

Arboricultural Impact Assessment

WC-258.1a

Newsome Church, Jackroyd Lane,
Huddersfield HD4 6JH



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Report prepared by:	Jack Delaney MICFor MArborA
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Contents

EXECUTIVE SUMMARY	3
1. INTRODUCTION	4
1.1. INTRODUCTION AND SCOPE OF REPORT	4
1.2. SITE DETAILS	4
1.3. SITE TOPOGRAPHY AND ELEVATION	5
1.4. DESK BASED STUDY AND PLANNING CONTEXT	5
1.5. DEVELOPMENT PROPOSALS.....	5
2. METHODS.....	6
2.1. SURVEY DETAILS	6
2.2. SURVEY PERSONNEL	6
2.3. SURVEY METHODOLOGY.....	6
2.4. CONSTRAINTS.....	7
3. SURVEY RESULTS AND OBSERVATIONS	8
3.1. TREE POPULATION OBSERVATIONS AND AMENITY VALUE.....	8
3.2. TREE CATEGORISATION.....	8
4. IMPACT ASSESSMENT	9
4.1. TREE REMOVALS	9
4.2. FACILITATION PRUNING.....	9
4.3. TREE ROOT PROTECTION AREAS (RPAs).....	9
4.4. SHADE ANALYSIS.....	10
4.5. SERVICES AND OTHER CONSIDERATIONS	10
5. RECOMMENDATIONS	11
5.1. TREE REMOVALS	11
5.2. LEGAL CONSTRAINTS.....	11
5.3. TREE PROTECTION	11
5.4. MITIGATION.....	12
5.5. ADDITIONAL INFORMATION.....	12
REFERENCES.....	13
APPENDICES.....	14
APPENDIX 1: TREE SURVEY SCHEDULE	14
APPENDIX 2: IMAGES OF TREES.....	17
APPENDIX 3: OUTLINE ARBORICULTURAL METHOD STATEMENT (AMS)	19
APPENDIX 4: TREE CONSTRAINTS PLAN	23
APPENDIX 5: SHADE ANALYSIS PLAN.....	24
APPENDIX 6: TREE PROTECTION PLAN	25



Executive Summary

Woodsage Consulting Ltd have been instructed by the Ward Councillors of Newsome to carry out an Arboricultural Impact Assessment at Newsome Church, Jackroyd Lane, Huddersfield HD4 6JH, in relation to the proposed development of the site.

The proposals are to extend upon the existing church building.

According to information available on the website of Kirklees Council (2024), there are multiple trees at the site which are subject to group tree preservation orders (TPO Ref: 23/80)

The site survey identified a total of 10 Category B trees of moderate-quality with the potential to be affected by the proposed development.

The development proposals will necessitate the removal of one category B tree of moderate-quality.

To minimise disturbance to the roots of two category B trees of moderate-quality, the proposed extension shall be constructed upon pile foundations - of the smallest feasible diameter - which will reduce the possibility of striking major tree roots.

The root protection areas (RPAs) of the retained trees are to be suitably protected throughout the development process by temporary tree protection fencing and ground protection.

To mitigate for the removal of one category B tree and to enhance the amenity of the site, it is recommended that three trees are included in a post-development tree planting scheme.

Providing the recommendations made within this report are followed, the development is considered achievable, with minimal impact in arboricultural terms to the site and surrounding area.



1. Introduction

1.1. Introduction and Scope of Report

- 1.1.1.** Woodsage Consulting Ltd have been instructed by the Ward Councillors of Newsome to carry out an Arboricultural Impact Assessment at Newsome Church, Jackroyd Lane, Huddersfield HD4 6JH, in relation to the proposed development of the site.
- 1.1.2.** The purpose of this report is to allow the local planning authority (LPA) to assess information regarding trees at the site as part of the planning submission, and to demonstrate to the LPA that appropriate consideration has been given to the subject of trees as part of the development proposals.
- 1.1.3.** In accordance with *BS 5837: 2012: Trees in Relation to Design, Demolition and Construction - Recommendations* (hereafter referred to as *BS 5837: 2012*), this report sets out to:
- Assess the quality and value of the trees on and immediately adjacent to the site.
 - Identify trees for removal and/or retention, in consideration of the development proposals (where feasible, removals will be restricted to the less significant specimens on site).
 - Prescribe tree protection measures where necessary, which will ensure the successful retention of the retained trees at the site; in accordance with *BS 5837: 2012*, these measures will be further detailed in an Outline Arboricultural Method Statement (AMS).
 - Provide preliminary recommendations for mitigation tree planting.
- 1.1.4.** The contents of this report are concerned with arboricultural issues alone; although other disciplines such as engineering and ecology may be referenced, it is important to gain advice from an appropriate expert on these matters.

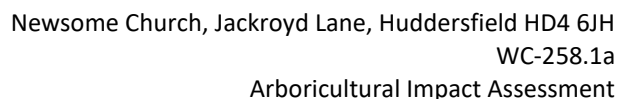
1.2. Site Details

- 1.2.1.** The site, which is shown in **Fig. 1.1**, below, is centred on OS Grid Reference SE 14413 14630, and lies within the village of Newsome, approximately 1 mile south of Huddersfield. The site is accessed south off Jackroyd Lane.



Figure 1.1: Aerial imagery showing the approximate boundaries of the site outlined in red, and study area highlighted in yellow (Google Earth, 2024).

- 1.2.2.** The site covers approximately 0.59 ha, and comprises the grounds of Newsome Church. The study area is located to the north-west of the site.



- ### 1.3. Site Topography and Elevation

- 1.3.2.** The topography of the site is predominantly level.

1.4.1. Cranfield (2024) states that the site and surrounding area consists of Soilscape 6; these are slightly acidic, loamy soils, that are freely draining. No further detailed soil analysis was carried out as part of the survey.

- [illegible]

1.5. Development Proposals



2. Methods

2.1. Survey Details

- 2.1.1. The site survey was carried out on Monday the 4th of March 2024.
- 2.1.2. The weather at the time of the survey was fine and dry; the visibility of the trees was not impeded.

2.2. Survey Personnel

- 2.2.1. The survey was carried out by Jack Delaney. Jack is a Chartered Arboriculturalist (Member of the Institute of Chartered Foresters), and has worked in the arboricultural sector for over 15 years. Jack holds an FdSc in Arboriculture, with distinction, and is a Professional Member of the Arboricultural Association. Jack is also a LANTRA qualified Professional Tree Inspector, and is a trained and registered user of Quantified Tree Risk Assessment (QTRA).

