TREE CONSULTANTS

ARBORICULTURAL METHOD STATEMENT

to BS 5837:2012

at

Land off

Wilthorpe Road,
Barnsley,
South Yorkshire.

This document describes how the trees will be protected and managed during the development of this site. It explains how and when the protection measures must be installed and maintained throughout the development.

A copy of this document report must be permanently available on site for the duration of all development activity and should be referenced for practical guidance on how to protect the retained trees at this site.

Prepared for:
Persimmon Homes West Yorkshire
3 Hepton Court,
York Road,
Leeds,
LS9 6PW

Application Reference Number: 2016/1228

AWA Reference: 1310/1848

Date: April 2017

Institute of Chartered Foresters
Registered Consultant

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Union Forge, 27 Mowbray Street, Sheffield, S3 8EN. AWA Tree Consultants Limited. Company No. 8520123. Registered in England & Wales.

Contents

1. Introduction

1.1 Instruction

1.1.1 I am instructed by Matt Burrow of Persimmon Homes West Yorkshire, to prepare an arboricultural method statement for the proposed development at:

- ***Wilthorpe Road, Barnsley, South Yorkshire***

1.2 Purpose

1.2.1 This method statement has been prepared in order to demonstrate that the development operations at this site can be undertaken with minimal risk of adverse impact on the trees to be retained.

1.2.2 This method statement conforms to BS 5837: 2012 *Trees in relation to design, demolition and construction - Recommendations*. It is based on arboricultural report ref: AWA1143, dated 23rd January 2014.

1.3 Description of Development

1.3.1 Increase total number of dwellings from 302 (applied under app 2014/0474) to 326, including 14 dwellings on public open space and a net gain of 10 units through plot substitutions.

1.3.2 The proposed development layout has been provided by my client and is the basis for the **Tree Protection Plan (TPP)** detailing Tree Protective Fencing at **Appendix 4**.

1.4 Details of Consent

1.4.1 Planning consent has been granted with conditions relating to trees.

1.4.2 This method statement and associated plans must agreed in advance by the Local Planning Authority.

1.4.3 The contents of this report must be adhered to, before, during, and after the construction phase.

2. Method Statement Timeline

2.1 Overview of Sequence of Operations

2.1.1 In overview, it is necessary to undertake the following sequence of operations in relation to arboricultural input for development operations.

1 Method Statement approved by the LPA

2 Recommended tree works

3 Install protective fencing

4 Pre commencement meeting

5 Construction of new development

6 Removal of tree protection

7 Undertake associated soft landscaping

2.2 Specific Sequence of Operations

2.2.1 The following timeline table informs the key principles for development operations proceeding in relation to arboricultural requirements conditioned as part of this method statement.

2.2.2 The actions and timescales within this table must be adhered to in order to discharge the arboricultural method statement planning condition for this site.

2.2.3 The precise timing and order of some of the development operations may need to be changed due to site specific operational requirements, yet any operations that may affect the trees on the site must be done so under arboricultural supervision by a suitably qualified person appointed by the contractor.

Sequence of Operations		
Stages	***Action***	***Arboricultural Input***
1 Approval	This arboricultural method statement document is submitted to and approved in writing by the LPA.	If necessary, liaise with contractor and LPA to discuss methodologies detailed within this method statement.
2 Tree Works	Undertake tree removals and pruning associated with this development, as detailed on the plan at Appendix 4 and the Tree Works Schedule at Appendix 3.	Review the site tree work requirements with the tree contractor.
3 Tree Protection	Installing the tree protective measures will take place prior to any demolition, storage of plant, materials and machinery. Tree Protection Fencing shall be located as shown on the Tree Protection Plan at Appendix 4. The Tree Protection Fencing shall not be removed, breached or altered without prior written authorisation from the local planning authority or under arboricultural supervision as detailed in this AMS. It shall remain in a functional condition throughout the entire development, until all development related machinery and materials have been removed from site. If the fencing is damaged beyond effective functioning then works that may compromise the protection of trees shall cease until the protection can be repaired or replaced.	If necessary, liaise with the contractor installing the protective fencing until completed to the standard specified in this method statement.
4 Site meeting	Following the full installation of the Tree Protection, the LPA shall be invited to inspect the fencing and discuss any other site operations that have implications for trees.	Meeting with a representative of the LPA and the site manager. Alternatively, contractor can confirm the fencing is as specified by taking photographs of the tree protection measures.

