

**ARBORICULTURAL METHOD STATEMENT
to BS 5837:2012
at
New Road
Pilley
Barnsley
South Yorkshire
S75 3BQ**

Client:

Barratt David Wilson Yorkshire West

Client Address:

Raynham House
2 Capitol Close
Morley
West Yorkshire
LS27 0WH

Client Telephone:

0113 307 6850

JCA Ref:

13039a/SR – amended 03.04.17

Contents

1. Introduction	3
1.1 Purpose of the Method Statement.....	3
1.2 Terms of Reference	3
1.3 Status of the Method Statement.....	3
2. Tree Works Prior, During and Post Construction.....	4
3. The Protective Barrier Prior, During and Post Construction	5
4. Construction Phase	7
4.1 Demolition Works	7
4.2 Ground Level Changes	7
4.3 Construction of Hard Surfaces	7
4.4 Construction of New Buildings	7
4.5 Excavations and Services	7
4.6 Location of the Site Compound.....	7
5. Post Construction Phase	8
5.1 Completion Meeting.....	8
5.2 Post Construction Landscaping	8
6. Timescale of Works	9
7. Relevant Contact Details	9
Appendix 1: Tree Works Schedule	11
Appendix 2: Protective Barrier	12
Appendix 3: Utilities and Drainage.....	15
Appendix 4: Tree Protection Plan.....	17

1. Introduction

1.1 Purpose of the Method Statement

- 1.1.1 This Method Statement has been prepared to ensure good practice in the protection of retained trees during the proposed development at **New Road, Pilley**.

1.2 Terms of Reference

- 1.2.1 We are instructed by **Barratt David Wilson Yorkshire West** to prepare a Method Statement for the proposed development, based on our arboricultural report dated 19th September 2016 (JCA Ref: **13039/SR**). 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 construct a new residential development, with associated access drives that link with New Road.
- 1.2.3 The following drawings have been provided and these are the basis of the Method Statement and the Tree Protection Plan at **Appendix 4**:
- Topographical Survey (Drawing Ref **OS topo.dwg**).
 - Development Layout (Drawing Ref **2235 TL01 REV E**).

1.3 Status of the Method Statement

- 1.3.1 This 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 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 In this case, the extent of the tree works is to be determined by marking on site the location of adjacent proposed structures. This will inform how much the trees can be pruned by. The proposed tree works will be undertaken before actual construction commences.
- 2.1.2 The tree works include:
- The removal of a short section of **H5**, to facilitate the proposed development.
 - The pruning of **T1, G2, H5, H6, T9, G11** and **H12**, to facilitate the development.
- 2.1.3 **Pruning of T1:** for this tree, the adjacent dwelling (**plot 32**) will be marked on site. This will inform the extent of required pruning to provide adequate clearance. The maximum reduction of this tree will be 2.5m to the east and southeast aspects.
- 2.1.4 **Pruning of G2:** For this tree, the adjacent dwelling (**plot 33**) will be marked on site. This will inform the extent of required pruning to provide adequate clearance. The maximum reduction of this tree will be 2.5m to the east and southeast aspects.
- 2.1.5 **Pruning of H5:** The specification for this hedge is to face-back by approximately 2m and reduce in height to approximately 4m. In addition, some structures are located close to the hedge and these will require marking out on site. This will inform whether further pruning back in these areas is needed or if parts of the hedge immediately adjacent to the structures needs removing. Gapping-up can be implemented following development to fill-in any gaps in the hedgerow. The following structures require marking on site: the dwelling to **plot 32**, the garages to **plots 35, 41, 46** and **47** and the footpath between **plots 35** and **36**.
- 2.1.6 **Pruning to H6:** for **H6** the footprint of the adjacent dwelling (**plot 47**) and the two adjacent turning points in the access road will require marking on site. This will inform whether any pruning or sectional removals are needed for this item.
- 2.1.7 **Pruning to T9:** For this tree, the footprint of the adjacent dwelling (**Plot 9**) must first be marked on site. The closest wall **must not** be closer than 9m to the main stem of the tree at any point. A crown reduction will then be undertaken on the west aspect of the canopy, as informed by the location and height of the proposed building. The reduction **must not** exceed 3m to the west aspect.
- 2.1.8 **Pruning to G11:** For this group, any stems located within the garden of **plot 9** will be removed. The canopy will then be faced-back to the boundary.

- 2.1.9 **Pruning to H12:** For this hedge, the garage to **plot 1** and the turning point in the adjacent driveway will be marked on site. This will inform any necessary pruning to this item which will then be carried out.

