



**Arboricultural Implication Assessment
Land adjacent 71 Woodhead Road Honley**

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1 Introduction

1.1. Instruction and Brief

1.1.1. Tree Care Consultancy was commissioned by Peter Mitchell to prepare an Arboricultural Survey and Implication Assessment to accompany a planning application for a proposed residential development at the above address. The report produced includes the following information:

- A tree survey, undertaken in accordance with British Standard 5837:2012 'Trees in relation to design, demolition and construction' - Recommendations
- A Tree Constraints Plan overlaying the proposed Site layout Plan which highlights the potential development limitations trees pose on site

1.1.2. This report is based on site observations and information provided. Conclusions have been made in light of the surveyors experience and qualifications.

1.1.3. This report is only concerned with trees in relation to construction and makes no attempt to provide a full safety inspection of the trees surveyed. It should not be seen as an alternative for a Tree Hazard Assessment which is specific to minimising the risk and liability associated with trees.

1.1.4. Climatic conditions including storms, drought and temperature-related factors can cause damage and failure in apparently healthy trees. It should be remembered that all trees do pose a risk and whilst every effort has been made to detect any major defects in inspected trees, no guarantee can be given as to their safety. Although the risk should be managed to an acceptable level, no tree can be guaranteed as safe at all times.

1.1.5. This report is based on Visual Tree Assessment (VTA) methodology, as devised by Mattheck (1991). V.T.A is a ground level visual assessment of a tree, which is carried out to identify obvious mechanical defects, signs of ill health, potential mechanical failure and the suitability of a tree to a site. The survey is compiled in accordance with British Standard 5837:2012 'Trees in relation to design, demolition and construction' - Recommendations with Root Protection Areas (RPA 's) based upon section 4.6 of the document.



1.2. Site Visit

- 1.2.1. The survey was undertaken by Stephen Waterson on 22 February 2018. Stephen has many years experience within the Arboricultural industry, predominantly in the role of a Local Authority Tree Officer, though more recently he has worked in the role of Arboricultural Consultancy. He has a wide range of experience covering tree management, trees in relation to development and tree work applications associated with protected trees. In 1997 Stephen was awarded the Technicians Certificate in Arboriculture. As part of his continuing professional development Stephen attends seminars and develops contacts with fellow professionals ensuring his knowledge and awareness of industry best practice is current and up to date.
- 1.2.2. Measurements were calculated using necessary instruments or estimated where appropriate. No climbing inspections or decay detection analysis was undertaken.
- 1.2.3. Tree survey data was recorded and the trees were graded using table 1 of BS5837. This information has been included within the tree schedule at Appendix 1. An explanation of the tree schedule format is also included within the Appendix.
- 1.2.4. This survey should be read in conjunction with the Tree Constraints Plan at appendix 4. This plan has been prepared by overlaying tree survey data onto the proposed site layout plan. The author has relied on the accuracy of the drawings in the production of this report.

1.3. Site Description

- 1.3.1. The site consists of vacant plot of land that fronts Woodhead Road to the west. The land immediately fronting Woodhead Road is relatively flat, though falling gradually away from the highway. In the past this area has been subject of infilling and effective leveling of the land that previously sloped down towards the rear of a former garage court. Where the filled ground is present this in the main is supported by a substantial concrete retaining wall.
- 1.3.2. The surrounding area is one of mixed use. Please refer to the Planning Statement prepared by Northern Design for the full site context.



- 1.3.3. The tree cover present on site consists of a grouping of early mature and mature sycamore trees. Fronting Woodhead Road the trees are collectively visually prominent.
- 1.3.4. Tree cover within the surrounding area is moderate in terms of coverage and species mix, though the age profile is noticeably weighted towards trees of a mature age.

1.4. Tree Status

- 1.4.1. It is understood trees covered by the report are subject of a Tree Preservation Order (TPO), though the property is not subject to Conservation Area controls. In the case of trees that are subject of TPO, Conservation Area controls or planning application procedures it is essential the Local Authority's advice is sought and where necessary consent obtained prior to undertaking any tree removal or pruning operations.

1.5. Soil Assessment

- 1.5.1. No soil testing was undertaken and no soil information was provided for the author.