5 Construction	Undertake the construction of the new development.	Provide ongoing arboricultural advice and, if required, supervision of construction activities within areas that could affect trees. Liaise with the local authority and the site foreman to ensure any issues are adequately resolved.
6 Site Finishing	Removal of tree protection measures must only be undertaken following the completion of the construction phase and when all site traffic and machinery has left the site.	If necessary, meeting with a representative of the LPA and the site manager. Alternatively, if acceptable to the LPA, the contractor can take photos of the site to give to the LPA to gain approval for the removal of protective fencing.
7 Landscaping	Post construction soft landscaping for this development.	If necessary, provide arboricultural advice in relation to soft landscaping establishment.

3. Tree Protection Issues

3.1 Arboricultural Impact Assessment

3.1.1 The development will require the removal of the trees T5 Oak, T13 Ash, T16 Elm, T26 Ash, a 5m section of G27 Blackthorn and a 10m section of G36 Hazel, as highlighted in red on the plan at Appendix 4 and as detailed in the tree data schedule in Appendix 3.

3.1.2 In addition, crown pruning works are required to G1 Birch, T2 Birch, G4 Hazel, T6 Oak, G9 Hawthorn, T15 Sycamore, T17 Oak, T20 Sycamore, G47 Hawthorn and T49 Oak; as detailed in the tree data schedule in Appendix 3.

3.1.3 Apart from two moderate value trees, T5 Oak and T26 Ash, the tree removals are all low value category C trees, with only limited long term value. As such, the tree removals will only have a minor/negligible impact on the surrounding amenity value. The proposed tree planting that forms part of the soft landscaping scheme will greatly increase the tree cover within the site and so mitigate the required tree removals.

3.1.4 When appointing a tree surgeon, only properly qualified and experienced companies should used, who have adequate Public Liability and Employer's Liability Insurance. All tree work should be carried out according to British Standard 3998: 2010 *Tree Work - Recommendations*.

3.2 Protective Fencing

3.2.1 The protective fencing for this site should be located as shown on the Tree Protection Plan (TPP) at Appendix 4 (as illustrated with a thick purple line) and in accordance with the specifications given below and at Appendix 1.

3.2.2 The precise fencing location may need to be slightly adjusted on site due to local site conditions, but is not expected to differ from that shown on the TPP. The final fencing position must be inspected and agreed on by the LPA before the commencement of any site works.

3.2.3 The protective fencing will be appropriate to the degree and proximity of likely construction works. The default specification of BS 5837: 2012 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 Appendix 1, figures 1 and 2).

3.2.4 In this instance, if acceptable by the LPA, an adequate level of protection for the trees could be provided by 'Heras' type fencing, of welded mesh panels. The 'Heras' fencing panels should be securely fixed, as detailed in the Tree Protection Fencing Drawing Ref: TPF-2012:001B at Appendix 1.

3.2.5 The existing robust fencing along much of the sites northern and western boundary areas should be utilised to provide an adequate level of protection to the adjacent trees.

3.2.6 The area enclosed by the fencing is referred to as the Construction Exclusion Zone (CEZ); this area should be considered a restricted area. No pedestrians, vehicles, storage of materials, equipment or machinery should be allowed with the CEZ unless specified within this method statement.

3.2.7 Once the fencing is erected, waterproof warning signs labelled '*Tree Protection Area'* should be placed at 3m intervals to ensure that all personnel are aware of the restrictions that apply to the fenced-off area (see Appendix 1, figure 3 for an example sign).

