

Annex

Date November 04	Document DPC:04/30089945
------------------------	-----------------------------

National Committee	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editorial)	COMMENTS	Proposed change	OBSERVATIONS OF THE SECRETARIAT on each comment submitted
	2.1	1 st definition	Editorial	The definition is not correct; it is possible that an 'arboriculturist' could not have had sufficient training and experience in relation to this subject.	Amend 2.1 to be more accurate or exclude and use 2.2 Competent Person only as this covers the issue.	
	2.3	3 rd definition	Technical	It may not be practical to put in place 'barriers and / or ground protection' in all cases, e.g. when the main access to a site is a metalled road and trees are adjacent to it.	Add ...of a tree, <i>or have the ground area affected by the exclusion zone clearly signed by means of hatched painted lines as a being part of the exclusion zone.</i>	
	2.6	6 th Definition	Editorial	There are now 2 definitions, exclusion zones and TPZ.	Amend 2.3 to include text / meaning of 2.6 and change title to TPZ	
	2.6	6 th Definition	Technical	The technical information required to make this statement is not known with the accuracy suggested by the text.	Amend to say: area (in m ²) surrounding the tree(s) that is considered (based on current arboricultural knowledge) contains sufficient soil volume to ensure the long term survival of the tree(s).	
	2.5	7 th Definition	Editorial	Clause number and Definition incorrect.	Change clause number and use English Nature definition which is already known and accepted.	
	3.2	3.2.1	Editorial	Should provide page reference for Figure 1.	Insert page reference.	
	3.2	3.2.2	Editorial	There is no definition of what 'special engineering' or 'method statement' means in this context.	Add definitions to section 2.0.	
	3.2	3.2.2	Technical	'Position of all excavations' is a very in accurate statement as this does not normally include the extent of excavations for construction purposes.	Replace with 'the extent of excavations, including any reduced dig, required for construction purposes' and any ...etc. Will also need to add 'reduced dig' to definitions.	
	3.2	3.2.5	Editorial	Last sentence needs to be made stronger as this is one of the main reason why this BS is not as effective as it should be.	Amend to: but the enforcement powers and responsibility are vested ONLY within the local authority, this requires active monitoring and enforcement of planning conditions on development sites in their administrative area.	

		Figure 1	General	Poor readability	Use specialist 'usability' person / company to improve layout.	
		Figure 1	Technical	This figure does not provide any clear guidance to the 'evaluation processes of when trees are at risk on a site.	Either needs review or an additional Figure inserted titled Risk Assessment Chart, that would include such things as temporary access points widening of access for construction purposes etc.	
		Figure 1	Technical	Figure does not include Pre-application meetings.	Add Pre-application meetings between Initial design and link to central box.	
	4.0	4.1.2	Editorial	This seems over long and lacking clarity.	Amend after 'are relevant' by adding 'in the context of the site and its surroundings, having regard to landscape, habitat, biodiversity and planning policy issues, for inclusion in the survey.	
	4.0	4.1.3	Technical	There will be many sites that only have a few trees, 10 or less when this requirement would be unnecessary.	Amend to: On sites with more than 10 trees or when there are trees close together, and some of these are going to be felled and others retained, trees should be numbered usingetc.	
	4.0	4.1.4	Editorial	Mention of Soil Heave in last sentence, this is a technical term and either needs including in definitions or having a page reference to the information on subsidence later in the standard.	Add to definitions or add page reference or delete, see below at 7.3.	
	4.0	4.1.5c)	Technical	The word 'avoiding' changes is incorrect in this context the wording should be 'assessing' changes.	Amend 'avoiding' to 'assessing'.	
	4.0	4.1.5d)	Technical	Last part of this sentence seems onerous as trees that may be 'part of the overall landscape effect of the area' could include many tens or hundreds of trees.	Amend to: 'or trees that adjoin or overhang the site boundaries and form part of landscape character of the site'	
	4.0	4.2.1.2	Editorial	Reference to arboriculturist for categorising trees is too narrow given that in the definitions a 'competent person' could do this.	Amend to replace arboriculturist or add 'or a competent person'	
	4.0	4.2.1.3	Technical	Badly worded, particularly first sentence, the importance of such trees for habitat and biodiversity requires greater clarity.	Suggest approach to the Ancient Tree Forum or Woodland Trust for their approach to this issue or amend to include reference to wildlife / legislation issues.	
	4.0	4.2.1.6e)	Technical	Stem dia has very little importance when evaluating the risk to the tree, buttress dia is far more important because normally it is larger and in some case could be 2 to 3 times large than stem dia.	Amend to add Buttress dia to the survey.	
	4.0	4.2.1.6f)	Technical	Actual branch spread may be difficult to show because most trees have oval shaped crown outlines, particularly in groups / avenues / woodlands.	Amend to: If drawing software does not allow true crown outline shape to be shown on plan, crown outline should be hand drawn for trees identified for retention.	