2.3. Survey Methodology

- 2.3.1. Only substantial trees with a stem diameter of 75 mm or above were included as part of the survey, as is recommended in *BS 5837:2012*.
- 2.3.2. The trees were inspected from ground level, using the Visual Tree Assessment (VTA, Mattheck and Breloer, 1994). Although notable defects of trees were recorded, the site survey did not constitute a full tree safety assessment. No specialist decay detection equipment was used as part of the survey, though sounding and probing tools were used where necessary.
- 2.3.3. Tree information was collected in accordance with *BS 5837: 2012*, and includes species, height, diameter at breast height (DBH), crown spread, crown clearance, age class, condition, vitality, and safe useful life expectancy (SULE).
- 2.3.4. Trees were allocated to one of four categories (U, A, B or C) as defined in **Tab. 2.1**, below, to reflect amenity value and suitability for retention, in consideration of the development proposals.

Table 2.1: *BS 5837: 2012 cascade chart (adapted from British Standards, 2012).*

<i>BS 5837: 2012</i> Category	Definition	Retention	Colour code
Category A	Trees of high quality with an estimated remaining life expectancy of at least 40 years; trees that are particularly good examples of their species, especially if rare or unusual.	Highly desirable	Light green
Category B	Trees of moderate quality with an estimated remaining life expectancy of at least 20 years; trees lacking the special quality to merit category A designation.	Desirable	Dark blue
Category C	Trees of low quality with an estimated remaining contribution of at least 10 years, or trees with a stem diameter below 150 mm; unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Feasible, but should be removed if posing a constraint to development	Grey
Category U	Trees that have serious, irremediable, structural and/or physiological defects, including those that will become unviable after removal of other category U trees.	Unfeasible	Red

- 2.3.5. Subcategories 1, 2 and 3 were also given to trees, and reflect arboricultural and landscape qualities, and cultural values, respectively.
- 2.3.6. Tree heights were measured using a clinometer to the 0.5 m; crown spreads were measured to the north, east, south, and west aspects, using a laser measurer to the nearest 0.5 m.



2.3.7. Where access to trees was obstructed or obscured, DBH, height, and crown spread measurements have instead been estimated.

2.3.8. The DBH of trees was measured at 1.5 m above ground level, and rounded to the nearest centimetre. This was then used to calculate the root protection area (RPA) of trees using methods prescribed in *BS 5837:2012*:

- For single stem trees, the RPA was calculated as a circle with a radius 12 times the DBH.
- For trees with 2-5 stems, the combined stem diameter was first calculated using the formula:

$$\sqrt{(\text{Stem 1 DBH})^2 + (\text{Stem 2 DBH})^2 + \dots (\text{Stem 5 DBH})^2}$$

- For trees with 6 or more stems, the combined stem diameter was first calculated using the formula:

$$\sqrt{(\mu \text{ DBH})^2 \times \text{number of stems}}$$

2.4. Constraints

2.4.1. The survey was constrained by the season in which it took place; certain tree pathogens, for example, the fructifications of decay fungi are only visible at specific times of the year.

2.4.2. The locations of the trees plotted during the survey were aided using a topographical plan of the site; the accuracy of this plan is unknown to the author of this report.

2.4.3. A number of trees at the site have dense adventitious shoots on the main stems, which restricted visual inspection. In these instances, defects may be present which could not be inspected in detail.



3. Survey Results and Observations

3.1. Tree Population Observations and Amenity Value

- 3.1.1.** The site survey identified a total of 10 trees the potential to be affected by the development proposals.
- 3.1.2.** The tree species and cultivars which were recorded include copper beech (*Fagus sylvatica* 'Purpurea'), common ash (*Fraxinus excelsior*), whitebeam (*Sorbus aria*), and common lime (*Tilia x europaea*).
- 3.1.3.** The surveyed trees are all within the early-mature to mature age range, and are positioned along the north and west boundaries of the site, adjacent to Jackroyd Lane and Newsome Road South.
- 3.1.4.** Owing to their age, size, and prominent position, the surveyed trees are therefore considered of high amenity value.

3.2. Tree Categorisation

- 3.2.1.** The surveyed trees include 10 category B trees of moderate-quality.
- 3.2.2.** There were no category A trees of high-quality, category C trees of low-quality, or category U trees with SULEs of less than 10 years identified at the site.
- 3.2.3.** A summary of the BS 5837: 2012 categories of trees at the site is given in **Tab. 3.1**, below.

Table 3.1: Summary of BS 5837: 2012 tree categories.

Category	Description	Tree Ref:	Totals
B	Trees of moderate-quality, which should where possible be retained throughout any proposed development	T001, T002, T003, T004, T005, T006, T007, T008, T009, T010	10 Trees
Subtotal:			10 Trees

- 3.2.4.** The full results of the survey can be viewed in **Appendix 1: Tree Survey Schedule**. Images of the trees can be viewed in **Appendix 2: Images of Trees**. Tree locations, and the above and below ground constraints posed by trees, can be viewed in **Appendix 4: Tree Constraints Plan**.
- 3.2.5.** There are additional trees at the site, however, these are considered outside of the impactable distance of the proposed development.



4. Impact Assessment

4.1. Tree Removals

- 4.1.1. The development proposals will necessitate the removal of T010.
- 4.1.2. T010 is positioned approximately 2.4 m from the north aspect of the proposed extension, and consequently would impact roughly 10% of the RPA. The crown of T010 would also encroach substantially over the proposed extension (refer to the proposed elevations provided in **Appendix 4: Tree Constraints Plan**), and as such, the tree is unlikely to be retainable in the long-term, as nuisances like shading, falling leaves and other tree debris are all likely to gradually increase as the tree matures.
- 4.1.3. Although the removal of a category B tree is unfortunate, the proposed development will provide an incentive for the landowner to carry out tree planting at the site, and to increase the diversity of the tree stock in the process.

4.2. Facilitation Pruning

- 4.2.1. The development proposals do not require facilitation pruning to any of the trees at the site.

4.3. Tree Root Protection Areas (RPAs)

- 4.3.1. The RPAs of T002 and T003 will be encroached onto by the footprint of the proposed extension by approximately 4% and 7% respectively.

