

**ARBORICULTURAL METHOD STATEMENT
to BS 5837:2012**

**at
6 Woodroyd Gardens
Barnsley
South Yorkshire
S73 0HB**

Client:

James White and
Amanda Wroe

Client Address:

28 Aldous Way
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JCA Ref:

14900a/PH

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1. Introduction

1.1 Purpose of the Method Statement

- 1.1.1 This Arboricultural Method Statement has been prepared to ensure good practice in the protection of retained trees during the development at **6 Woodroyd Gardens, Wombwell, Barnsley**.

1.2 Terms of Reference

- 1.2.1 JCA Limited is instructed by **James White** and **Amanda Wroe** to prepare an Arboricultural Method Statement for the proposed development, based on our arboricultural report dated 30th April 2019 (JCA Ref: **14900/PH**). The arboricultural survey and report conforms to the most recent specifications outlined in BS 5837: 2012 *Trees in relation to design, demolition and construction - Recommendations*.
- 1.2.2 It is proposed to reconstruct the existing dwelling and create a new detached double garage.
- 1.2.3 The following construction details have been provided and these are the basis of the Arboricultural Method Statement and the Tree Protection Plan at **Appendix 5**:
- Development Layout (Drawing No. **201818 SL Blk Plans Clean.dwg**).
 - Garage detail Layout drawing (ref no: **201818 GAs Clean.dwg**)
- 1.2.4 No construction works to proceed until an arboricultural method statement is formalised and agreed upon with the Local Planning Authority.
- 1.2.5 Therefore, planning consent is subject to this method statement being agreed upon in advance by the Local Planning Authority. The contents of this report must be adhered to, **before**, **during**, and **after** the construction phase of the development.

1.3 Status of the Method Statement

- 1.3.1 This Arboricultural Method Statement should be included as part of the specification and schedule of works issued to the building contractor, and can form part of the contract.
- 1.3.2 This Arboricultural Method Statement should be available on site for inspection by the local authority, contractors and other relevant persons.

2. Tree Works Prior, During and Post Construction

2.1 Tree Works Prior to Construction

- 2.1.1 Prior to any construction activity on site, the first operation on site will be the undertaking of the necessary arboricultural works, as described at **Appendix 1**.
- 2.1.2 The tree works include:
- The removal of **T1, T2, T3, T4, T5, G5** (a section; see plan), **T6** and **T10** to facilitate the proposed development.
- 2.2.1 Individuals from within **G5** are to be removed to enable the construction of the garage building. The first operation will be for an appointed person to mark out on site the proposed structure plus, an additional 1.5m for working space using an appropriate method (e.g. temporary, biodegradable spray paint or pegs and lines). The individual trees requiring removal will then be assessed on-site and marked for removal using spray paint;

2.2 Tree Works During Construction

- 2.2.2 In this case, no above ground tree works are envisaged to be required during the construction phase.
- 2.2.3 Damage to trees for retention should be entirely prevented by the installation of temporary protective fencing to create a Construction Exclusion Zone (**CEZ**). All persons on site must be aware of limitations that apply within the CEZ (please refer to **Section 3.1.3**).
- 2.2.4 If any trees on site are damaged, this must be immediately reported to JCA to agree on appropriate remedial action. Contact numbers for all parties can be found at **Section 7**.

2.3 Tree Works Post Construction

- 2.3.1 When the construction phase is completed and when the temporary protective fence has been removed, some minor remedial works may be required. This may be for aesthetic purposes; to give clearance for new paths or to provide ground clearance for landscaping schemes.
- 2.3.2 Any post construction remedial works must be applied for via a tree work application submitted to the Local Planning Authority.
- 2.3.3 No post construction remedial works are to be carried out on the trees until permission has been granted by the Local Planning Authority.

2.4 Recommendations For Tree Works

- 2.4.1 All work must be undertaken to BS 3998: 2010 - *Recommendations for tree work* and carried out by qualified, experienced and, ideally, Arboricultural Association approved contractors who must be adequately insured.
- 2.4.2 Any defects seen by a contractor or the client that were not apparent to the consultant must be brought to the attention of JCA immediately.
- 2.4.3 No liability can be accepted by JCA in respect of the trees unless the recommendations of this Method Statement are carried out under our supervision.