2.2 Tree Works During Construction

- 2.2.1 In this case, no works are to be undertaken during construction.

2.3 Tree Works Post Construction

- 2.3.1 When the construction phase is complete and when the temporary protective barrier 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 No post construction remedial works are to be carried out on the trees until prior 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 will comprise of protective fencing, as detailed below.

- 3.1.2 Once installed, the appointed arboriculturalist will be invited on site to inspect the protective fencing and ground protection, ensuring that it is located 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.
- 3.1.3 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 4**. 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, storage of materials, equipment or machinery are allowed within the CEZ unless specified within this Method Statement.**
- 3.1.4 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.
- 3.1.5 For some of the hedges on site, there is not suitable space between them and proposed structures to construct a scaffold support. In these areas, Heras-style fencing in rubber feet will be used. The areas concerned are shown on the Tree Protection Plan at **Appendix 4**.
- 3.1.6 Once the protective 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 Protective Barrier During Construction

- 3.2.1 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.

3.3 Removal of the Protective Barrier

- 3.3.1 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.
- 3.3.2 When this approval has been given the protective barrier may be dismantled and removed from site.

- 3.3.3 It should be noted the same restrictions apply to all RPAs as the CEZ (please refer to **Section 3.1.3**).

4. Construction Phase

4.1 Demolition Works

- 4.1.1 In this case, no demolition works are required adjacent to retained trees.

4.2 Ground Level Changes

- 4.2.1 No ground level changes are permitted 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, no specialist foundation methods are required for arboricultural purposes.

4.5 Excavations and Services

- 4.5.1 Details on service routes are not available at this time. 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.

4.6 Location of the Site Compound

- 4.6.1 The site compound, typically including the site office, mess facilities, toilets, storage of materials and parking, must be located away from, and outside the RPA of 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 Following completion of the main construction phase, the protective fencing may be removed and the landscaping phase can commence.
- 5.2.2 The proposals include for the installation of wooden boundary fences and gate posts. Where these are located within the RPA of retained trees, post holes will be dug by hand and they are to be as small as practically possible. They may be driven in either by hand or using mechanical means. However, if construction plant is to be used, it must work from outside of the RPA at all times.
- 5.2.3 Many of the 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 barrier will have been removed and the property may be occupied.
- 5.2.4 Landscaping works should 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.
- 5.2.5 Heavy machinery is not permitted in the vicinity of retained trees, unless otherwise stated in this method statement.
- 5.2.6 Herbicides should be appropriate for the purpose and should not be used in such a way as to damage any retained trees or vegetation.
- 5.2.7 If in doubt, regarding the impact of proposed landscape operations, please contact the appointed arboriculturalist.

6. Timescale of Works

6.1.1 The timescale for 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	Engineer to mark on site structures adjacent to trees.		
Stage 3	Undertake tree works as detailed in this report.		
Stage 4	Install the temporary protective fencing around the trees (as detailed at Appendix 2 and as shown on the Tree Protection Plan at Appendix 4).		
Stage 5	Have the Local Planning Authority/JCA inspect the fencing prior to any on site construction near to trees. Once inspected, the protective fencing must not to be moved or breached.		
Stage 6	Undertake the construction of the new buildings.		
Stage 7	Following the completion of the construction phase and when all site traffic and machinery has left, the protective fencing can be removed.		

7. Relevant Contact Details

Contact Name	Organisation/Detail	Contact Number
Scott Reid	JCA Limited	01422 376335
Edward Jowett	Barnsley Metropolitan Borough Council	01226 770770
Richard Weilding	Barratt David Wilson Yorkshire West	0113 307 6850
Site Manager	To be confirmed	To be confirmed