	4.0	4.2.1.6g)	Technical	Reference to shadow effects requires some explanation' i.e. does this mean on the ground or adjacent property and if so what is the assessment trying to achieve?	Amend to include explanation or provide definition at section 2.	
	4.0	4.2.1.6i)	Technical	Physiological and Structural Conditions are very different entities.	Amend to have these as separate items.	
	4.0	4.2.1.6h)	Technical	Age class, as there is no definition in the standard, it would be necessary either to put one in or amend the text giving a requirement for survey terms to be defined as part of the survey methodology.	Amend to include definitions or require survey definitions to be part of survey methodology.	
	4.0	4.2.1.6l)	Technical	This is open to a very wide interpretation depending on your knowledge of species performance in any particular local environment.	Amend to: estimated remaining contribution is based on knowledge of the context of the site (or proposed layout) and the species profile in the local area.	
	4.0	4.2.1.6m)	Technical	Note 1 – No forms are included	Include forms	
	4.0	4.2.1.6m)	Technical	Note 2 – Annex B In 5.4.2a) reference is made to the Helliwell System, as this system would exclude small trees or give them a low value this would be counter productive on sites with habitat / biodiversity value. As there is no agreed way of valuing habitat or biodiversity value it would be better to have a policy based approach to identification of important trees.	Amend to: Local Authorities should adopt a tree landscape assessment system which provides for identification of important trees in the landscape based on local adopted and national policy.	
	4.0	4.2.2.1 & table 1	Technical	The categorisation system leads to a numbers on ambiguities, e.g. Category C trees could still have high conservation value. The main problem with the proposed system is the mingling of 'values' with 'life expectancy'. The values are in the 1, 2 and 3 columns there is no need to add them to the first column.	Take all reference values out of column 1 and rename as Life expectancy, as defined in definitions, see comments on 4.2.1.6h).	
	4.0	4.2.2.1 & Table 1	Technical	Within the 'Mainly arboricultural values' column, in the Category B row, it states 'downgraded because of slightly impaired condition' This very ambiguous and needs replacing with a more defensible statement.	Amend to: Minor structural or physiological problems that can be controlled or corrected using standard arboricultural practice. This approach could also be used for Category 3 row i.e. Major structural and or physiological problems that would require extensive arboricultural works to retain the tree(s).	