3.2.8 The protective fencing should be inspected for faults or damage by the site manager or other responsible named person on a regular basis and a written record kept. Any faults or defects should be repaired or replaced as soon as is reasonably practicable.

3.2.9 Seven trees (T2, T5, T6, T15, T17, T20, and T49) have not been able to have their RPA fully enclosed by the Tree Protection Fencing. All of the trees are in good or fair condition and it is considered that they will tolerate any minor disturbance resulting from development operations nearby or within the exposed RPA.

3.3 Site Compound

3.3.1 The site compound, that typically includes the site office, mess facilities, toilets, storage of materials and parking, must be located away from trees.

3.3.2 Care should also be taken to prevent contamination with chemical spillages, including petrol, diesel and oils. Cement mixers and toxic materials should not be permitted close to trees.

3.4 Drainage and Utilities

3.4.1 Drainage and utilities are to be directed away from the retained trees. Over-ground services should ideally be routed away from areas where they are likely to interfere with the crowns of mature trees.

3.4.2 New underground services should be grouped together and routed away from RPAs. *NJUG 10: Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees* should be considered when installing services.

4. Signature

I trust this report provides all the required information.

Signed

.....

Adam Winson,
Chartered Arboriculturist, MSc, BSc (Hons), MICFor, AIEEM.

18th April 2017

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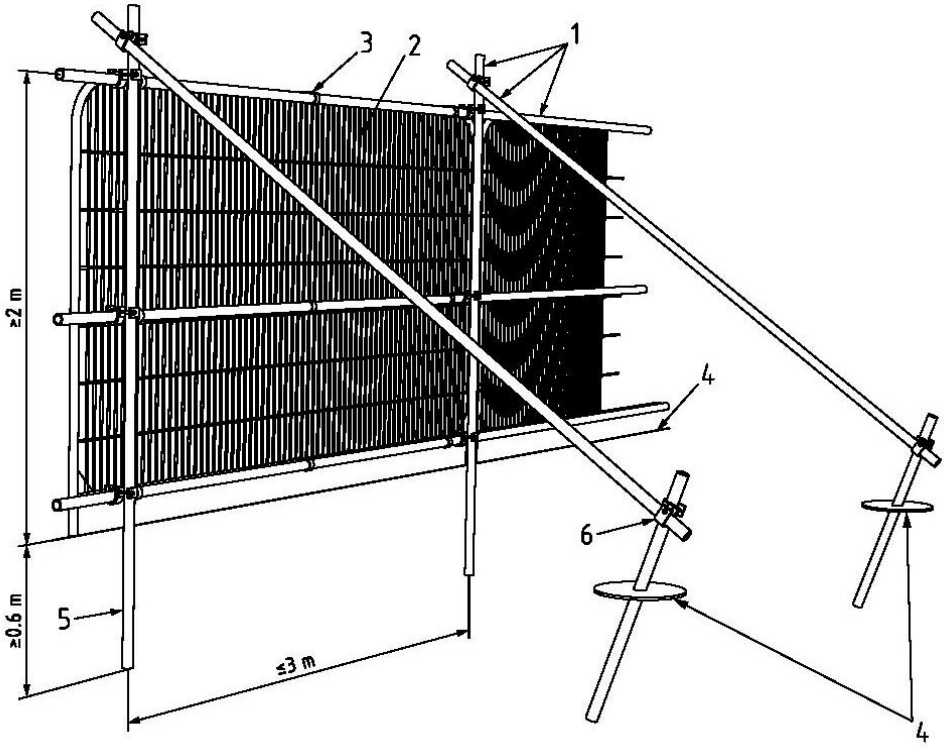
Appendix 1: Images and Figures



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

Figure 1: 'Fencing to BS 5837: 2012'.

Figure 2: 'Photo of Fencing to BS 5837: 2012'.

Figure 3: 'Example of warning sign for fencing '.