Appendices

Appendix 1: Tree Works Schedule

Tree Ref.	Age	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread			Observations	Recommendations	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
	Common Name <i>Botanical Name</i>					N	W	E								
T 1	Early-mature Goat Willow <i>Salix caprea</i>	10	2.5	1.6 S	43	4 2 8		10	Located behind hedgerow. Single-stemmed and heavily leaning specimen with a suppressed crown, extended to the east. Some minor deadwood noted. Otherwise it appears to be in good condition.	Mark on site dwelling to plot 32. Prune back canopy to east/southeast aspect as needed (no more than 2.5m). n/a	GOOD	GOOD	LOW	HIGH	10+	C 1
G 2	Early-mature Common Ash <i>Fraxinus excelsior</i>	15	2.5	2 E	36	4 3.5 4		7.5	2 trees in close proximity to each other; located to the field boundary. Some minor deadwood noted in the crowns. One is three-stemmed from base with included unions and should be monitored. Otherwise they are in acceptable condition.	Mark on site dwelling to plot 33. Prune back canopy to the east aspect as needed (no more than 2.5m). n/a	GOOD	FAIR	LOW	MOD	20+	B 1
T 3	Early-mature Common Ash <i>Fraxinus excelsior</i>	15	7	3 NW	25	6 3.5 0		4.5	Situated behind hedgerow. Single-stemmed with a suppressed form, though no major visible defects.	No action required. n/a	GOOD	GOOD	LOW	MOD	20+	B 1
G 4	Early-mature Group <i>Details in observations</i>	16	0	0 n/a	34	See plan			Large off-site area of vegetation located on the far side of the boundary hedgerow and track. Species include Silver Birch, Common Lime, Goat Willow, Hawthorn, Norway Maple, Common Ash, Red Oak, Beech and Crab Apple.	No action required. n/a	GOOD	GOOD	MOD	HIGH	20+	B 1
H 5	Early-mature Group <i>Details in observations</i>	5	0	0 n/a	14	See plan (av. 3m spread)			A cohesive boundary hedgerow in good condition, running along the entirety of the western boundary. Species include Hawthorn, Elder and Plum.	Face-back by approximately 2m along its length and reduce in height to approximately 4m. Mark on site the following to allow pruning back/sectional removal for clearances: Dwelling to plot 32, Garages to plots 35, 41, 46, 47 and the footpath between plots 35 and 36. Remove a short section adjacent to Plot 35 to facilitate the new drainage. n/a	GOOD	GOOD	MOD	HIGH	20+	C 1
H 6	Semi-mature Group <i>Details in observations</i>	2	0	0 n/a	3	See plan			A short, mixed boundary hedge that is fairly well maintained but also gappy in places. Species include Hawthorn, Hazel, Holly, Elder and Common Ash.	Mark on site the dwellings to Plot 47 and two adjacent turning points in the driveway. Face-back hedge as needed. n/a	FAIR	FAIR	LOW	HIGH	10+	C 1
T 7	Semi-mature Copper Beech <i>Fagus sylvatica 'Purpurea'</i>	7	1	1 n/a	14	4 3.5 4		3.5	Located in dense understorey scrub and adjacent to utility pole. It appears to be off-site. No major visible defects noted. Limited access prevents a detailed inspection.	No action required. n/a	GOOD	GOOD	LOW	MOD	10+	C 1

Tree Ref.	Age	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread		Observations	Recommendations	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
	Common Name					Priority									
	Botanical Name														
T 8	Semi-mature Common Ash <i>Fraxinus excelsior</i>	7	2	1.5 N	12	3 2.5 2.5		A small specimen that appears to be off-site, amongst dense scrub. It is of little arboricultural significance but appears to be in good condition. n/a	No action required. n/a	GOOD	GOOD	LOW	MOD	20+	C 2
T 9	Mature Common Ash <i>Fraxinus excelsior</i>	18	2.5	6 n/a	70	8 12 9		A large off-site tree, overhanging into the site. Ivy to stem. Limited access prevents a detailed inspection. n/a	<i>Plot 9 to be marked on site. Canopy to be pruned back to the west aspect as needed (no more than 3m).</i> n/a	GOOD	GOOD	MOD	MOD	20+	B 1
T 10	Early-mature Common Ash <i>Fraxinus excelsior</i>	18	3.5	3 W	28, 27	5 7.5 8		Twin-stemmed, Ivy covered specimen located off-site but overhanging the boundary. Limited access prevents a detailed inspection. n/a	No action required. n/a	GOOD	GOOD	MOD	MOD	20+	B 1
G 11	Early-mature Group <i>Details in observations</i>	8	0	0 n/a	13	See plan		An overgrown group of Hawthorn with two Sycamore also included within. Likely originally part of a boundary hedgerow. In acceptable condition at this time.	<i>Face-back to boundary of site. Remove any stems within garden to plot 9.</i> n/a	GOOD	GOOD	LOW	HIGH	10+	C 1
H 12	Semi-mature Group <i>Details in observations</i>	3	0	0 n/a	5	See plan		A well trimmed section of boundary hedgerow providing effective screening to the adjacent property. Mainly comprising of Hawthorn, with occasional Common Ash also noted.	<i>Garage to plot 1 and turning point in adjacent driveway to be marked on site. Hedge to be faced-back as needed.</i> n/a	GOOD	GOOD	MOD	HIGH	10+	C 1

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 and Figure 2.

