

2 Church View, Main Street Searby Barnetby DN38 6BG

# Arboricultural Method Statement to BS 5837:2012

Site Address:

30 Thorpe Lane Lincoln LN6 9NW

**Issue Date:** 

23<sup>rd</sup> March 2023

**Report No:** 

230208

**Prepared For:** 

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## Contents

1.	Introduction 1.1. Purpose of the Report 1.2. Scope of the Report	3									
2.	Timing of Operations	3									
3.	Status of the Trees	4									
4.	Trees Works	4									
5.	The Construction Exclusion Zone (CEZ)	4									
6.	Tree Protection Fencing	5									
7.	Ground Protection	5									
8.	Temporary Buildings and Stores	5									
9.	Installation of Services within CEZ	6									
10.	0. New Hard Surfacing within CEZ										
11.	Demolition Works within CEZ	6									
12.	Construction of Buildings/Excavation within CEZ	6									
13.	Post Construction Landscaping	6									
Ар	pendix 1: Survey Schedule	8									
Ар	pendix 2: Tree Protection Fencing	10									
Ар	pendix 3: Constraints Plan	11									
Ар	pendix 4: Tree Protection Plan	12									

#### 1. Introduction

- 1.1. Purpose of the Method Statement
  - 1.1.1.This Arboricultural Method Statement has been complied to ensure the safe and healthy retention of retained trees on this development. Integral to achieving this goal is the implementation of the specialist construction and tree protection measures detailed within this document.
  - 1.1.2. This Method Statement must be made available to all contractors and operatives on the site during the construction process so that they fully understand the importance of the measures set out for tree protection.
  - 1.1.3. The information contained within this Arboricultural Method Statement conforms to BS 5837:2012 'Trees in relation to Design, Demolition and Construction - Recommendations'.
- 1.2. Scope of the Method Statement
  - 1.2.1.1 am instructed to produce this Arboricultural Method Statement (AMS) for the proposed development consisting of the demolition and replacement of a detached dwelling. The details of the design can be found in drawing ref. 2206/412. This drawing also forms the basis for the Tree Protection Plan in Appendix 4.
  - 1.2.2.This method statement is based on the tree survey carried out on 7<sup>th</sup> February 2023, and on the associated report ref. Arboricultural Report 230208 30ThorpeLaneLN69NW.
  - 1.2.3. The AMS is concerned with the trees within and, where deemed necessary, those just beyond the boundary of the site, and has been compiled in order that retained trees are adequately protected throughout the course of the development. It is not intended to be used for any other purpose. The report does not consider any other trees or vegetation, except where these are specifically referred to.
  - 1.2.4. The activities to which the AMS relates are; tree removal and pruning (including root pruning) for access and clearance, tree protection measures and construction methods. Risk assessments (with relevant control measures) should be produced for each of these operations prior to commencement of work. This is the duty of the contractors engaged to undertake the work.

#### 2. Timing of Operations

- 2.1. To ensure that disturbance to retained trees is kept to a minimum, the site operations should proceed in the following order:
  - Phase 1 Pre-development
    - 1. Completion of the approved tree works, (Section 3)
    - 2. Implementation of tree protection measures (Section 4, 5 & 6)
  - Phase 2 Development
    - 1. Adherer to site limitations resulting from tree protection measures, (Section 4, 5 & 6)
    - 2. Where excavation is required within the RPA adherer to relevant protocols, (Section 12)
  - Phase 3 Post-development
    - 1. Landscaping operations required outside CEZ, (Section 12)
    - 2. Removal of tree protection measures
    - 3. Landscaping operations required within CEZ, (Section 12)

2.2. Any amendments to the ordering of operations may only be made with the approval of the project arboriculturist and the Local Planning Authority (LPA) Arboricultural Officer.

#### 3. Status of the Trees

3.1.1.A status investigation was made on 14th February 2023 with North Kesteven District Council via their online planning portal. We are informed that there are no Tree Preservation Orders (TPO) in force and that the site is not within a Conservation Area. We do however advise a further status investigation is carried out prior to any tree works. Conducting work without permission to a tree subject to protection is a criminal offence.