Table 4.1: Summary of tree RPAs impacted by proposed structures.

Tree Ref:	Total RPA (m ²)	Affected RPA (m ²)	Affected RPA (%)
T002	191	7	4%
T003	296	21	7%

- 4.3.2. Construction of the proposed extension within the RPAs of T002 and T003 is considered feasible, providing that the following mitigation measures are implemented to minimise disturbance to tree roots:
- The use of traditional strip footings within tree RPAs can result in extensive root loss and should be avoided. The proposed extension shall therefore be constructed upon pile foundations - of the smallest feasible diameter - which will reduce the possibility of striking major tree roots. Site investigation should be carried out, by means of hand tools or compressed air soil displacement, to a minimum depth of 60 cm, to determine the optimal location of piles.
 - The pile type should be selected bearing in mind the need to protect the soil and adjacent roots from the potentially toxic effects of uncured concrete; for example, sleeved bored or screw piles.
 - The smallest practical piling rig should be employed during installation of the piles. The piling rig should be operated upon a piling mat, which should conform to the parameters for temporary ground protection provided in **Section 7** of the **Outline AMS**.
- 4.3.3. If shrinkable soils are present at the site, the foundation design of the extension should also take account of the risk of indirect damage, which can occur when moisture is removed from the ground through the action of tree roots. This can result in significant volume change and ground movement.



- 4.3.4.** The temporary tree protection fencing and ground protection - detailed in **Section 5** and **Section 7** of the **Outline AMS** in **Appendix 3**, and illustrated in the **Tree Protection Plans** in **Appendix 6** - will ensure that the RPAs of the retained trees are suitably protected from development activities.

4.4. Shade Analysis

- 4.4.1.** Due to the high levels of tree cover at the site, the proposed extension will naturally endure significant shading, though it should be noted that the levels of shading will be no more than is experienced by an adjacent existing single-storey extension.
- 4.4.2.** The removal of T010 will ensure that a proposed north facing window will benefit from unobstructed views.
- 4.4.3.** A **Shade Analysis Plan** can be viewed in **Appendix 5**.

4.5. Services and Other Considerations

- 4.5.1.** At time of writing, details of proposed service routes have not been provided by the client; however, it is assumed that the existing utilities and drainage will be utilised.
- 4.5.2.** If there are any alterations which conflict with tree RPAs however, this should first be reported to the Project Arboriculturalist, so that appropriate measures may be taken.



5. Recommendations

5.1. Tree Removals

- 5.1.1. T010 will necessitate removal.

5.2. Legal Constraints

- 5.2.1. According to information provided on the website of Kirklees Council (2024), T010 does not appear to be covered by TPO Ref: 23/80/g1; however, tree protection status should be checked and verified with Kirklees Council prior to the commencement of works. Killing or damaging a protected tree is a criminal offence and can result in an unlimited fine.
- 5.2.2. All tree works, including tree removals, should be carried out by a fully insured and suitably qualified arboricultural contractor who is able to comply with *BS 3998: 2010: Tree Works - Recommendations*.
- 5.2.3. Trees provide valuable habitat for wild birds, bats, and many other forms of wildlife. The risks posed to these should be suitably assessed before the recommendations within this report are completed.
- 5.2.4. Under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and the Wildlife and Countryside Act 1981:
- it is an offence to intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or destroy a nest containing eggs or young.
 - it is an offence to intentionally or recklessly damage or destroy a bat roost site, even if the roost is not occupied at the time.

5.3. Tree Protection

- 5.3.1. Construction, and any other works involving excavations, can cause irreversible damage to trees - particularly those which have reached maturity - which are far less capable of adapting to alterations in their surrounding environment. Whilst above-ground injuries are usually obvious, root damage is often concealed, though can have equally devastating impacts to tree health.
- 5.3.2. Direct root damage includes root severance, which can be caused by digging of trenches and ditches, and the stripping of topsoil. Indirect damage may involve the raising of soil levels, alterations in drainage patterns, the laying of impervious surfaces, and soil compaction.
- 5.3.3. Compaction of soils is regarded as the most common cause of death or damage to retained trees on development sites. Soil compaction reduces soil pore space, which in turn reduces soil air, the passage of water and available nutrients. These anaerobic conditions prevent root growth and the proliferation of soil microbes essential to tree health. Symptoms in trees may include crown die-back, sparse and small foliage, and poor extension growth; however, these are usually not evident until well after the occurrence of compaction. Even one pass of a vehicle in wet conditions can cause irreparable soil compaction.
- 5.3.4. To avoid both direct and indirect damage to the roots of the retained trees, temporary tree protection fencing and ground protection should be installed throughout the development, in the locations shown in the ***Tree Protection Plan***, which can be viewed in ***Appendix 6***.
- 5.3.5. It is recommended that development works follow the ***Outline AMS*** provided in ***Appendix 3***. This includes the specifications for tree protection fencing, ground protection, and other protective measures to be adhered to throughout the development.



- 5.3.6. As aspects of the development may be subject to change, the **Outline AMS** should be reviewed by the Project Arboriculturalist prior to the commencement of development works.

5.4. Mitigation

- 5.4.1. The development proposals will necessitate the removal of one category B tree of moderate-quality from the site.
- 5.4.2. To improve the age and species diversity of the tree stock and to enhance the amenity of the site, it is recommended that a minimum of three new trees are included within a post-development tree planting scheme.
- 5.4.3. Suggested species which will thrive on the slightly acidic, loamy, and freely draining soils at the site - and which will also help to improve species diversity - include hornbeam (*Carpinus betulus*), midland hawthorn (*Crataegus laevigata*), sweetgum (*Liquidambar styraciflua*), sessile oak (*Quercus petraea*), rowan (*Sorbus aucuparia*), wild service tree (*Sorbus torminalis*), and small-leaved lime (*Tilia cordata*).
- 5.4.4. To ensure the best possible chances of successful establishment, the trees should be planted in accordance with *BS 8545: 2014: Trees: from Nursery to Independence in the Landscape - Recommendations*:
- Any trees planted should be container grown, or root balled, and regular-standard in size.
 - Trees should be supported with a wooden stake and secured to the stake by a biodegradable tie.
 - Ties should be adjusted as necessary to allow the stem to incrementally grow without constriction. Deer and/or rabbit guards should be installed if populations are known within the local area.
 - An organic woodchip mulch should be applied annually to a depth of 10 cm and in a 1 m radius around the tree stems.
 - Trees should be watered regularly during the first two growing seasons and will require approximately 50 litres per week. If water does not drain away within ten minutes following watering however, the trees are in danger of overwatering.
- 5.4.5. In the interests of biosecurity, all trees should be sourced from a UK based nursery. Trees should ideally be grown from seed within the UK, or if this is not possible, should have been grown in the UK for at least one year after import.
- 5.4.6. Aftercare for trees will be required for a period of at least five years after planting. Any trees which fail to establish within this period should be replaced.
- 5.4.7. The proposed locations for tree planting are shown in the **Tree Protection Plan** in **Appendix 6**.