	4.0	4.2.2.1 & Table 1	Technical	Category D (fell) The explanation for this makes no reference to wildlife considerations. Given the forth-coming enactment of part of the biodiversity section of the Countryside and Rights of Way Act 2000, it is essential that this issue is highlighted, there is plenty of room and given that this table is likely to be taken on site as a guide then it is even more critical.	Amend by adding wildlife legislation, regarding protected species, veteran or ancient trees and habitat.	
	5.2	5.2.3	Technical	The replacement of Table 1 in the existing 5837 by this system does resolve the problem of defining vigour, however, given that this is bound to be challenged and form the basis of planning appeals or defence in prosecution cases. The 12 x 1 standard should set out in an Appendix and the basis for the 'system' explained and or shown in an example. Otherwise those seeking to protect trees on development sites will have little scientific or practical help in defending their stance.	Add an annex setting out the basis for using the 12 x BHD as a means of setting the area for protection.	
	5.2	5.2.4c)	Technical	'Compressibility of soil', again there is no definition or reference to what this means; to an engineer it will mean a different value compared with an arboriculturist. Given that the parameters of soil bulk density for varying soil types are known for root growth there is no reason why they can not be included.	Include details of soil bulk densities for sandy, loam and clay soils which are required for normal root rhizosphere processes. Will of course need to add definition of Rhizosphere.	
	5.2	5.2.4f)	Technical	'the end use of space' which space?	Amend to explain what space is being described.	
	5.3	5.3.1	Editorial	Note 2 Solar gain, needs reference to BRE document.	Include reference to BRE information on sunlight / daylight.	
	5.4	5.4.2a)	Editorial	Should not refer to any particular system, given the problems associated with using any of them in terms of consistency. It certainly could not be used to address item 5.4.2 d)	Remove reference to Helliwell System and make reference to Local Authorities adopted policy.	
	5.4	5.4.2a)	Editorial	Last paragraph, this is close to being 'trees at risk list' needs to be formalised into a 'risk' chart / figure.	Add 'Risk Chart' to standard.	
	5.4	5.4.6	Editorial	This is a policy issue for the local authority and should not form part of this guidance.	Delete	
	5.5	5.5.1	Editorial	Grammar of first sentence needs to be amended. There is no need to explain purpose of the TPZ.	Amend after finalised to: the TPZs should be drawn on the Tree Protection Plan. Delete remainder of sentence.	
	5.5	5.5.1	Editorial	Note 2 again this points to a need for a trees at 'Risk' chart.	Add risk chart.	

	5.5		Editorial & Technical	Wood Frame Buildings design and construction process is not discussed, but this is now common practice in some areas of the country. This type of construction requires far greater extent of scaffolding, large areas of storage space and larger areas for movement of the timber sections and materials around buildings	This item needs adding to the standard, so that this issue is raised at the design stage.	
	5.5	5.5.2	Technical	The actual extent of an excavation is generally greater than the line drawn on the plan; amendments need to include this important point.	Add to first sentence after 'it is essential 'to show the extent of the excavations needed for construction and the extent of working areas on site'.	
	6.1	6.1.1	Technical	End of last sentence is likely to cause ambiguity needs amending to provide evidence for agreement to such actions.	Amend after 'should not be' to 'removed (temporarily or otherwise) without written confirmation of the local authority.	
	6.1	6.1.3	Technical	The same issue arises as with 6.1.1.	Amend to 'with written consent of local authority.	
	6.1	6.1.5	Technical	The reference to scaffold poles being the required barrier construction is contrary to 6.1.4 which says 'barriers should be fit for the purpose. There are many ways of providing suitable barriers; it is up to the local authority to ensure the design used is 'fit for the purpose'.	Delete 6.1.5 and add to 6.1.4 that an example can be seen at Figure 2.	
	6.1	6.1.7	Technical	Existing paved areas may be more than adequate for protection of root zones without the increased safety risk that could be associated with having ground protection measures covering a main access area.	Add to last sentence 'after ground protection 'or the existing access area surface (if adequate for root protection) clearly marked to show it as being part of the TPZ.	
	6.1	6.1.8	Editorial	Mixed up sentence.	Change 'exclude' to 'allow' and 'from the TPZ' to 'within the TPZ'	
	6.1	6.1.9	Technical	Ambiguous, need to specify the parameters the engineer is designing to, i.e. To protect existing soil bulk density.	Amend to say 'an engineer to protect existing soil bulk densities.	
	6.1	Figure 2	Technical	Item 8 on depth of insertion in the soil, this would not be sufficient in wet or very sandy soils.	Amend to: Driven to a depth sufficient for stability and proposed load bearing.	
	6.2	6.2.2c)	Technical	Large fires can cause damage to crown and bark even at 10m from the centre of the fire.	Amend to: Fires should not be lit within 10m of the extent of any tree canopy, on or off the site.	
	6.2	6.2.2g)	Technical	Does not take account of damage that could be caused by abstraction of large timber, even if felled in sections.	Add to end of last sentence and material removed by hand or a suitable ground / tree protection system used to prevent damage to soil, roots, buttress and main trunk of trees being retained.	
	7.2	7.2.2	Editorial	The first sentence does not make sense when compared with first sentence of 7.2.3, needs revising; it is probable supposed to say 'away from the main stem and large roots!	Review to provide basis for when roots exert only low pressure?	