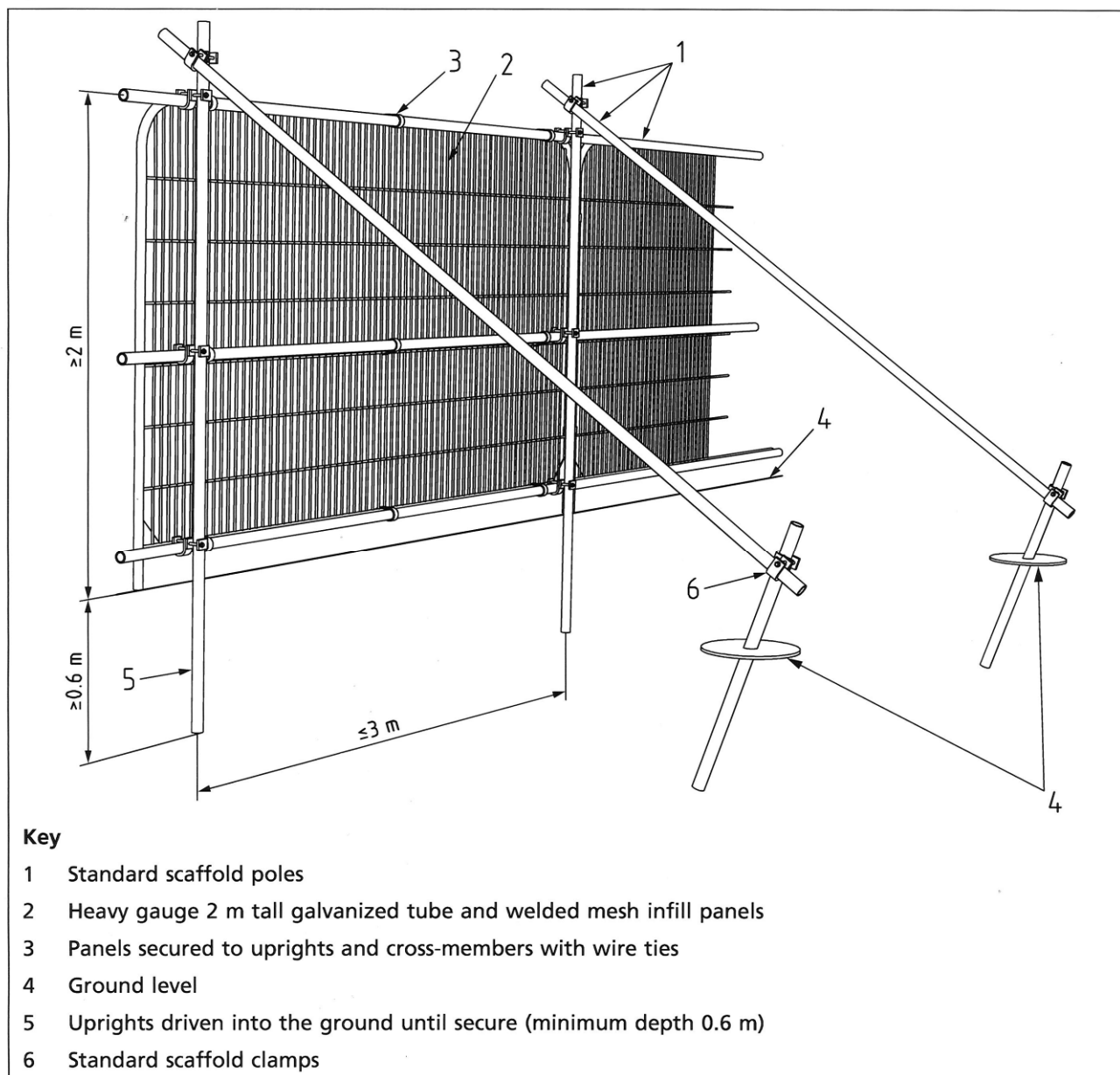


Figure 1: 'Protective Barrier to BS 5837: 2012'. To be used where situated in open ground.