3. The Protective Barrier Prior, During and Post Construction

3.1 Protective Barrier Prior to Construction

- 3.1.1 The installation of the temporary protective barrier will be the very first job to be undertaken on site following the completion of the tree works (**Section 2.1**). This barrier may comprise of protective fencing, ground protection, or a combination of both.
- 3.1.2 The protective fencing must be constructed in accordance with BS 5837: 2012 *Trees in relation to design, demolition and construction - Recommendations* and will be located as shown on the Tree Protection Plan at **Appendix 5**. Where possible, the protective barrier will enclose the entire Root Protection Area (RPA) of the trees to make a Construction Exclusion Zone (CEZ); **this area is to be considered a restricted area; no pedestrians, vehicles, equipment or machinery are allowed within the CEZ and the storage of materials is not permitted, unless specified within this Method Statement.**

- 3.1.3 The protective fencing will be installed in accordance with BS 5837: 2012 and will comprise of a vertical and horizontal scaffold framework, well braced to resist impacts. The vertical tubes should be spaced at a maximum interval of 3m and driven securely into the ground, taking care to avoid underground services and structural roots. Finally, weld mesh panels are to be securely fixed on the scaffold framework. Please refer to **Appendix 2 (Fig 1)** for protective fencing details.
- 3.1.4 Once the fencing is installed, waterproof signs with the sentence '*Protected tree zone, no storage or operations within this area*' are to be placed at 3m intervals to ensure that all personnel are aware of the restrictions that apply to the cordoned off area. A prepared sign is available at **Appendix 2**.

3.2 Checking the Protective Fence Prior to Construction

- 3.2.1 Once installed, the appointed arboriculturalist will be invited on site to inspect the protective fencing, ensuring that it is in the correct position and that it has been constructed in accordance with this Method Statement. No other work, including soil stripping, excavation, or the bringing onto site of materials or machinery, shall commence until the barrier is installed and confirmed to be acceptable by the appointed arboriculturalist.
- 3.2.2 It is important that the protective fencing be checked by the LPA or an arboricultural consultant prior to any construction works being carried out on site. **If the protective fencing is not correctly installed, or if it does not comply with BS 5837: 2012, this could result in damage being caused to trees and a stop notice being served by the LPA.**

3.3 Protective Barrier During Construction

- 3.4.1 No operations shall take place which require the removal of part of the protective barrier without prior agreement with the Local Planning Authority or JCA.

3.4 Removal of the Protective Barrier

- 3.5.1 When the development phase is complete and the main site machinery has been removed, the Local Planning Authority should be invited to inspect the site to give approval for the removal of protective barrier.
- 3.5.2 When this approval has been given the protective barrier may be dismantled and removed from site.
- 3.5.3 It should be noted the same restrictions apply to all RPAs as the CEZ (please refer to **Section 3.1.2**).

4. Construction Phase

4.1 Demolition Works

- 4.1.1 Where existing buildings are proposed to be demolished adjacent to retained trees, a sensitive method will be employed. In order to prevent damage to nearby trees, the buildings will be collapsed onto their existing footprint in a direction away from the trees; a method referred to as '*top down, pull back*'.
- 4.1.2 In this case, the existing building is to be partially demolished and re-modelled on the same foot print. The protective fencing will be placed to ensure an appropriate degree of protection for the retained trees during the demolition of the existing structures.

4.2 Ground Level Changes

- 4.2.1 No ground level changes are required within the RPA of any tree to be retained on this site. As such no mitigation actions are considered necessary.

4.3 Construction of Hard Surfaces

- 4.3.1 In this case, no new hard surfaces are proposed within the RPA of retained trees. As such, no specialist mitigation actions are required.

4.4 Construction of New Buildings

- 4.4.1 In this case, the proposed buildings are located at sufficient distance from the retained trees that no specialist foundation methods are required for arboricultural purposes.

4.5 Excavations and Services

- 4.5.1 Details on service routes are not available currently. As such, no provision for the routing of utilities within the RPAs is made within the scope of this report. All utilities must therefore be located outside the RPA of retained trees. If, for whatever reason, incursions into the RPAs are considered unavoidable, the consulting arboriculturalist and/or the LPA must be consulted immediately, to prevent a breach of planning conditions and/or damage to retained trees.
- 4.5.2 Guidance and methodologies on the installation of underground services whilst minimising damage to tree roots is provided at **Appendix 3**.