	7.2	7.2.4	Editorial	These need examples to show how the detail needs to make allowances for all of the root system.	Add standard details.	
	7.2	7.2.6	Editorial	Needs to refer back to 5.4.2	Add Reference to 5.4.2	
	7.2	Table 2	Technical	The explanation does not refer for the need to have regard to species that have large surface roots or that on shallow soils or soils with high water tables that trees will have larger roots and buttresses for stability purposes. Distances will need to be increased in proportion to the stability zone of the tree.	Need to add detail to bottom of table and add reference to tree stability in Body Language of Trees.	
	7.3	all	Editorial	This information should be in an appendix or by referring to BRE Digests	Delete	
	7.3	7.3.1	Technical	The relationship between tree root growth, water uptake, subsidence and hydraulic conductivity of clay soils needs to be addressed in a more technical and accurate way than is given here. If it is to be included this whole section needs re-writing, e.g. at 7.3.1.5 it states that the depth to which soils rehydrates during winter is a function of the 'mass' permeability of the soil. This is certainly not the case in clay soils as the permeability of such soils can vary 10 fold over a few metres.	Delete and have as an Appendix and / or re-write, preferably by a soil scientist.	
	7.3	7.3.2	Editorial	The design of foundation is not really an item for inclusion in this standard.	Delete and add as an appendix or simply refer to the references	
	7.3	7.3.4	Editorial	Last sentence states 'in certain circumstances' as this is likely to be an important point it should provide example or set out the principals when this would be the case.	Amend to give example or principals.	
	8.1	8.1.1	Editorial	First sentence needs shortening.	Amend to: It may be necessary to incorporate hard surfaces within the defined TPZs.	
	8.1	8.1.1	Technical	The last but one sentence is not technically correct, it is the soil type and rooting pattern that is the determining factor in deciding if a hard surface can be used within the TPZ, (this is basically what 8.1.2 states(if the condition of the tree is an issue then the issue should be considered on risk assessment grounds).	Amend to state that soil type and rooting pattern of the tree are the limiting factors. Or delete and start this section with 8.1.2.	
	8.2	8.2.4	Technical	Note: provides max dimensions for paved areas, this is bound to be challenged at appeal, it needs references to back up this claim.	Add references or explanation.	

	8.2	8.2.5	Technical	This clause is misleading as it does not refer to the importance of the fine root system, i.e. roots 1mm or less in diameter. For resource uptake and stability.	Needs amending to take account of the extent of pruning in relationship to stability and resource capability of the tree for the situation, tree condition and species. I.e. include reference to depth of excavation, extent of root area affected and need for re-instatement specification to be designed to provide ideal conditions for root growth in the area affected.	
	8.2	8.2.7	Technical	It is not only the 'demands of hand excavation' that cause problems, it is also the 'limitations', i.e. excavations deeper than 1m need to be protected by shuttering (see Health & Safety Law) therefore roots could not be retained in a trench deeper than 1m so there would be no point in specifying hand digging in the hope of retaining root.	Add information of H&S issue and limitations of hand digging.	
	8.3	8.3.1	Technical	This information is often not supplied with planning applications and even if it is there is no guarantee that the underground service will be in the place shown on the plans. Planning conditions cannot be used for this problem, because if consent is given with such a condition and then it is found that the development can not go forward because it is not possible to connect up the services without removing the tree(s) the condition will be void.	Amend to reflect that if it appears that the service is close to the TPZ then it will be required that the location of the service and the location of any new trenches and or replacement services can be implemented without removing / significantly damaging the tree(s), before planning consent will be given.	
	8.4	8.4.1	Technical	No more than 20% new impermeable surfaces, what if there are existing surfaces? Needs amending to say total extent of impermeable surfaces should be no more than 20%. In addition references for backing this up should be available for appeal / prosecution situations.	Amend to say: the total extent of impermeable surfaces should be no more than 20%, plus references.	
	8.4	8.4.3	Editorial	There is no 7.4.1	Amend	
	8.5	8.5.5	Editorial	Needs drawing	Add drawing	
	8.7	8.7.4	Technical	These 'holes' can be built in to the construction of the raft using rather than drilling through afterwards. However, diffusion gradients in clay soils being poor the density of the 'holes' will need to be more like at 300mm centres.	Amend to: 50mm holes to be part of the design of the raft and at 300mm centres,	
	8.8	8.8.3	Technical	The use of boards or pinned kerbs is rarely a long term solution and may introduce health and safety issues in terms of CDM. Avoidance of sharp changes in levels is a clear need as well as long term functionality of such features.	Need to consider if this clause should be deleted and replaced with a drawing to show how this would work and what the problems to be considered are. It is possible when using geotextiles / gabions and stone to use high slump concrete for 'fixing' edge details.	
	8.9	8.9.3	Editorial	Arbor-toxic needs definition	Add definition or re-word.	