Appendix 2: Relevant Contact Details

Contact Name	Organisation / Details	Contact Number	Contact E-mail
Edward Jowett	Tree Officer Barnsley Council	01226 772557	edwardjowett@barnsley
Adam Winson	Arboricultural Consultant AWA Tree Consultants Ltd.	0114 272 1124	adam@awatrees.com
Matt Burrow	Persimmon Homes West Yorkshire	0113 2409 726	matthew.burrow@persimmonhomes.com

Appendix 3: Tree Data

Appendix 4: Tree Protection Plan

	Tree Species		Measurments					Crown (m)						Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*First branch*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiology*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
G1	Birch	*Betula pendula*	Semi-mature	11	1	150	Yes	3n	3	See Plan				No visual defects	No visual defect; Minor cavities	No visual defects; Minor dead wood	Recently planted tree belt, situated behind unmanaged boundary hedge. Comprised of approx': Birch 70%, Ash 10%, Alder 10%, Pine 10%.	Good	Good	20 to 40 yrs	High	**A**	No action (Occasional overhanging crowns could be lifted to 3m if required)
T2	Birch	*Betula pendula*	Early-mature	8	1	320	No	2n	1	6	5	5	6	No visual defects	No visual defect. Multiple stemmed at 2m.	No visual defects	Situated on boundary.	Fair	Fair	20 to 40 yrs	Mod	**B**	Crown lift northern overhanging crown to 4m from ground level
G4	Hazel	*Corylus avellana*	Early-mature	5	1	300	No	2n	1	3	3	2	3	No visual defects	No visual defect; Multi stemmed with partially included bark	No visual defects; Minor die back	Line of trees forming one crown along boundary area. Occasional young Sycamore in group.	Fair	Fair	20 to 40 yrs	Low	**C**	Cut back overhanging crowns as required
T5	Oak	*Quercus robur*	Early-mature	6	1	660	No	2n	2	6	6	4	6	No visual defects; Soil compaction	Multi stemmed at 2m with partially included bark. Reaction growth at 2m.	No visual defects	Situated on boundary.	Good	Good	40+ yrs	Mod	**B**	Fell to ground level
T6	Oak	*Quercus robur*	Early-mature	7	1	490	No	2n	3	7	6	5	6	No visual defects	Bark wounds; Multi stemmed at 2m with tight union and partially included bark.	No visual defects	Situated on boundary area	Good	Good	40+ yrs	Low	**B**	Crown lift northern overhanging crown to 4m from ground level
G9	Hawthorn	*Crataegus monogyna*	Semi-mature	8	1	150	Yes	2e	2	See Plan				No visual defects; Soil erosion	Some stems with slight lean	Minor deadwood and die back	Natural regeneration along boundary area, Occasional Hazel, Birch and Goat Willow. Low individual value but provides good screening value.	Fair	Fair	20 to 40 yrs	Mod	**B**	Cut back/lift overhanging crowns as required