5.5. Additional Information

- 5.5.1. All visual observations and recommendations specified within this document relate to the condition of the trees and surroundings at the time of the survey. As such, any subsequent changes to landform in the proximity of the trees could invalidate the advice given.
- 5.5.2. Trees are dynamic living organisms, and their condition can change rapidly; the information given in this report is therefore valid for a period of 18 months. This period may be reduced if significant changes occur to the trees, or the ground conditions, which surround them.



References

- British Standards (2010). *BS 3998:2010: Tree Works - Recommendations*. London: British Standards Institute.
- British Standards (2012). *BS 5837: 2012: Trees in Relation to Design, Demolition and Construction – Recommendations*. London: British Standards Institute.
- Cranfield (2024) *Soilscapes* [online]. Available at: >www.landis.org.uk/soilscapes< [accessed 15th March 2024].
- Google Earth Pro (2024). *Google Earth* [online]. Available at: >www.google.co.uk/earth< [accessed 15th March 2024].
- Hirons, A.D. and Sjöman, H. (2019) *Tree Species Selection for Green Infrastructure: A Guide for Specifiers, Issue 1.3*. Trees & Design Action Group.
- Kirklees Council (2024) *Interactive Mapping Service* [online]. Available at: >www.kirklees.gov.uk< [accessed 15th March 2024].
- Lonsdale, D (2015) *The principles of Tree Hazard Assessment and Management*. Stonehouse: The Arboricultural Association.
- Mattheck, C., Breloer, H. (1994). *The Body Language of Trees, a Handbook for Failure Analysis*. London: Her Majesty's Stationary.



Appendices

Appendix 1: Tree Survey Schedule

Table Key					
Tree Ref: Reference numbers, as illustrated in Appendix 4: Tree Constraints Plan			DBH: Diameter at breast height (1.5 m), in millimetres		
Height (Ht.): Overall height of tree, measured to nearest metre			SULE: Safe useful estimated life expectancy of tree, in years		
Crown Spread (CS): Radius of crown to N, E, S, and W aspects, measured to nearest metre			Crown Clearance (CC): Clearance from ground level of lowest branch, measured to nearest metre		
Structural Condition (SC): An assessment of structural condition. G = Good; F = Fair; D = Decaying; C = Collapsing; PD = Physical Defect			Physiological Condition (PC): An assessment of vitality and vigour F = Fair; P = Poor; D = Dead		
Species: Common (and <i>binomial name</i>)			#: Denotes estimated value		
Age	Young (Y): Newly planted or self-seeded tree		Early-mature (EM): Trees in second-third of life expectancy for species type		Over-mature (OM): Mature trees which have entered stages of natural decline
	Semi-mature (SM): Trees in within first-third of life expectancy for species type		Mature (M): Trees in final-third of life expectancy for species type		
BS 5837: 2012 Categories	Category A: Trees of high-quality with an estimated remaining life expectancy of at least 40 years, and that are particularly good examples of their species type			Category C: Unremarkable trees of low-quality offering limited arboricultural merit and/or of such impaired condition that they do not warrant in higher categorisation	
	Category B: Trees of moderate-quality with an estimated remaining life expectancy of at least 20 years, though lacking the necessary qualities to warrant Category A designation			Category U: Trees which display serious, irremediable, structural and/or physiological defects	

Individual Trees

Tree Ref:	Species	Age	SULE	Ht.	DBH	CS				CC	Comments	PC	SC	BS 5837:2012 Category	Recommendations
						N	E	S	W						
T001	Common lime (<i>Tilia x europaea</i>)	EM	40-80	20	660	4.5	6	4.5	7.5	3	Base of main stem partially obscured by dense epicormic, though upper portion of crown appears of fair vitality and vigour with no indication of physiological dysfunction. Multiple branch cavities on main stem, from 3-5 m from historic crown lifting works.	F	F	B2	No works recommended
T002	Common lime (<i>Tilia x europaea</i>)	EM	40-80	20	650	5.5	7.5	4.5	7	7	Base of main stem partially obscured by dense epicormic, though upper portion of crown appears of fair vitality and vigour with no indication of physiological dysfunction. Bifurcates at 3.5 m into three co-dominant primary stems; unions appear structurally	F	G	B2	No works recommended



Tree Ref:	Species	Age	SULE	Ht.	DBH	CS				CC	Comments	PC	SC	BS 5837:2012 Category	Recommendations
						N	E	S	W						
											optimised. Minor deadwood < 100 mm in diameter scattered throughout the crown				
T003	Common lime (<i>Tilia x europaea</i>)	EM	40-80	19	810	6	6.5	4.5	8.5	9.5	Bifurcates at 2.5 m into three co-dominant primary stems; unions appear structurally optimised. Minor deadwood < 100 mm in diameter scattered throughout the crown	F	G	B2	No works recommended
T004	Common lime (<i>Tilia x europaea</i>)	EM	40-80	17	530	3.5	4	3.5	7	8	Base of main stem partially obscured by dense epicormic, though upper portion of crown appears of fair vitality and vigour with no indication of physiological dysfunction. Minor deadwood < 100 mm in diameter scattered throughout the crown.	F	G	B2	No works recommended
T005	Common ash (<i>Fraxinus excelsior</i>)	EM	40-80	20	610	4.5	10	4	10	4.5	Major deadwood > 100 mm in diameter scattered throughout the crown	F	F	B2	No works recommended
T006	Common lime (<i>Tilia x europaea</i>)	EM	40-80	17	550	6	4.5	2.5	7	8	Base of main stem partially obscured by dense epicormic, though upper portion of crown appears of fair vitality and vigour with no indication of physiological dysfunction. Minor deadwood < 100 mm in diameter scattered throughout the crown. Multiple branch cavities on main stem, from 3-5 m from historic crown lifting works.	F	F	B2	No works recommended
T007	Common lime (<i>Tilia x europaea</i>)	EM	40-80	16	500	6.5	3.5	3.5	6	8	Base of main stem partially obscured by dense epicormic, though upper portion of crown appears of fair vitality and vigour with no indication of physiological dysfunction. Minor deadwood < 100 mm in diameter scattered throughout the crown.	F	F	B2	No works recommended
T008	Common lime (<i>Tilia x europaea</i>)	EM	40-80	17	540	6	2	5	5	8	Base of main stem partially obscured by dense epicormic, though upper portion of crown appears of fair vitality and vigour with	F	F	B2	No works recommended