#### 4. Tree Works

- 4.1. Prior to any construction activity, the first operation on site will be the undertaking of the necessary arboricultural works, as described in the Survey Schedule at Appendix 1. These include:
  - 4.1.1.The removal of T1 and H1, and the partial removal of H2. The locations of this vegetation can be seen on the Constraints Plan in Appendix 3.
  - 4.1.2. The pruning of T4 and H3
  - 4.1.3.All work must be undertaken to BS 3998:2010 Tree work Recommendations, and carried out by qualified and experienced contractors who must be adequately insured.
  - 4.1.4. Any tree defects seen by a contractor or the client that were not apparent to the project arboriculturist must be brought to our attention immediately.
- 4.2. If during the development additional access facilitation pruning is required the project arboriculturist and local authority tree officer must first be consulted. Under no circumstance shall construction personnel undertake any tree pruning operations.

#### 5. The Construction Exclusion Zone (CEZ)

- 5.1. In order to adequately protect retained trees a Construction Exclusion Zone (CEZ) must be formed around their crowns and Root Protection Area (RPA). The CEZ must be formed of appropriate protective fencing and/or ground protection.
- 5.2. Within the CEZ, the following restrictions shall apply unless stated otherwise in this method statement:

NO mechanical digging or scraping

NO hand digging (unless in accordance with sections, below)

NO storage of material or equipment

NO vehicular or plant access (unless in accordance with section 5 and/or section 6)

NO fire lighting

NO washing down of vehicles or machinery

NO handling, discharging or spillage of any chemical substance including cement washings

NO action likely to cause localised water-logging

NO changing of ground levels (unless agreed by the LPA)

NO earthworks

5.3. In addition to the above, further precautions are necessary adjacent to the CEZ or adjacent to any trees on neighbouring land:

Materials that may contaminate the soil such as concrete mixing, diesel spillage and vehicle washings must not be discharged within 10m of a tree.

This must consider the topography of the site and the slopes to avoid toxic materials running towards retained trees.

Fires must not be lit in a position where their flames can extend to within 5 metres of the foliage,

branches or trunk. This will depend on the size of the fire and the wind direction.

Notice boards, telephone cables or other services (etc.) should not be attached to any part of a tree.

#### 6. Tree Protection Fencing

- 6.1. The Tree Protection Plan (TPP) at Appendix 4 shows the position of the Tree Protection Fencing. This fencing must be erected after any tree works but before any materials or machinery are brought onto site and before any demolition, development or stripping of soil commences.
- 6.2. On this site the protective fencing must be installed in accordance with the below ground stabilised protective fencing method as detailed in BS 5837: 2012. All weather signage outlining the status of the CEZ should be securely fixed to the fencing. Please refer to Appendix 2 for further details of the protective fencing and signage.
- 6.3. Once erected, barriers and ground protection will be regarded as sacrosanct, and must not be removed or altered without first consulting the project arboriculturist and local authority tree officer.
- 6.4. Barriers should be fit for the purpose of excluding constructive activity, and appropriate to the degree and proximity of work taking place around the retained tree. On all sites, special attention should be paid to ensuring that barriers remain rigid and complete.

#### 7. Ground Protection

- 7.1. To facilitate development, pedestrian construction access will be necessary within the RPA of T4. To prevent harm to tree roots, temporary ground protection must be laid. The location of this ground protection is highlighted on the Tree Protection Plan in Appendix 4. This must consist of a 75mm layer of wood chip covered with scaffold boards/heavy-duty ply-board pinned/pegged in place to prevent movement. Alternatively, where scaffolding is to be erected, a suspended walkway will provide adequate ground protection. This will be achieved by constructing a framework of scaffold poles attached to the main scaffolding. Scaffold boards will be then placed over the framework and utilised as a walkway.
  - 7.1.1.Installation of ground protection is to take place without vehicles travelling on unprotected areas. Once installed, the ground protection will remain in place until the final landscaping phase. Removal of the ground protection will similarly take place without vehicles travelling on unprotected ground. Areas of ground protection must only be used for access and not for operations that could result in contamination by spills and run-off. Such operations may include, but may not be limited to, washing, fuelling and the storage of loose/soluble materials.
- 7.2. To protect the soil structure in the new planting location on the site frontage, an area of ground must also be enclosed with protective fencing. The location of this fencing is highlighted on the Tree Protection Plan in Appendix 4.