	9.0	9.2	Editorial	Reference to 7.2 should be to 6.2	Amend to 6.2	
	9.0	9.3	Technical	For 'Air injection' to be effective soil moisture content needs to be within very tight parameters if this technique is to work, i.e. not to wet and not to dry.	Amend to recognise this problem (which is difficult to predict in any case) or delete or include all the other methods available.	
	10.0	10.1	Editorial	Agree that reference should be made to guidance on choosing tree contractor, but this standard should not promote commercial companies.	Delete reference to AA Approved contractors.	
	11.1	11.1.2	Technical	Roots improve slope stability 3 or 4 fold.	Add slope stability to list.	
	12.4	12.4.1	Editorial	Needs a detail to show how this can be achieved. There can be problems when using this type of detail when large tree pits filled with an 'engineered soil' are specified, i.e. the tree pit is much larger than the surface detail and either there is unacceptable distortion of the paving surface or the soils are over compacted. One problem leads to negligence claims and the other to trees not establishing.	Suggest this one is re-considered and possibly have one of the specialist companies who do this type of work provide a 'basic' detail.	
	13.1	13.1.4	Technical	There is no evidence that inoculation using mycorrhizae is effective without first improving soil structure and drainage.	It is sufficient to say: The arboriculturist should consider appropriate cultural operation to restore / enhance soil structure and organic nitrogen level in the soil.	
	Annex A	A2.1	Technical	Needs to refer to the actual sections of the 1990 Act and the 1999 Regulations, as the 1990 Act does not specify the details relating to Conservation Areas	Amend by adding section of Act and regulations.	
	Annex A	A2.3	Technical	The Forestry Act is legal protection; need to remove first 7 words of sentence.	Remove words identified.	
	Annex A	A3.2	Technical	It is currently Section 70(2) of the 1990 Act and this will change when the new Planning & Compulsory Purchase Act come into force.	Amend to include Section 38(6) of the new Act.	
	Annex A	A3.2	Technical	The reference to "Structurally sound trees" is not appropriate without referring to the possible conflict with Veteran trees and the inclusion of trees for wildlife value particularly in a Group, Area or Woodland situations.	Amend text to include after 'structurally sound' the following: taking into account the biodiversity and habitat values of the trees / site.	
	Annex A	A3.7	Editorial	This is poorly set out, if this information on enforcement is going to be included then it needs to set out how and when each part can be used, e.g. do not use Breach of Condition Notice if damage as occurred, as this type of Notice does not carry any powers to make the person served repair / correct any damage.	Amend to set out enforcement correctly or delete.	

	Annex A	A3.8	Editorial	Given the complexity of these issues it is strongly suggested that this item is deleted.	Delete.	
	Annex A	A3.9	Editorial	Given the complexity of these issues it is strongly suggested that this item is deleted.	Delete.	
	General	Document	Editorial	The sequence of the various 'stages' of the document miss out a critical element in any evaluation of a proposed development, i.e. the assessment process. This is important if the intention is to set standards, i.e. you provide an assessment process as part of the document, a simple checklist would do.	Add a new section entitle 'Assessment of applications' that sets out the assessment framework of the issues that need to be considered. This will then form a 'checklist' for ensuring all the risks have been considered and provide a summary to show what assessments were undertaken.	

Comments from David Thorber, West Lancs Council

A3.2. I do not consider the reference to "Structurally sound trees" to be appropriate. This is because it could conflict with Veteran trees and the inclusion of trees for wildlife value particularly in a Group, Area or Woodland situations.

I may have further comments.