4.6 Location of the Site Compound

- 4.6.1 The site compound, typically including the site office, mess facilities, toilets, material storage areas and parking locations must be located away from, and outside the RPA of all the retained trees. Areas designated for the storage and/or mixing of chemicals, including petrol, diesel and oils must also be located away from, and outside the RPA of retained trees. Such areas should be constructed with consideration to, and contingencies for, the occurrence of spillages, preventing the leaching of chemicals into unprotected, open ground.

5. Post Construction Phase

5.1 Completion Meeting

- 5.1.1 Upon completion of the works as specified in **Section 4**, a JCA consultant will invite the Local Planning Authority representative to meet with them on site to agree on any remedial works which may be required.
- 5.1.2 Any necessary remedial works will be confirmed in writing and must be carried out in accordance with BS 3998: 2010 - *Recommendations for tree work*.
- 5.1.3 Due to the large potential penalties for illegally carrying out work to protected trees, JCA recommend that a further check is carried out prior to any works being undertaken post development.

5.2 Post Construction Landscaping

- 5.2.1 The retained trees on site may be subject to some form of landscaping or seeding beneath their canopies after the development phase. At this stage the protective fencing will have been removed and the property may be occupied.
- 5.2.2 Landscaping works must be carried out in such a way as to avoid ground level changes or deep digging within RPAs. Tractor mounted rotovation or other mechanised cultivation methods must not be used within the RPAs of retained trees.
- 5.2.3 Heavy machinery is not permitted in the vicinity of retained trees, unless otherwise stated in this method statement.
- 5.2.4 Herbicides should be appropriate for the purpose and should not be used in such a way as to damage any retained trees or vegetation.
- 5.2.5 If in doubt, regarding the impact of proposed landscape operations, please contact the appointed arboriculturalist.

5.3 Tree Planting Scheme

- 5.4.1 The planting of new trees must go ahead in the first tree planting period (Nov-Feb) after the construction phase is completed.

6. Timescale of Works

- 6.1.1 The timescale for the arboricultural requirements are summarised below:

Timescale	Action	✓	Initial
Stage 1	All requirements listed in the planning consent are approved by the Local Authority planning office.		
Stage 2	Undertake any required tree works (as detailed at Appendix 1).		
Stage 3	Install the protective fencing around all the trees (as detailed at Appendix 2 and as shown on the Tree Protection Plan at Appendix 5).		
Stage 4	Have the Local Planning Authority inspect the fencing prior to any on site construction activity. Once inspected, the protective fencing must not to be moved or breached.		
Stage 5	Undertake the demolition of the existing building.		
Stage 6	<u>Construction Phase:</u> Undertake the construction of the new dwelling, garage building and driveway.		
Stage 7	Following the completion of the construction phase and when all site traffic and machinery has left, the protective fencing can be removed.		
Stage 8	Undertake the Tree Planting Scheme.		

7. Relevant Contact Details

Contact Name	Organisation/Detail	Contact Number
Phil Humeniuk Arboricultural Consultant	JCA Limited	01422 376335
TBC Tree Officer	Barnsley MBC	TBC
TBC Site Manager	TBC	TBC
J. Early Architect	JE Architectural Ltd	TBC