#### 8. Temporary Buildings and Stores

8.1. The location of any site office/welfare unit and temporary buildings must be located away from the RPA of retained trees. This includes areas for mixing of chemicals including cement washings and storage of machinery as well as parking.

#### 9. Installation of Services within CEZ

9.1. No service installations are required within the CEZ.

#### 10. New Hard Surfacing within CEZ

- 10.1. No new hard-surfacing has been specified within the RPA of retained trees.
- 10.2. Any patios, garden paths or other pedestrian accessways within the RPA, which may or may not be shown on the plans provided, must not cover more than 20% of the currently undeveloped RPA of any tree. Such surfacing must be laid using a no-dig technique. The removal of a maximum of 50mm of turf/surface vegetation is however permitted. To allow air and moisture penetration, this surfacing must consist of paving slabs or block pavers laid dry-jointed on a sharp sand or coarse aggregate no-fines foundation. Any such surfacing situated beyond the protective fence must only be laid when the main construction phase has finished and the fencing has been removed.

#### 11. Demolition Works within CEZ

- 11.1. The existing dwelling and garage, standing near to T4 and H3, will need to be demolished. The location of this demolition is highlighted on the Tree Protection Plan in Appendix 4.
- 11.2. These demolition works must be undertaken inwards onto the footprint of the existing buildings utilising a 'top down, pull back' method. Any self-propelled machinery must operate from the footprint of the existing building or from outside the RPA of retained trees.
- 11.3. Any below-ground elements within the RPA must only be removed to a point which is necessary to facilitate development or post-development landscaping. The extent of associated excavations must be strictly limited to what is necessary to facilitate the required degree of demolition. These excavations must be conducted by hand where this is reasonably practicable.

#### 12. Construction of Buildings/Excavation within CEZ

- 12.1. Foundations for the proposed dwelling infringe on the RPA of T4. To prevent unnecessary harm to tree roots, foundations within the RPA must be hand-dug with any roots encountered cut back to the boundaries of the excavation using appropriate and suitably sharp hand tools (e.g. hand saws or bypass secateurs).
- 12.2. To prevent ground contamination by cement leaching, the footings must be lined with a recognised impermeable membrane. The membrane must be adequately installed and sealed to prevent leakage into the RPA.

#### 13. Post Construction Landscaping

13.1. Following completion of the main construction phase, the protective fencing can be removed, and any temporary ground protection lifted, the landscaping phase can then commence.

- 13.2. Where new fencing is located within the RPA of retained trees, post holes must be dug by hand. Fencing systems utilising continuous trench footings must not be used in the RPA of retained trees. During excavation, roots (or clumps of roots) encountered <25 mm diameter may be pruned back, making a clean cut with a suitable sharp tool (e.g. bypass secateurs or handsaw). Roots (or clumps of roots) encountered >25mm diameter should be severed only following consultation with an arboriculturist, as such roots might be essential to the tree's health and stability.
- 13.3. Any patios, garden paths or other pedestrian accessways within the RPA, which may or may not be shown on the plans provided, must not cover more than 20% of the currently undeveloped RPA of any tree. Such surfacing must be laid using a no-dig technique. The removal of a maximum of 50mm of turf/surface vegetation is however permitted. To allow air and moisture penetration, this surfacing must consist of paving slabs or block pavers laid dry-jointed on a sharp sand or coarse aggregate no-fines foundation. Any such surfacing situated beyond the protective fence must only be laid when the main construction phase has finished and the fencing has been removed.
- 13.4. Increases or decreases in ground level within the RPA can be extremely detrimental to trees and must be avoided. In the event such works are deemed necessary, approval must first be sought from the project arboriculturist and the Local Planning Authority (LPA) Arboricultural Officer
- 13.5. Landscaping works must be carried out in such a way as to avoid deep digging within the RPA. Tractor mounted rotovators or other mechanised cultivation methods must not be used within the RPA of retained trees. Heavy machinery is not permitted in the vicinity of retained trees, unless otherwise stated in this method statement.
- 13.6. Herbicides should be appropriate for the purpose and should not be used in such a way as to damage any retained trees or vegetation.
- 13.7. If in doubt, regarding the impact of proposed landscape operations, please contact the appointed arboriculturist.