2 Tree Quality Assessment

2.1.1. As highlighted in table 1 below, the tree survey included 9No. individual trees. No trees were identified as a category "A" or "U" items, 5No. trees were identified as category "B" material and 4No. trees were identified as category "C" material.

Table 1:

Category	Category Description	Tree Numbers
'A'	Trees of high quality, with life expectancy in excess of 40 years	None
'B'	Trees of moderate quality, with life expectancy in excess of 20 years	T3, T4, T5, T8, T9
'C'	Trees of low quality with life expectancy in excess of 10 years or young trees	T1, T2, T6, T7
'U'	Seriously defective trees that cannot be retained in present context for longer than 10 years	None
Total number of trees:		9No. trees

2.1.2. Whilst past management has been undertaken; by and large the treescape present can be expected to provide an effective landscape feature for a period in excess of 20 years.

2.1.3. Generally, the Local Planning Authority is likely to accept the removal of trees in a poor condition or where justifiable in development terms those with a minimal, safe, useful life expectancy. This usually includes category "U" and "C" trees. This presumption is also viewed reasonable where it accords with competent arboricultural management.



3 Arboricultural Implication Assessment

3.1.1. The following section evaluates the proposed layout in relation to all trees within influencing distance of the proposal. Any tree and design conflicts are highlighted and possible remedial action recommended. The assessment is based on the surveyor's findings and drawings provided by Northern Design.

3.1.2. The scheme proposes to erect 2No. dwellings within the site.

3.2. Tree work necessary to facilitate the proposed development

3.2.1. As demonstrated in Table 2 the removal of the T2 category "C" sycamore is recommended in order to accommodate a proposed access to plot 3. However this tree is arguably the poorest of the group, being a relatively spindly specimen whose removal would not significantly impact on visual amenity and the local street scene. Furthermore the trees removal would aid the development of adjacent trees T1 and T3. The remaining trees are shown to be retained.

Table 3:

Tree categories A, B, C & U	Trees to be retained and protected	Trees to be removed for development	Trees to be removed for arboricultural management reasons
'A'	Nil	Nil	Nil
'B'	T3, T4, T5 T8, T9	Nil	Nil
'C'	T1, T6, T7	T2	Nil
'U'	Nil	Nil	Nil

3.3. Below ground constraints

3.3.1. The area of roots that need to be protected around a tree to try to ensure it does not suffer damage during the construction process is called the Root Protection Area (RPA).

3.3.2. As recommended in BS5837 we have plotted the RPAs (in magenta) onto the attached Tree Constraints Plan (TCP) taking full account of the surrounding topographical factors, tree condition and the overall likelihood of root disposition. Undoubtedly the Woodhead Road carriageway, adjacent retaining features and utility service trenches will have influenced the individual tree RPA's. Notwithstanding the limitations and potential damage associated with past ground disturbance the trees appear to be maintaining acceptable growth and for this reason it appears reasonable to specify the default radial RPA measure on the basis root activity will not be overly biased into the site.



3.3.3. The proposed private drives to serve plots 2 and 3 will encroach over the RPA's of trees T1 and T3-T8. As such it is recommended that the incorporation of a "minimal dig methodology geogrid system" will provide scope to retain these trees without causing any demonstrable harm to tree health. Ordinarily there would be presumption in favour of limiting the extent of the encroachment within the respective RPA's to 20% maximum. However taking account of the raised ground levels discussed at 3.3.2 this design principle is not considered overly relevant here.

3.4. Above ground constraints

3.4.1. There is no requirement to undertake facilitation pruning, since the trees already have been crown lifted and crown cleaned in the recent past. Retained trees (in proximity to proposed buildings can be expected to grow their overall dimensions subject to routine pruning operations. The expected future growth of the retained trees is not considered to cause any conflicts with the future use. Such pruning works would be carried out in accordance with BS3998:2010 recommendations for tree work.

3.5. Tree protection

3.5.1. A bespoke no dig method of construction for the private drives and protective fencing details can be installed prior to the commencement of any site works e.g. before any materials are brought on site. Fencing will have signs attached to it stating that this is a Construction Exclusion Zone (CEZ) and that **NO WORKS** are permitted within the CEZ. The protected fence may only be removed following completion of all construction works.