Appendices

Appendix 1: Tree Works Schedule

Tree Ref.	Age Common Name Botanical Name	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
T 1	Early-mature Silver Birch <i>Betula pendula</i>	15	4	4 W	34	5 6 6	Single-stemmed with a slightly unbalanced crown. Occasional pruning wounds.	Remove to facilitate the development n/a	GOOD	FAIR	LOW	LOW	20+	B 2
T 2	Early-mature Purple Filbert <i>Corylus maxima 'Purpurea'</i>	7	3	4 N	10 11 9 12	3 4 3 2	Multi-stemmed from ground level with an unbalanced canopy due to suppression. Profuse epicormic shoots from base. Occasional historic pruning wounds noted.	Remove to facilitate the development n/a	GOOD	GOOD	LOW	LOW	20+	C 1
T 3	Early-mature Saucer Magnolia <i>Magnolia X soulangeana</i>	7	2	3 N	13 8 16	3 5 1 1	Multi-stemmed from 0.2m with an unbalanced canopy due to competition. Occasional historic pruning wounds noted.	Remove to facilitate the development n/a	GOOD	GOOD	LOW	MOD	20+	B 2
T 4	Early-mature Saucer Magnolia <i>Magnolia X soulangeana</i>	6.5	2.5	2 N	15 14 8	3 2 0	Multi-stemmed from 0.3m with a canopy optimised north due to competition. Occasional historic pruning wounds and branch cavities noted. No significant defects.	Remove to facilitate the development n/a	GOOD	GOOD	LOW	MOD	20+	B 2
G 5	Semi to early-mature Mixed <i>Details in observations</i>	to 6	0	0 n/a	Est. Av. 15	See plan	Understorey garden ornamentals group providing some screening value; unmanaged with merging crowns and occasional dead specimens shaded out. Species include <i>Rhododendron sp</i> , Cypress cv's, variegated Holly, <i>Camellia sp</i> , spotted Laurel and young yew.	Remove section (see plan) to facilitate the development Low	GOOD	FAIR	LOW	MOD	20+	C 1
T 6	Semi-mature Western Red Cedar <i>Thuja plicata</i>	10	5	5 N	14 17 5	2 2 2	Three-stemmed from 0.4m with a tight union and high balanced canopy due to competition. Minor shade deadwood noted.	Remove to facilitate the development n/a	GOOD	GOOD	LOW	MOD	40+	B 2
G 7	Semi-mature Silver Birch <i>Betula pendula</i>	14	6	6 W	Av. 17	See plan	Five in group; single and twin-stemmed. High crowns merge and contain minor deadwood. Young Rowan also in group.	No action required n/a	GOOD	FAIR	LOW	LOW	20+	C 1
G 8	Semi to early-mature Holly <i>Ilex aquifolium</i>	to 12	3	2 N	10 to 25	See plan	Eight in group; formerly a historic hedgerow adjacent a stone boundary wall, now gone. Leaning stems, exposed roots and stem wounds from wall rubbing observed. Differing levels mean collapse is likely. High merging canopies display reasonable vigour.	Remove canopies to leave 1m stumps for re-growth High	GOOD	POOR	MOD	LOW	10+	C 1

Tree Ref.	Age Common Name <i>Botanical Name</i>	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
G 9	Mature Mixed <i>Details in observations</i>	to 17	4	5 n/a	# to 70	See plan	Inspection limited; predominantly common and purple Beech with occasional Birch and Holly. Provides screening and amenity value.	Re-inspect fully to assess condition High	GOOD	FAIR	HIGH	MOD	40+	1 B 2 3
T 10	Early-mature Irish Yew <i>Taxus baccata 'Fastigiata'</i>	6	0	0 n/a	Est. 30	2 2 2	Inspection limited due to dense vegetation at base. Canopy displays good vigour. Young multi-stemmed Sycamore grows from base.	<i>Remove to facilitate the development</i> High	GOOD	GOOD	LOW	MOD	40+	1 B 2

Appendix 2: Protective Barrier

A2.1 The protective barrier will be installed in accordance with BS5837: 2012. The default specification of BS 5837: 2012 (pictured below for reference) recommends a vertical and horizontal, scaffold framework, well braced to resist impacts, with vertical tubes at no more than 3m intervals. These should be driven into the ground. Weld mesh panels should be affixed to this framework with scaffold clamps - See Figure 1.