Tree Ref:	Species	Age	SULE	Ht.	DBH	CS				CC	Comments	PC	SC	BS 5837:2012 Category	Recommendations
						N	E	S	W						
											no indication of physiological dysfunction. Minor deadwood < 100 mm in diameter scattered throughout the crown.				
T009	Whitebeam (<i>Sorbus aria</i>)	M	20-40	16	790	8	6.5	8	3.5	2	Minor deadwood < 100 mm in diameter scattered throughout the crown.	F	F	B2	No works recommended
T010	Copper beech (<i>Fagus sylvatica</i> 'Purpurea')	EM	40-80	20	690	7	8	6	2.5	6	Bifurcates at 2-4 m into four co-dominant primary stems; unions are acute and are possibly included.	F	PD	B1	Remove tree



Appendix 2: Images of Trees



Plate 1: T001 (foreground)



Plate 2: T002 (foreground)



Plate 3: T004, T003, & T010 (right to left)



Plate 4: T004, T005, & T006 (left to right)



Plate 5: T007, T008, & T009 (left to right)



Plate 6: T010 and the existing church building/site of the proposed extension



Plate 7: T010 and the existing church building/site of the proposed extension



Appendix 3: Outline Arboricultural Method Statement (AMS)

A3.1 Introduction

- A3.1.1** Woodsage Consulting Ltd have been instructed by the Ward Councillors of Newsome to produce an Outline AMS in relation to the proposed development of the land at Newsome Church, Jackroyd Lane, Huddersfield HD4 6JH.
- A3.1.2** The proposals are to extend upon the existing church building.
- A3.1.3** This Outline AMS should be read in conjunction with the Arboricultural Impact Assessment (Ref: WC-258.1a).

A3.2 Timing of Works

- A3.2.1** It is not the Project Arboriculturist's role to determine the timing and implementation of works on site; however, an input into the process can avoid issues once work is underway. The phasing of works should be carried out in accordance with **Tab. A3.1**, below.

Table A3.1: *Timing of Works.*

Stage	Works
1	Site induction
2	Carry out tree removals
3	Install temporary tree protection fencing and ground protection, in the locations shown in the Tree Protection Plan
4	Inspection of tree protection measures by the Project Arboriculturalist
5	Carry out construction works
6	Remove temporary tree protection fencing and ground protection once construction works have been completed
7	Carry out tree planting
8	Final inspection by the Project Arboriculturalist

A3.3 Site Supervision

- A3.3.1** Prior to works commencing, it is the responsibility of the main contractor, or assigned agent, to ensure that details regarding tree protection are understood and adhered to by all site personnel.
- A3.3.2** During the site induction, the final AMS, and a copy of the **Tree Protection Plan** - which can be found in **Appendix 6** - should be made available to all contractors attending the site.

A3.4 Tree Works

- A3.4.1** Prior to works commencing, T010 should be removed.
- A3.4.2** According to information provided on the website of Kirklees Council (2024), T010 does not appear to be covered by TPO Ref: 23/80/g1; however, tree protection status should be checked and verified with Kirklees Council prior to the commencement of works. Killing or damaging a protected tree is a criminal offence and can result in an unlimited fine.
- A3.4.3** All tree works, including tree removals, should be carried out by a fully insured and suitably qualified arboricultural contractor who is able to comply with *BS 3998: 2010: Tree Works - Recommendations*.
- A3.4.4** Trees provide valuable habitat for wild birds, bats, and many other forms of wildlife. The risks posed to these should be suitably assessed before the recommendations within this report are completed.



A3.5 Tree Protection Fencing

A3.5.1 Tree protection barriers shall be installed prior to the commencement of development works, and should be fit for the purpose of excluding site personnel and machinery. The default specification should be in accordance with *BS 5837: 2012*.



Figure A3.1: Example of mesh welded type barriers in-situ.

A3.5.2 Specification: Barriers shall be a minimum 2 m high, and should consist of a vertical and horizontal scaffold framework, well braced to resist impacts, as illustrated in **Fig. A3.1**, above, and **Fig. A3.2**, below.

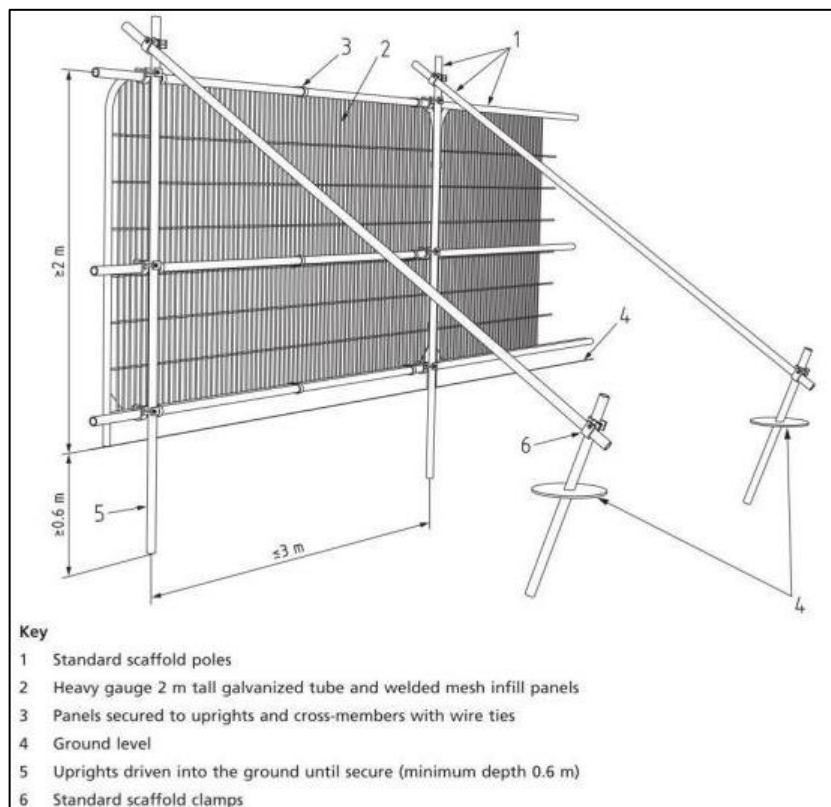


Figure A3.2: Specification for temporary 2 m steel protective fencing.