3.5.2. The positioning, implementation and monitoring of a tree protection scheme can be resolved by an Arboricultural Method Statement.

3.6. Material Storage

3.6.1. It is recommended that all material storage or plant movement shall be carried out clear of the private drives either utilising the footprint of the dwellings or land to the rear of the plots.

3.7. Services

3.7.1. No new services or soak-a-ways are proposed to be sited or constructed within the RPA of retained trees. Should it become necessary these must be installed using techniques and methods described at section 4.1 of the current edition of the National Joint Utilities Group (NJUG) Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (www.njug.org.uk) or if this is not practicable, trenches are to be opened by compressed air excavation tools and not mechanically dug.



3.8. Mitigation of tree loss

3.8.1. As stated previously, the loss of 1No. low quality category “C” tree will be required. This loss will be mitigated by retained trees and the introduction of a desirable landscaping scheme. Whilst a minor loss of amenity is foreseen in the short term, the introduction of new planting along Woodhead Road frontage and to a lesser extent the proposed rear gardens will add value to the local landscape. I would presume this is a matter the Local Planning Authority would be agreeable to conditioning as part of a planning permission.

4 Conclusions

4.1.1. From the tree survey findings, comments and observations, it will be seen that in pure development terms the loss of 1No. low quality category “C” tree will be required; however such removal will not have a significant impact on visual amenity.

4.1.2. The protection of trees and their subsequent health and future potential is totally dependent upon all persons operating within the site. Communications are vitally important to ensure that all parties understand the reason for tree protection and its continued existence. Providing all necessary tree protection works are undertaken, retained trees and development alike can satisfactorily coexist.

4.1.3. It is hoped that this report and recommendations provides all necessary information, however should there be any queries or should clarification of any points be required, please contact the report author.

Stephen Waterson
Arboriculturist



5 Appendices

Appendix 1 – Explanation of Survey Details

Tree Id- Each tree/group has been given a unique number, which coincides with the drawings located in appendix 3.

Species & botanical name- where identifiable the full botanical name has been given. Where a cultivar, variety or species cannot be accurately given the genus name only will be given.

Height (m)- measured approximately to the nearest 1m. If height issues are critical, measurements can be collected accurately using optical instruments.

No of stems- the number of separate stems each individual tree has.

Stem Dia @1.5m (mm)- the diameter of the given tree at 1.5m above soil level, (on sloping ground taken on the up-slope side of the tree base). Where the tree is multi-stemmed measurements will be record for each stem.

Spread- indicates the crown radius from the base of tree in four compass directions, recorded to the nearest metre.

Crown height + direction (m)- recorded as the first significant branch and direction of growth.

Life stage- described as young, semi-mature, early-mature, mature or over-mature.

Physiological condition (P)- an assessment of the trees health. Considers vitality, die back and the presence of disease. Described as Good = no significant health problems Fair = symptoms of ill health that can be remediated Poor = significant ill health.

Structural condition (S)- an assessment of the trees structural condition. Described as Good = no significant defects Fair = significant defects that can be remediated Poor = significant defects no remedy.

Observations – negative and positive- narrative comments on general condition, significant defects and overall appearance (e.g. the presence of any decay).

Preliminary management recommendations- e.g. requires pruning or further investigation of suspected defects is needed.

Life expectancy- preliminary management recommendations, e.g. requires pruning or further investigation of suspected defects is needed.

Retention Category- Each tree/group is identified with a retention category in accordance with BS5837 (an in depth explanation is provided on the following page)

RPA radius (m)- minimum area in metres which should be left undisturbed around each retained tree.