### Appendix 1: Survey Schedule

Tree ID	Common Name	Maturity	Height (m)	Sten	n Diam	neter (	(mm)	RPA Radius (m)	Cr	rown Sj	pread	(m)	Retention Category	Life Expectancy	Physiological Condition	Structural Condition	Comment	Recommendations
		Ĕ	Hei	1	2	3	4	RPA R	N	E	S	W	Ret Cat	Life E)				
T1	Common Hazel	Semi-mature	5	75				2.2	4	3	2.5	3	C2	20 to 40 yrs	Good	Fair / Good	Multi stemmed with bushy habit typical for species.	Remove
T2	Orchard Apple	Semi-mature	4	110				1.3	2	2	2	2	C1	10 to 20 yrs	Fair	Fair / Good	Recent ground disturbance in rooting area. Bifurcated from 1.75m with a sound union. Crown poorly pruned with a sparse shoot structure.	n/a
T3	Myrobalan Plum	Semi-mature	6.5	200#	200#			3.4	4	4	3	4	C2	20 to 40 yrs	Good	Good	Off-site tree, location prevented detailed inspection. Bifurcated from 0.75m with a deep bark included union. A spreading well balanced crown with a healthy shoot structure.	n/a
Т4	Willow	Semi-mature	6.5	170#	120#	100#	100#	3.0	2.5	4	4	4	C2	20 to 40 yrs	Good	Fair	Off-site tree, location prevented detailed inspection. Multi stem from ground level with some bark inclusion at unions. A congested spreading crown structure with slender leaders. Crown with a healthy shoot structure.	Reduce crown spread to NW to 1- 1.5m.
H1	A Hedgerow		2							0.5		0.5	C2		Good		Moderately well managed Leyland cypress boundary hedge. Provides good screening.	Remove

Tree ID	on Name	Maturity	jht (m)								Stem Diameter (mm)			adius (m)	Crown Spread (m)				Retention Category Life Expectancy	Physiological Condition Structural Condition	Comment	Recommendations
Ē	Comm	Ma	Height	1 2	2	3	4	RPA Radius	N	E	S	W	Cat Cat Life Ex	Life Ex	Stru Con							
H2	A Hedgerow		3							0.75		0.75	C2				Poorly managed privet hedge with 3m of cotoneaster to SW followed by 5m heavily ivy clad. Provides reasonable screening.	Remove southern- most 12m				
Н3	A Hedgerow		2							0.5		0.5	B2		Good		Well managed privet hedge with 5m of holly to SW short adjacent section heavily suppressed by garage. Provides good screening.	Reduce crown spread to NW over site, for southern- most 13m only, to 0.3m.				

### Appendix 2: Tree Protection Fencing

Figure 1. Default Specification for Protective Barrier

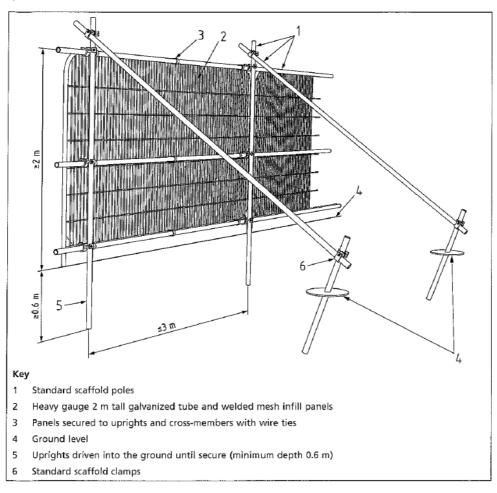


Figure 2. Example Signage for Protective Fencing