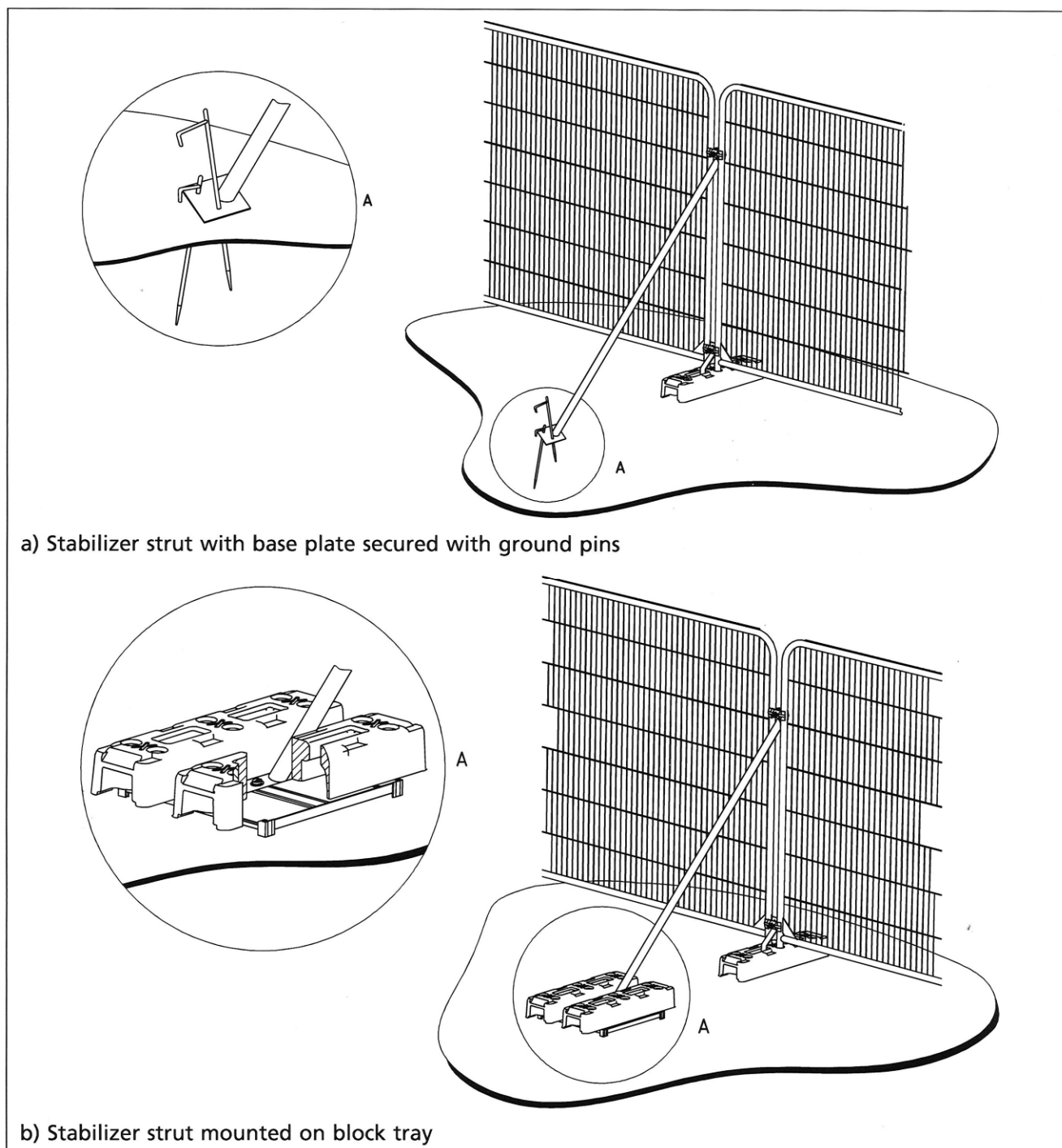


Figure 2: 'Examples of above-ground stabilisation systems'. To be used where there is hard surfacing which is to be retained.

The specific stabilisation method to be used is detailed in **Section 3**.