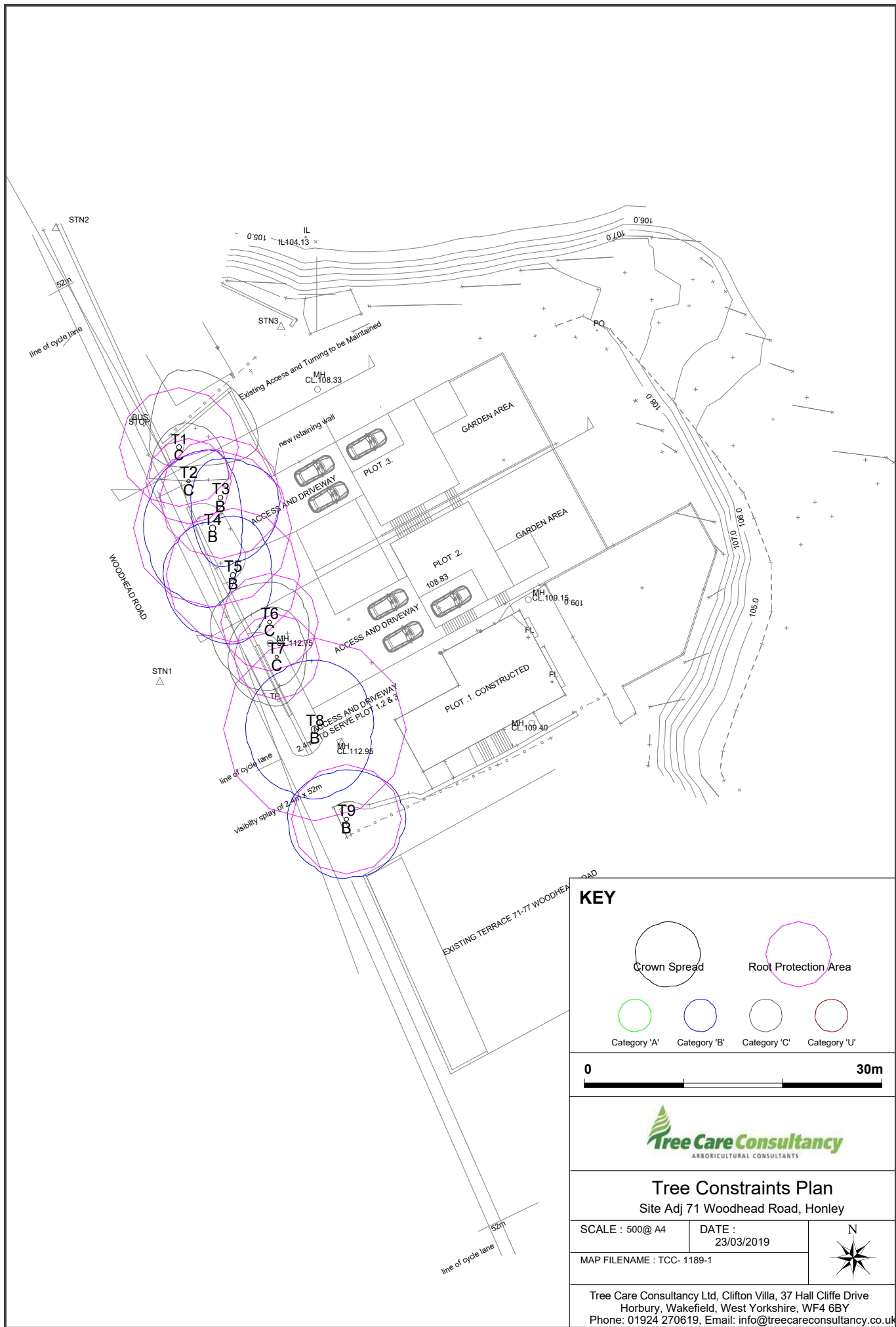
Appendix 2 – Cascade Chart for Tree Quality Assessment (Extract BS5837)

Category and definition	Criteria (including subcategories where appropriate)			Identification on Plan
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul style="list-style-type: none"> Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline Trees infected with pathogens of significance to health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <p>NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve</p>			DARK RED
TREES TO BE CONSIDERED FOR RETENTION				
Category and definition	Criteria – Subcategories			Identification on Plan
	1 Mainly arboricultural values	2 Mainly landscape values	3 Mainly cultural values, including conservation	
Category A Trees of a 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, or essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	LIGHT GREEN
Category B Those of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	MID BLUE
Category C Those of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees of a very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value; and/or trees offering low or only temporary/transient screening benefits	Trees with no material conservation or other cultural values	GREY