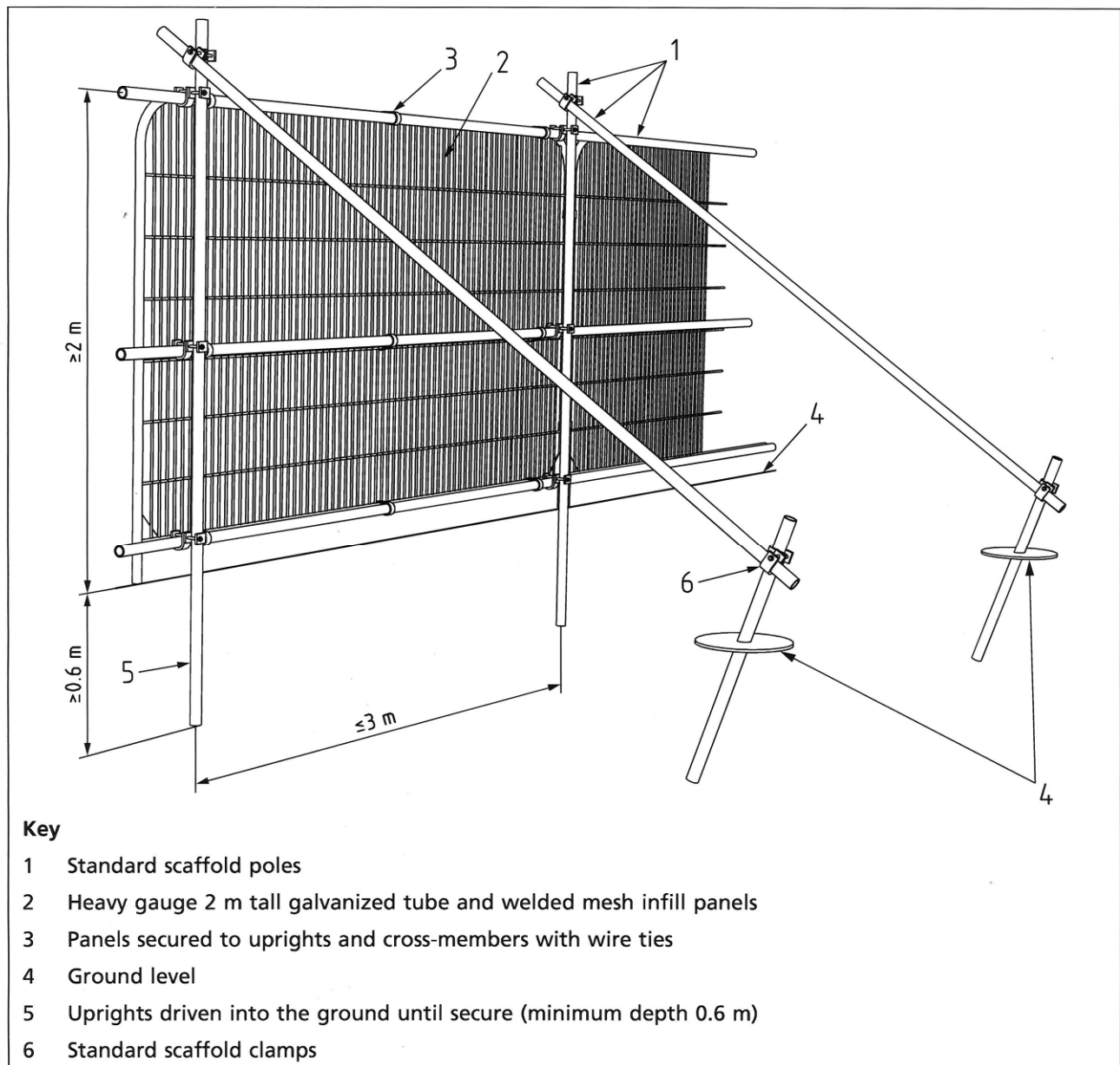


Figure 1: 'Protective Barrier to BS 5837: 2012'. To be used where situated in open ground.

TREE PROTECTION ZONE

KEEP OUT!

TREES ENCLOSED BY THIS FENCE ARE PROTECTED
BY STRICT PLANNING CONDITIONS

ANY DAMAGE CAUSED TO THESE TREES MAY
RESULT IN CRIMINAL PROSECUTION

RESTRICTED AREA:

- THE PROTECTIVE FENCE MUST NOT BE MOVED OR BREACHED
- NO PERSON, MACHINERY, VEHICLE OR PLANT IS PERMITTED WITHIN THE TREE PROTECTION ZONE
- NO MATERIALS SHALL BE STORED WITHIN THE TREE PROTECTION ZONE
- NO EXCAVATIONS ARE PERMITTED WITHIN THE TREE PROTECTION ZONE
- NO SPOIL IS TO BE DEPOSITED WITHIN THE TREE PROTECTION ZONE
- NO FIRES ARE TO BE LIT WITHIN THE TREE PROTECTION ZONE