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	Tree Species		Measurments					Crown (m)						Tree Condition							Value		Management
Tree ID	***Common Name***	***Latin Name***	***Maturity***	***Height (m)***	***Stems***	***Stem Dia (mm)***	***Estimated***	***First branch***	***Ave Height***	***N***	***E***	***S***	***W***	***Roots***	***Stem***	***Crown***	***Comments***	***Physiology***	***Structural***	***Life Expectancy***	***Amenity***	***Category***	***Works***
T13	Ash	*Fraxinus excelsior*	Mature	16	1	670	No	4n	4	7	7	8	8	No visual defects; Waterlogged	Decayed old stem at base, previously twin stemmed, now single-stemmed. Cavities from	Moderate die back; Minor dead wood	Situated on boundary area. Limited long term future prospects	Poor	Poor	10 to 20 yrs	Mod	**C**	Remove / Fell to suitable point near ground level
T15	Sycamore	*Acer pseudoplatanus*	Early-mature	16	8	260	Yes	3e	3	6	5	6	7	No visual defects; Waterlogged	Multi stemmed; Tight union; Ivy covered	No visual defects	Situated on boundary. Limited access around stem base	Fair	Fair	20 to 40 yrs	Mod	**C**	Crown lift overhanging branches up to 5m from ground level
T16	Elm	*Ulmus procera*	Semi-mature	8	4	260, 260, 250, 200	No	3s	3	5	3	3	5	Soil erosion	Cracked / included bark; Leaning; Old pruning wounds	Minor die back	Limited long term future prospects.	Poor	Poor	<10 yrs	Low	**C**	Remove / Fell to suitable point near ground level
T17	Oak	*Quercus robur*	Mature	13	1	780	No	3n	4	6	6	6	7	Soil compaction; No visual defects	Minor cavities; Decay; Multi stemmed at 2m	Minor die back	Large dead stub at union at 2.5m.	Fair	Fair	20 to 40 yrs	Mod	**B**	Crown lift overhanging branches up to 5m from ground level
T20	Sycamore	*Acer pseudoplatanus*	Early-mature	15	2	420, 400	No	3w	3	7	7	7	8	No visual defects	Twin Stemmed; Tight union	No visual defects	Situated on boundary.	Good	Good	40+ yrs	Mod	**B**	Crown lift overhanging branches up to 5m from ground level
T26	Ash	*Fraxinus excelsior*	Early-mature	12	2	350, 360	No	3s	2	6	5	6	6	No visual defects; Soil erosion	Twin Stemmed; Tight Union; Partially included bark.	No visual defects	Situated along stream.	Fair	Fair	20 to 40 yrs	Mod	**B**	Remove / Fell to ground level
G27	Blackthorn	*Prunus spinosa*	Semi-mature	5	1	200	Yes	0	1	See Plan				No visual defects	No visual defect	No visual defects	Dense group of natural regeneration. Occasional small Oak, Sycamore & Hazel	Fair	Fair	20 to 40 yrs	Low	**C**	Remove 5m southern section to allow for new road

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	Tree Species		Measurments					Crown (m)						Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*First branch*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiology*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
G36	Hazel	*Corylus avellana*	Early-mature	3	1	240	Yes	1 s	1	3	3	3	3	No major defects	Multi-stemmed. No major defects	Minor deadwood	Group of natural regeneration. Limited value.	Fair	Fair	20 to 40 yrs	Low	**C**	Remove 10m central section for new footpath
T38	Oak	*Quercus robur*	Mature	17	1	1000	No	3n	4	9	10	9	9	No visual defects	Twin stemmed at 3m. Ivy covered; Moderate cavity with decay at 2m, on northern side of stem.	No visual defects; Ivy in crown; Minor dead wood	Dense ivy limited detailed inspection / high value tree, remove ivy if site becomes used.	Good	Good	40+ yrs	High	**B**	Sever/ remove ivy
G47	Hawthorn	*Crataegus monogyna*	Early-mature	2	1	200	No	0	1	See Plan				No visual defects	No visual defect; Multi stemmed.	No visual defects; Old pruning wounds	Well managed hedge. Occasional gaps.	Fair	Fair	20 to 40 yrs	Low	**C**	Maintain at current height and spread
T49	Oak	*Quercus robur*	Early-mature	9	1	500	No	3n	3	5	5	5	5	No visual defects; Soil erosion	No visual defect; Bark wounds; Twin Stemmed at 2m.	No visual defects	Situated in boundary hedge feature. Wire throughout stem	Good	Good	40+ yrs	Mod	**B**	Crown lift overhanging branches up to 5m from ground level

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Appendix 4:
TREE PROTECTION PLAN

Wilthorpe Road, Barnsley
Ref:1310

BRITISH STANDARD 5837:2012

SCALE :1:200 PAPER: A1

◯	TREES TO BE RETAINED
◯	TREES FOR REMOVAL
○	TREE STEM
—	TREE PROTECTION FENCING
⬡	RPA: ROOT PROTECTION AREA
⊙	PROPOSED TREES