TREE PROTECTION ZONE

NO STORAGE OR OPERATIONS WITHIN THIS AREA

KEEP OUT

RESTRICTED ACCESS

NO VEHICLES

NO STORAGE OF MATERIALS

REPORT TREE DAMAGE TO JCA LTD ON

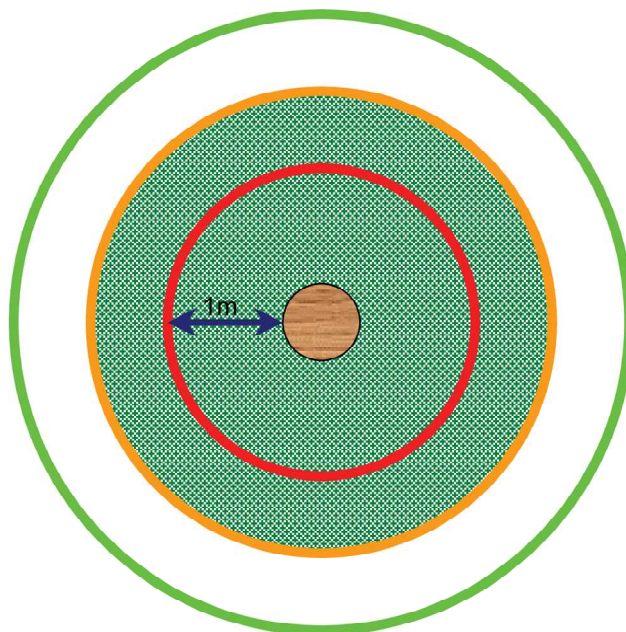
01422 376 335

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.

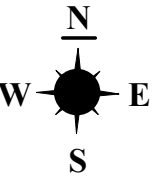


PRECAUTIONARY ZONE – 4 x tree circumference. Where excavations must be undertaken within this zone the use of mechanical excavation plant should be prohibited. Precautions should be undertaken to protect any exposed roots. Materials, plant and spoil should not be stored within this zone. Consult with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

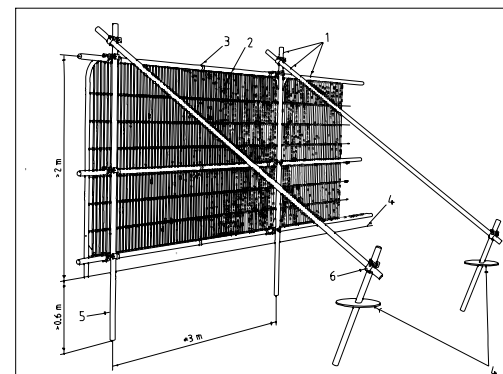


PERMITTED ZONE – outside of precautionary zone. Excavation works may be undertaken within this zone however caution must be applied and the use of mechanical plant limited. Any exposed roots should be protected.

Appendix 4: Tree Protection Plan



Default specification for a protective barrier



- Key
1. Standard scaffold poles
 2. Heavy gauge 2m 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 0.6m)
 6. Standard scaffold clamps

Appendix 4: Tree Protection Plan

ADDRESS: New Road, Pilley, Barnsley,
South Yorkshire, S75 3BQ.
JCA REF: 13039a/SR - amended 03.04.17

SCALE: 1:1000 PAPER SIZE: A3

SURVEYED BY: SR DRAWN BY: SR APPROVED BY: EW

	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 EXPOSED RPA BEYOND PROTECTIVE FENCELINE.
	PROTECTIVE FENCE LINE (CEZ) IN ACCORDANCE WITH BS5837:2012
	PROTECTIVE FENCE LINE (CEZ) OF HERAS STYLE PANELS IN RUBBER FEET.
	PROPOSED NEW DEVELOPMENT

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



.....
Scott Reid ND (*Arboriculture and Forestry*).

3rd March 2017

Amended 3rd April 2017

For and on behalf of **JCA Ltd**

Registered Office:

**Unit 80
Bowers Mill
Branch Road
Barkisland
Halifax
HX4 0AD**

**Tel. 01422 376335
Fax. 01422 376232
Email: jon@jcaac.com**

www.jcaac.com

Report printed on recycled paper

JCA Ltd. Arboricultural and Ecological Consultants

Professional Tree and Ecology Advice nationwide

ARBORICULTURAL SERVICES

Guidance for Architects and Developers

- British Standard 5837 Tree Surveys
- Arboricultural Implication Assessments (AIA)
- Arboricultural Method Statements (AMS)

Tree Advice for the Legal Profession

- Subsidence Litigation
- Personal Injury and Accident Investigation
- Expert Witness, Planning Inquiries and Appeals

Advice for Engineers, Loss Adjusters and Insurers

- Tree Surveys for Subsidence
- Heave Assessment
- Tree Root Identification

Veteran Tree Management

- Ancient Woodland Management
- Veteran Tree Management

Advice for Local Authorities and Social Housing

- Tree Safety Surveys
- Specialist Decay Detection
- Landscape and Orchard Design

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:

Unit 80 Bowers Mill,
Branch Road,
Barkisland,
Halifax, HX4 0AD.

Tel: 01422 376335
Mobile: 07778 391986
Email: jon@jcaac.com
Website: www.jcaac.com