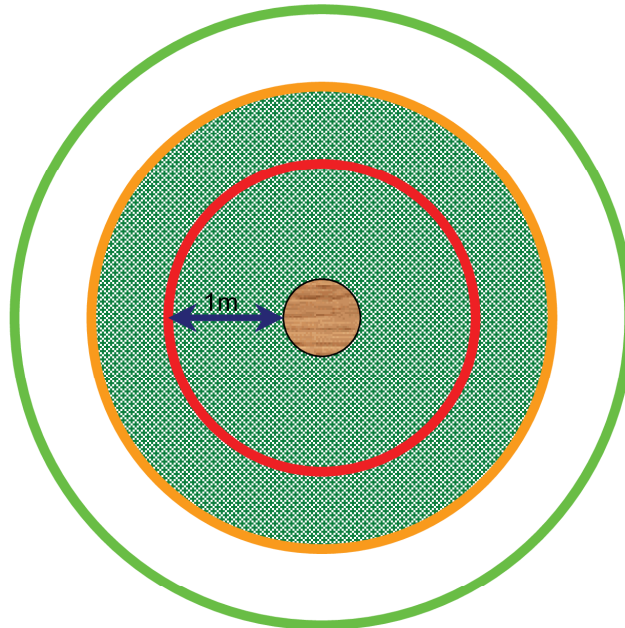
REPORT TREE DAMAGE TO JCA LIMITED ON
01422 376 335

Appendix 3: Utilities and Drainage

- A3.1 Over-ground services should be routed away from areas where they are likely to interfere with the crowns of trees. Similarly any landscaping should take account of over-ground services and mature tree size.
- A3.2 Underground services must be routed outside the RPA of retained trees, unless otherwise specified within this report. NJUG Volume 4 Issue 2 (on the next page) is a set of accepted guidelines for installing services in the proximity of trees. Please note that this is not a substitute for site-specific advice by an arboriculturalist and consultation should be made wherever incursions of RPAs are envisaged. The contents of this report, specifically **Section 4.5**, supersede the set of guidelines on the next page, which are only included for reference.



NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees – Issue 2



TREE PROTECTION ZONE

Key to Diagram



Trunk of Tree



Spread of canopy or branches



PROHIBITED ZONE – 1m from trunk. Excavations of any kind must not be undertaken within this zone unless full consultation with Local Authority Tree Officer is undertaken. Materials, plant and spoil must not be stored within this zone.

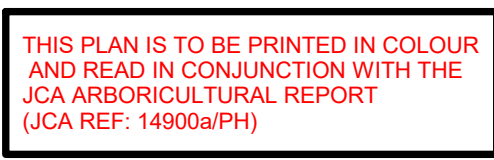
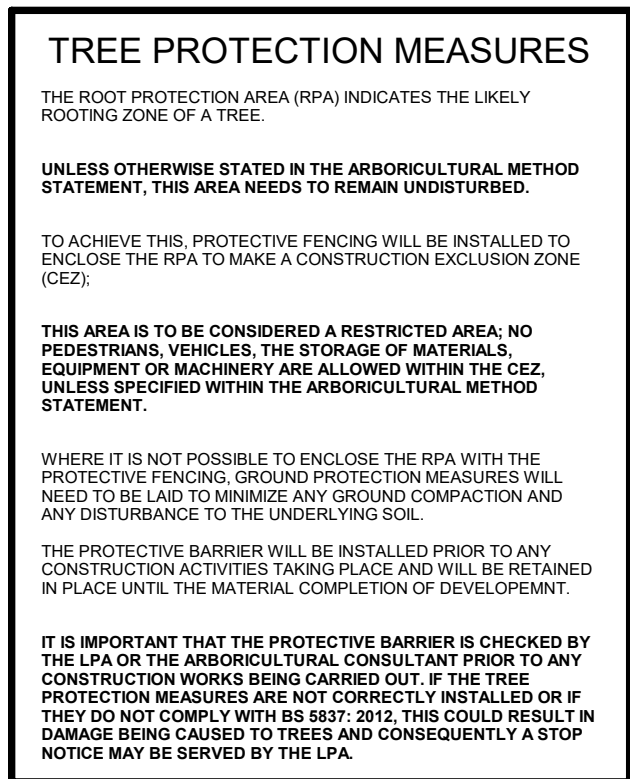


PRECAUTIONARY ZONE – 4 x tree circumference. Where excavations must be undertaken within this zone the use of mechanical excavation plant should be prohibited. Precautions should be undertaken to protect any exposed roots. Materials, plant and spoil should not be stored within this zone. Consult with Local Authority Tree Officer if in any doubt.