A3.5.3 The vertical tubes shall be spaced at a minimum interval of 3 m and driven securely into the ground. Onto this framework, welded mesh panels should be securely fixed.



A4.5.4 All-weather notices shall be attached to the barriers at 9 m intervals with the words 'TREE PROTECTION ZONE - NO ACCESS' clearly visible.

A4.5.5 **Location:** The temporary tree protection fencing should be installed throughout the duration of the development, prior to construction works commencing, in the locations shown in the ***Tree Protection Plan***.

A4.5.6 The protected areas should be regarded as sacrosanct, and once installed, tree protection fencing should not be removed or altered without prior consultation with the Project Arboriculturist.

A4.5.7 If any breach in the tree protection fencing occurs, it is the Site Manager's responsibility to report this to the Project Arboriculturalist, so that appropriate measures may be taken. Any breach which results in death or damage to the trees could result in a criminal offence being committed.

A3.6 Additional Details

A3.6.1 No materials hazardous to tree health, such as oil, bitumen or cement should be stored within the protective fencing. Where possible this area should be extended to 10 m away from the fencing.

A3.6.2 Where there is a risk of polluted water runoff into root protection areas (RPAs), heavy duty plastic sheeting and sandbags must be used to contain any spillages and prevent contamination. No fires should be lit within 20 m of the protective fencing.

A3.6.3 As the majority of tree roots are typically found within the first 100 cm of ground level - particular attention should also be paid to existing levels - which should be observed and maintained within tree RPAs.

A3.6.4 Any unavoidable excavations into the soil within RPAs should be carried out by use of hand-operated tools only, and only under prior approval of the Project Arboriculturalist. If roots are encountered which occur in clumps, or which are greater than 25 mm in diameter, these should not be severed without first consulting the Project Arboriculturalist.

A3.7 Ground Protection

A3.7.1 Due to site constraints - and to allow for suitable working space - the temporary tree protection fencing adjacent to T002, T003, and T005 will be setback from the default *BS 5837: 2012* positioning; as a result, soft-landscape within the RPAs will be exposed to development activities.



Figure A3.3: Examples of ground protection panels.

A3.7.2 Temporary ground protection should be installed throughout the exposed RPAs of T002, T003, and T005 – in the locations shown in the ***Tree Protection Plan*** - prior to the commencement of construction works.



A3.7.3 Ground protection should consist of inter-linked boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), which are laid onto a geotextile membrane, as illustrated in **Fig. A3.3**, on the previous page.

A3.7.4 Any plant or machinery operating within the RPAs of T002, T003, and T005 must ensure it does so upon ground protection at all times.

A3.7.5 The temporary ground protection may only be removed once construction works have been completed.

A3.8 Responsibility and Site Management

A3.8.1 It is the responsibility of the main contractor or assigned agent to ensure that details regarding tree protection are understood and followed by all site personnel.

A3.8.2 It is recommended that inspections by the Project Arboriculturalist are carried out at the following stages:

1. Once the temporary tree protection fencing and ground protection have been installed – in the locations shown in the **Tree Protection Plan** – and prior to construction works commencing.
2. Upon completion of the development works.

A3.8.3 After each inspection, a letter should be submitted by the Project Arboriculturalist to the LPA Arboricultural Officer, to confirm if the method statement has been followed correctly, and if trees have not been adversely affected by construction works.

