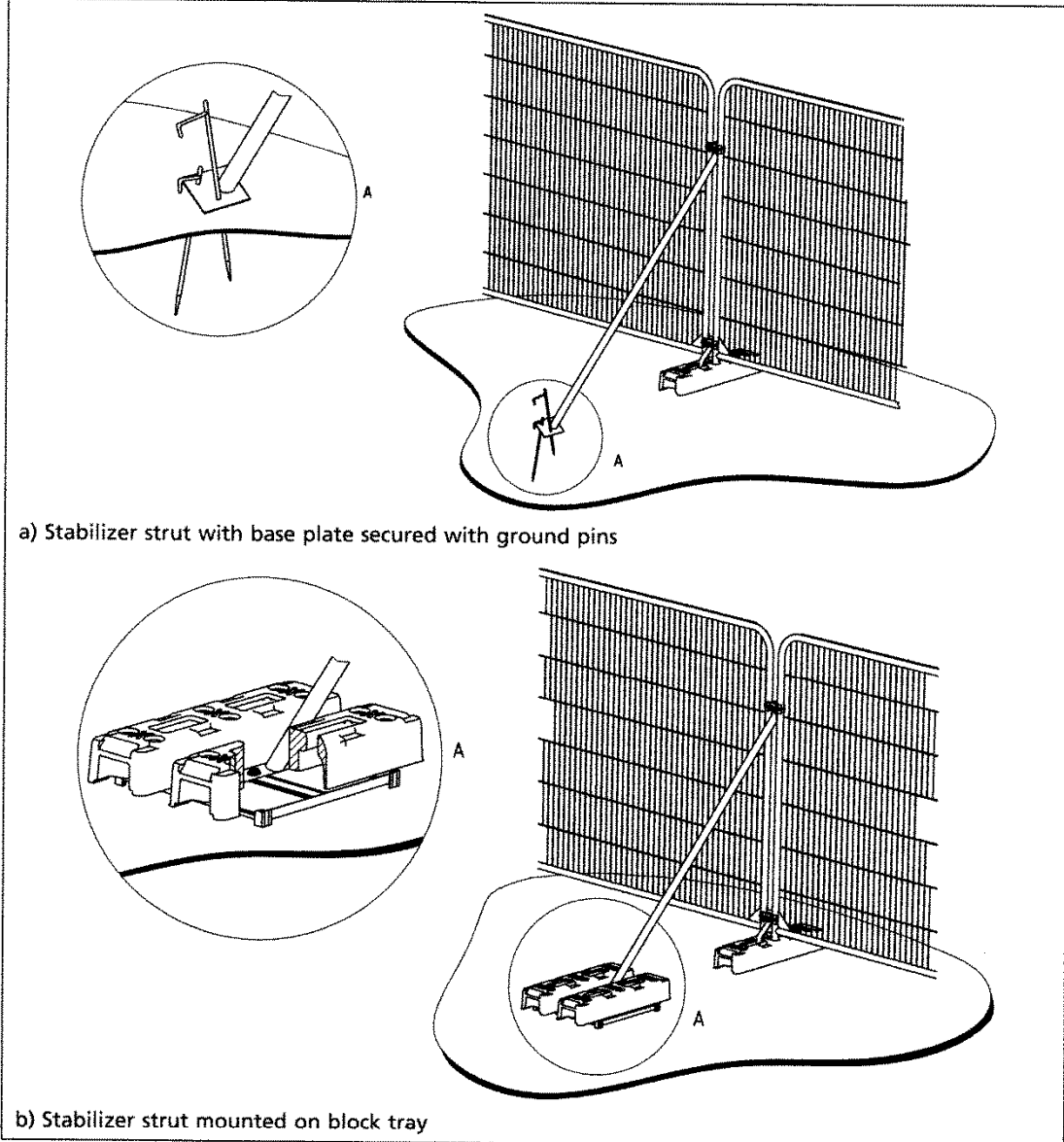


Figure 3 Examples of above-ground stabilizing systems





**PROTECTIVE FENCING. THIS
FENCING MUST BE
MAINTAINED IN ACCORDANCE
WITH THE APPROVED PLANS
AND DRAWINGS FOR THIS
DEVELOPMENT.**



**TREE PROTECTION AREA
KEEP OUT !**

**(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY
PLANNING CONDITIONS AND/OR ARE THE SUBJECTS 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**

Appendix F			Tree Schedule																			
Tree number	Species	Height (m)	Diameter (mm)	N Crown spread (m)	E	S	W	N Crown Height (m)	E	S	W	Age bracket	Physiological Condition	Structural Condition	Years remaining	Quality assessment	RPA radius(m)	RPA Area (m2)	Notes			
SB1	Silver Birch	15	375	6	4	4	4	3	3	3	3	mature	good	good	10 to 20	C	4.5	64				
Ok2	Oak	18	950	5	7	8	8	8	8	4	4	mature	good	good	20 to 40	B	11.4	408				
Po3	Poplar	23	725	11	9	8	8	8	5	7	8	mature	good	good	10 to 20	C	8.7	238				
Po4	Poplar	9	700	4	4	4	4	6	6	6	6	mature	fair	poor	<10	U	8.4	222			pollared. Decay under bark. signs of honey fungus	
Po5	Poplar	23	750	12	10	10	10	10	5	5	8	mature	good	good	10 to 20	C	9	254				
Po6	Poplar	10	700	7	4	4	4	5	5	5	5	mature	fair	poor	<10	U	8.4	222			pollared. Decay in stem	
Po7	Poplar	23	700	8	12	13	12	6	8	3	5	mature	good	good	10 to 20	C	8.4	222				
Ok8	Oak	9	300	6	7	8	7	2	2	2	2	mid-aged	good	good	>40	C	3.6	41				