PERMITTED ZONE – outside of precautionary zone. Excavation works may be undertaken within this zone however caution must be applied and the use of mechanical plant limited. Any exposed roots should be protected.

Appendix 5: Tree Protection Plan

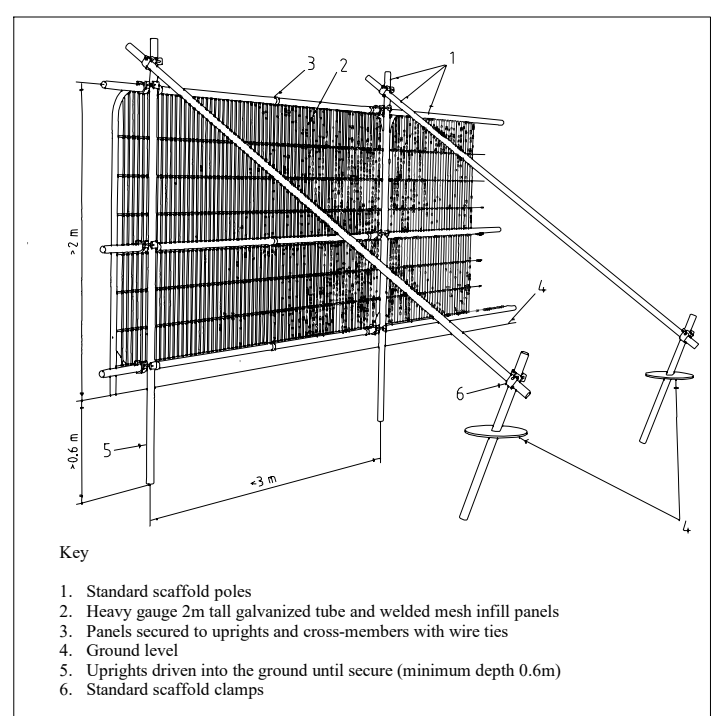


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	TREE TO BE RETAINED
	TREE TO BE REMOVED
	STEM OF TREE TO BE RETAINED
	STEM OF TREE TO BE REMOVED
	ROOT PROTECTION AREA (RPA)
	AREA OF RPA ENCRoACHED BY THE DEVELOPMENT; SPECIALIST CONSTRUCTION METHODS AND MATERIALS ARE TO BE USED TO MINIMISE ROOT DISTURBANCE
	PROTECTIVE FENCE LINE (CEZ)
	PROPOSED NEW DEVELOPMENT



Default specification for a protective barrier



I hope that this report provides all the necessary information, but should any further advice be needed please do not hesitate to contact the author.

Signed

P. Humeniuk

.....
Phil Humeniuk *FdSc (Arboriculture)*.

9th May 2019

For and on behalf of **JCA Ltd**

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- Expert Witness, Planning Inquiries and Appeals

Veteran Tree Management

- Ancient Woodland Management
- Veteran Tree Management

Tree Health and Pest and Disease Management

- Pest and Disease Surveys
- Tree Health Checks
- Disease Mitigation and Control

ECOLOGICAL SERVICES

Ecological Pre-Planning Services

- Phase 1 Habitat Surveys
- Great Crested Newt eDNA Sampling
- Protected Species: Bat, Wintering and Nesting Bird, Badger, Amphibian, Otter, Water Vole, White-Clawed Crayfish, Dormice and Reptile Surveys.
- Preparation for Environmental Impact Assessment (EIA)
- Invasive Species Surveys
- Code for Sustainable Homes

Ecological Post-Planning Services

- Biodiversity Enhancement Plans
- Protected Species Mitigation
- Ecological Management (Bat and Bird box installation and inspection)

HEAD QUARTERS:

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