A3.9 Project Arboriculturalist Contact Details

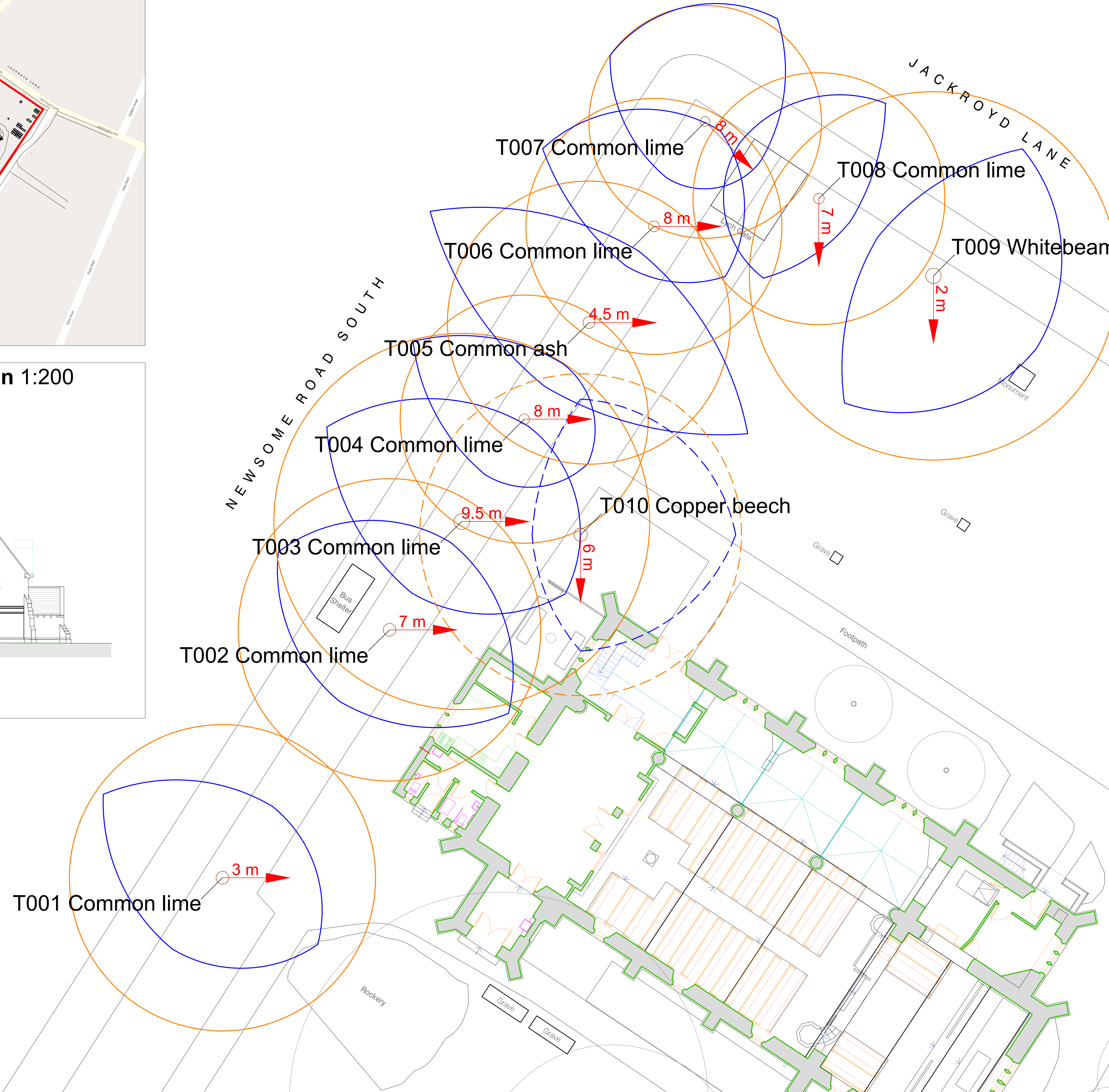
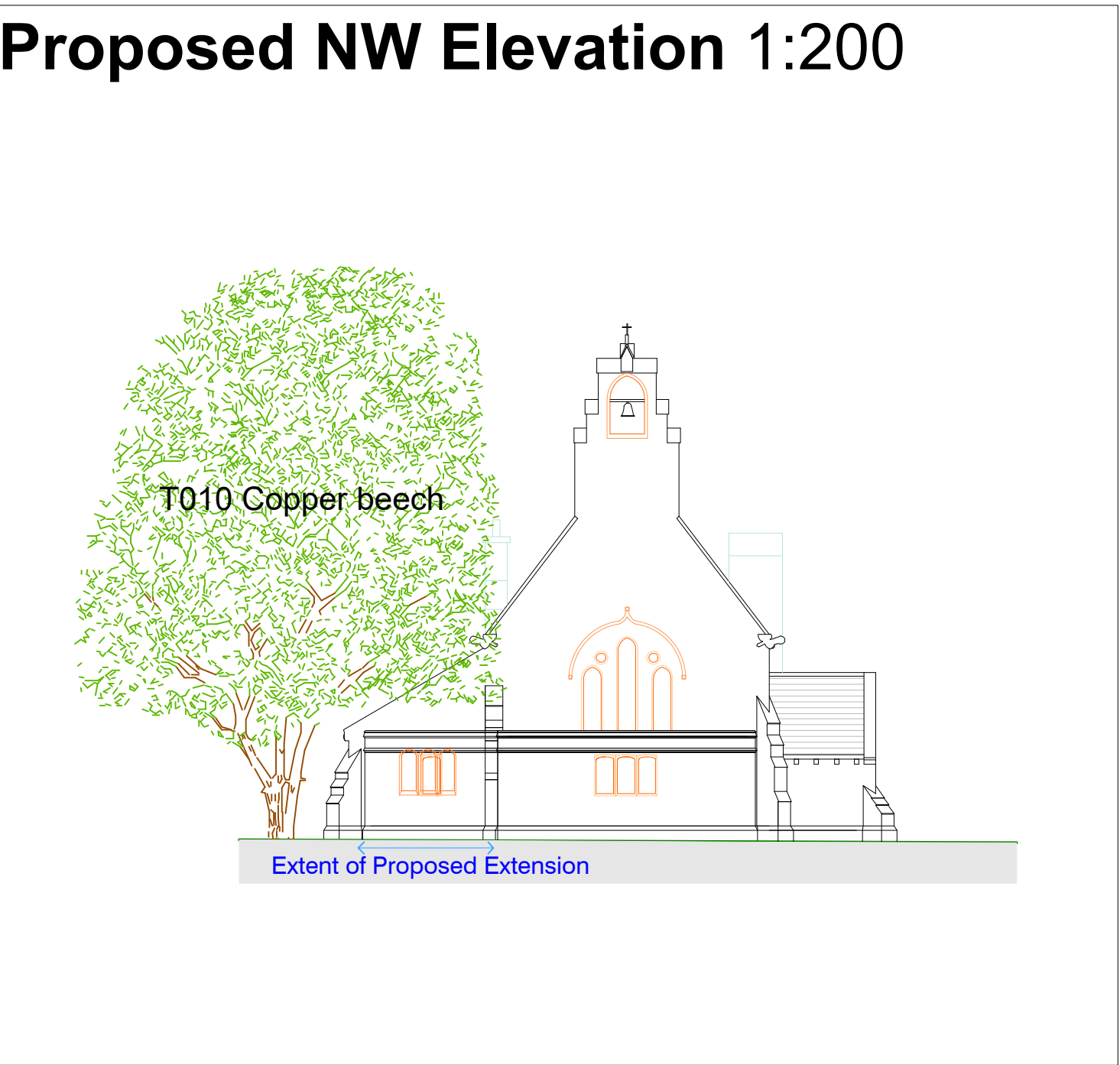
Mr Jack Delaney
Woodsage Consulting Ltd
Unit 2, Hey End Farm,
Shield Hall Lane,
Luddendenfoot,
West Yorkshire HX2 6JN

Tel: 07962401997
Email: info@woodsage.co.uk

Site Location 1:1000



Proposed NW Elevation 1:200



Appendix 4:
Tree Constraints Plan

Project:	Newsome Church, Jackroyd Ln, Huddersfield HD4 6JH
Drawn by:	Jack Delaney
Date:	15th March 2024
Scale:	1:100 @ A1
Drawing Number:	WC-258.1a.4

Do not scale off this drawing - to be reproduced in colour only

Map Key:

Category B trees of moderate-quality	
Root protection area (RPA)	
Tree stem	
Tree canopy	
Trees necessitating removal shown with dashed line	
	Additional on-site trees outside of the study area
	Application boundary