Appendix 3- Tree Schedule





Tree ID	Species, Botanical Name	Height (m)	No of stems	Stem @ 1.5M (mm)	Spread - N,E,S,W				Crown height+ direction (m)	Life stage	Physiological (P) and Structural (S) condition. Observations- negative and positive	Recommendations	Life expectancy	Retention category	RPA Radius (m)
T1	Sycamore, <i>Acer pseudoplatanus</i>	17	2	350 & 340	8	8	2	3	8-n	Early-mature	P= Good, S= Fair. Past ground level changes within RPA and possible rooting volume interference associated with construction of adjacent boundary retaining wall, though no discernible loss of vitality. Dual stemmed from ground level. Unbalanced form. Multiple partially occluded pruning wounds.	Retain and protect during development.	10 to 20 yrs	C2	5.9
T2	Sycamore, <i>Acer pseudoplatanus</i>	17	1	350	6	4	0	4	9-n	Early-mature	P= Fair, S= Fair. Past ground level changes within RPA. Spindly specimen. Multiple partially occluded pruning wounds.	Remove tree to accommodate proposed access	10 to 20 yrs	C2	4.2
T3	Sycamore, <i>Acer pseudoplatanus</i>	18	1	500	4	6	7	3	7-s	Early-mature	P= Fair, S= Fair. Past ground level changes within RPA though no discernible loss of vitality. Single stemmed. Multiple partially occluded pruning wounds.	Retain and protect during development.	20 to 40 yrs	B2	6
T4	Sycamore, <i>Acer pseudoplatanus</i>	18	1	650	8	3	8	7	6-s	Mature	P= Good, S= Fair. Past ground level changes within RPA though no discernible loss of vitality. Single stemmed. Multiple partially occluded pruning wounds.	Retain and protect during development.	20 to 40 yrs	B2	7.8

Tree ID	Species, Botanical Name	Height (m)	No of stems	Stem @ 1.5M (mm)				Crown height+ direction (m)	Life stage	Physiological (P) and Structural (S) condition. Observations- negative and positive	Recommendations	Life expectancy	Retention category	RPA Radius (m)	
				6	4	7	7								
T5	Sycamore, <i>Acer pseudoplatanus</i>	18	1	550	6	4	7	7	8-s	Early-mature	P= Good, S= Fair. Past ground level changes within RPA though no discernible loss of vitality. Dual stemmed from 4m. Multiple partially occluded pruning wounds.	Retain and protect during development.	20 to 40 yrs	B2	6.6
T6	Sycamore, <i>Acer pseudoplatanus</i>	18	1	400	4	4	7	6	6-s	Early-mature	P= Good, S= Fair. Past ground level changes within RPA though no discernible loss of vitality. Single stemmed. Multiple partially occluded pruning wounds.	Retain and protect during development.	10 to 20 yrs	C2	4.8
T7	Sycamore, <i>Acer pseudoplatanus</i>	18	1	350	5	3	5	5	7-s	Early-mature	P= Good, S= Fair. Past ground level changes within RPA though no discernible loss of vitality. Single stemmed. Multiple partially occluded pruning wounds.	Retain and protect during development.	10 to 20 yrs	C2	4.2
T8	Sycamore, <i>Acer pseudoplatanus</i>	18	1	750	7	6	7	7	9-s	Mature	P= Good, S= Fair. Past ground level changes within RPA though no discernible loss of vitality. Twin stemmed from 1.5m. Multiple partially occluded pruning wounds.	Retain and protect during development.	20 to 40 yrs	B2	9
T9	Sycamore, <i>Acer pseudoplatanus</i>	17	2	450	5	6	6	6	8-e	Early-mature	P= Good, S= Fair. Single stemmed form with balanced crown. Multiple partially occluded pruning wounds.	Retain and protect during development.	20 to 40 yrs	B2	5.4




KEY

 Crown Spread
  Root Protection Area


 Category 'A'
  Category 'B'
  Category 'C'
  Category 'U'

0 **30m**



Tree Care Consultancy
 ARBORICULTURAL CONSULTANTS

Tree Constraints Plan
 Site Adj 71 Woodhead Road, Honley

SCALE : 500@ A4	DATE : 23/03/2019	N 
MAP FILENAME : TCC- 1189-1		

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