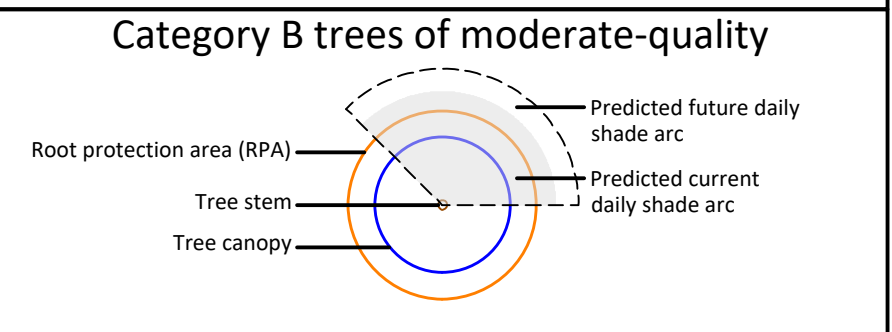


Appendix 5:
Shade Analysis Plan

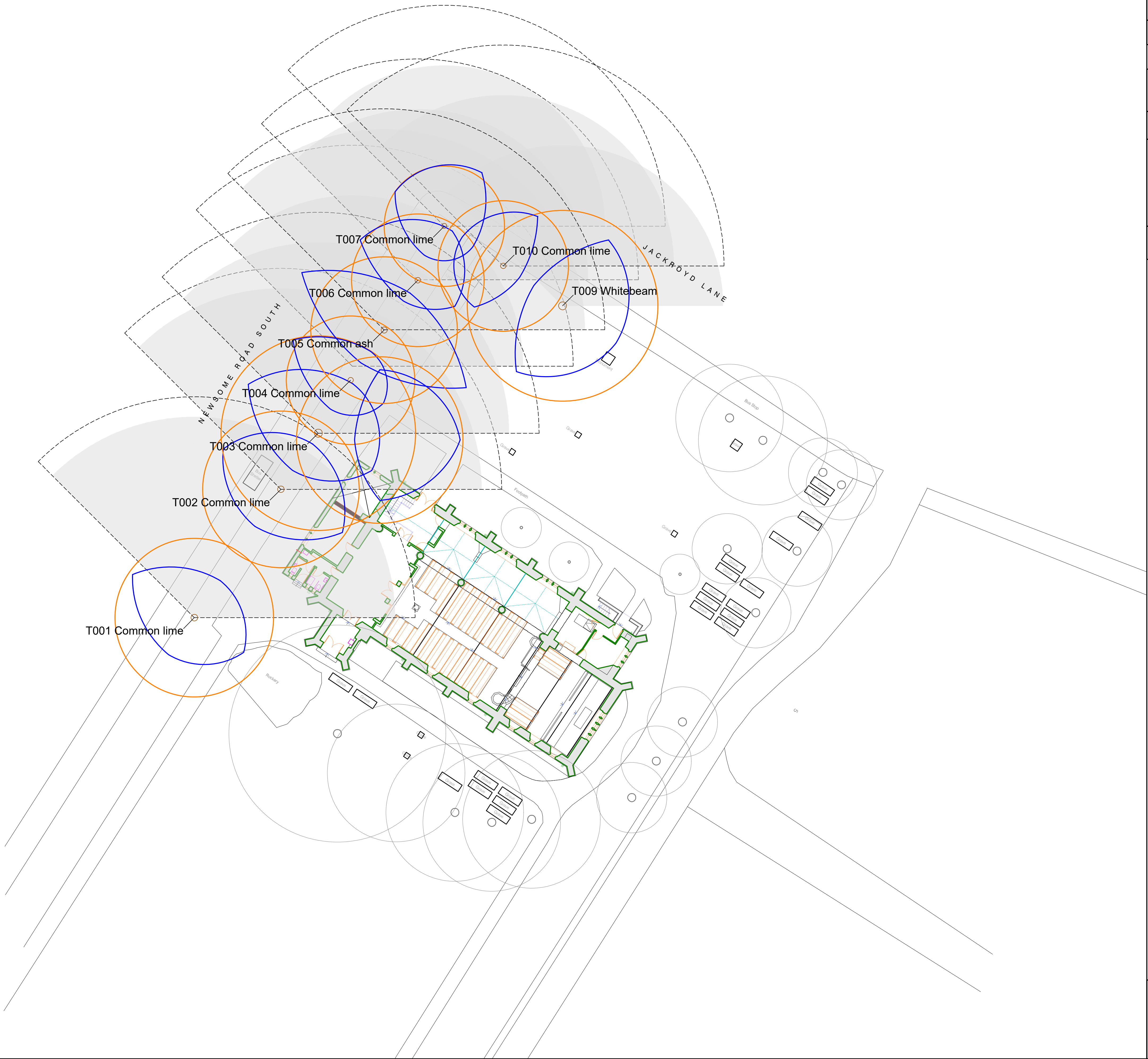
Project:	Newsome Church, Jackroyd Ln, Huddersfield HD4 6JH
Drawn by:	Jack Delaney
Date:	15th March 2024
Scale:	1:200 @ A1
Drawing Number:	WC-258.1a.5

Do not scale off this drawing - to be reproduced in colour only

Map Key:



	Additional on-site trees outside of the study area
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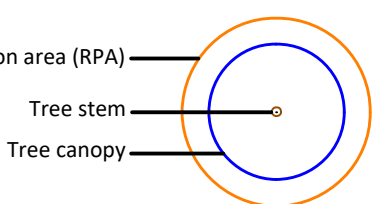
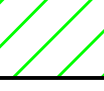


Appendix 6:
Tree Protection Plan

Project:	Newsome Church, Jackroyd Ln, Huddersfield HD4 6JH
Drawn by:	Jack Delaney
Date:	15th March 2024
Scale:	1:100 @ A1
Drawing Number:	WC-258.1a.6

Do not scale off this drawing - to be reproduced in colour only

Map Key:

Category B trees of moderate-quality	
	
	Additional on-site trees outside of the study area
	Proposed tree planting locations
	Temporary tree protection fencing; refer to Outline Arboricultural Method Statement (AMS) for detailed specification
	Temporary ground protection; refer to Outline AMS for detailed specification
	Proposed construction equipment and material storage area

