



Old Oak Tree Care

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Tree survey to consider impact upon trees by proposed development at Lane End, Penley, Wrexham, in accordance with BS5837:2012 Trees in Relation to design, demolition and construction: *Recommendations*.

Commissioned by
Greenspace Architects

Surveyed by
David Bailey
BSc (hons), M.Arbor.A, cert. Arb.(RFS)

Date: 14th January 2014

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1.0 Qualifications and Experience

- 1.1 My name is David Bailey. I am the owner of Old Oak Tree Care, an Arboricultural Consultant and Contractors business based on the Staffordshire/Shropshire border. I have run my business as a Contractor since 2004 and progressed to work as a consultant since 2008.
- 1.2 I attained the Honours Degree in Arboriculture at Myerscough College, Lancashire at an upper second level in 2011 after completing the Foundation Degree in Arboriculture at Merit level from Myerscough College, in 2008. I attained the Certificate of Arboriculture from the Royal Forestry Society in 2006.
- 1.3 I am a professional member of the Arboricultural Association and hold Professional Indemnity Insurance to £500 000.
- 1.4 Old Oak Tree Care is an approved contractor to Shropshire Council and carries out work for Government Agencies, County Councils, Town Councils, The Forestry Commission and private individuals.
- 1.5 In my work as a consultant, I have carried out surveys of trees in relation to construction, large scale health and safety tree surveys, private consultancy work and LPA appeals.
- 1.6 My professional interests include studying the spread of *Phytophthora alni* within the British riparian environment and promoting the professionalism of the Arboriculturist.

2.0 Brief / Overview of site

- 2.1 I have been asked by Mr Geraint Edwards of Greenspace Architects to survey trees at the bottom of Lane End, Penley with a view to development in this plot.
- 2.2 The area shown in the Tree Constraints Plan (TCP) is a large abandoned household site. There are a number of trees ranging from young specimens to semi-mature. Many of the trees are self set native species with a number of planted trees that relate back to the garden of the abandoned house.
- 2.3 It is my understanding of the proposal is that the land will be used to build houses upon.
- 2.4 A number of trees have been felled prior to my arrival on site, probably to allow better access for survey and ground assessment purposes. A large co-dominant stem has been removed from 524 on the southern side. The reason for this is unclear.
- 2.5 The trees of interest to this survey are marked on the Tree Constraints Plan (TCP) as 520 to 528.
- 2.6 The area is surrounded by many hedging species that have not been managed and have now turned into small trees.
- 2.7 A number of *Ailanthus altissima* (tree of heaven) stems are found in a position to the south of 527. Special attention is given to these at the end of section 5.

3.0 Introduction

This British Standard gives recommendations and guidance on the principles to be applied to achieve a satisfactory juxtaposition of trees, including shrubs, hedges and hedgerows, with structures. It follows, in sequence, the stages of planning and implementing the provisions which are essential to allow development to be integrated with trees.

This standard recognizes that there can be problems of development close to existing trees which are to be retained, and of planting trees close to existing structures. This standard sets out to assist those concerned with trees in relation to construction to form balanced judgements. It does not set out to put arguments for or against development, or for the removal or retention of trees. Where development, including demolition, is to occur, the standard provides guidance on how to decide which trees are appropriate for retention, on the means of protecting these trees during development, including demolition and construction work, and on the means of incorporating trees into the developed landscape.

4.0 Definitions

4.1 Trees to be considered for removal

Category U

Those in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management

- 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 R category trees (i.e. 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 the health and/or safety of other trees nearby (e.g. Dutch elm disease), or very low quality trees suppressing adjacent trees of better quality

NOTE Habitat reinstatement may be appropriate (e.g. U category tree used as a bat roost: installation of bat box in nearby tree)

4.2 Trees to be considered for retention

Category A

Those of high quality and value: in such a condition as to be able to make a substantial contribution (a minimum of 40 years is suggested)

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 which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance (e.g. avenues or other arboricultural features assessed as groups)

Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)

Category B

Those of moderate quality and value: those in such a condition as to make a significant contribution (a minimum of 20 years is suggested)

Trees that might be included in the high category, but are downgraded because of impaired condition (e.g. presence of remediable defects including unsympathetic past management and minor storm damage)

Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not, individually, essential components of formal or semi-formal arboricultural features (e.g. trees of moderate quality within an avenue that includes better, A category specimens), or trees situated mainly internally to the site, therefore individually having little visual impact on the wider locality

Trees with clearly identifiable conservation or other cultural benefits

Category C

Those of low quality and value: currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150 mm

Trees not qualifying 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 screening benefit

Trees with very limited conservation or other cultural benefits

NOTE Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150 mm should be considered for relocation.

Number annotation

Each category is given a number annotation that gives direction to the values that the A,B or C designation alludes to.

- 1 Mainly Arboricultural (tree) qualities. e.g. Rare tree of good form
- 2 Mainly Landscape qualities. e.g. Trees that form important part of a landscape view
- 3 Mainly Cultural or Conservation values. e.g. Veteran tree

4.3 Age Class

Y – Young;

MA – Middle aged; maturing tree, established but liable to further growth.

M – Mature; large tree for species, unlikely to gain further significant height or spread.

OM – Over-mature; tree beginning or during senescence.

V – Veteran; exceptionally old tree for species, showing high levels of senescence

4.4 Physiological condition

Trees marked '**Good**' are classed as having a generally good physiological and structural condition. The tree may show signs of minor physiological ailments such as minor pest damage or structural damage such as small branch damage but in general will be showing good vigour, freedom from serious disease or pests and will have a good structure.

Trees marked as '**Fair**' will have a generally reasonable physiological condition and structure. Evidence of fungal, viral or bacterial may be visible and/or the crown will show less than good vigour. Structural defects such as minor rot holes, minor included bark, mechanical damage or poor tree surgery are liable to be found. The tree is not poor, but has defects which mean it cannot be classed as 'good'.

Trees marked as '**Poor**' will have a generally poor physiological condition and structure. Evidence of major fungal, viral or bacterial are possible and/or the crown will show little vigour. Structural defects such as major rot holes, high pressure included fork unions, severe mechanical damage or exceptionally poor tree surgery are liable to be found. The tree is either showing signs of severe physiological disorder or is in a structural condition to deem it, or a significant part of it, at risk of failure.

Trees marked as '**Dead**' have no physiological condition. Their structure may range from dead but solid, to dead and liable to immediate collapse.

5 Trees Surveyed

All trees and root protection areas (a hatched circle) are shown on the Tree Constraints Plan
Raw data for each tree can be found in Appendix 3.

Tree Number	520
Species	Sycamore
Stem Diameter at 1.5m	225 mm
Age Class	young
Physiological and structural condition	good
Estimated remaining contribution	10-20 years
Retention category	C
Preliminary management recommendations	
Protective fence distance from bark of tree.	2.6 metres
Notes	Hedgeline escapee

Tree Number	521
Species	Willow
Stem Diameter at 1.5m	633 mm
Age Class	Mature
Physiological and structural condition	Good
Estimated remaining contribution	10 to 20 years
Retention category	C2
Preliminary management recommendations	Remove for development
Protective fence distance from bark of tree.	7.3 metres
Notes	

Tree Number	522
Species	Group of 3 Cypress macrocarpa
Stem Diameter at 1.5m	400 mm (average)
Age Class	Early-mature
Physiological and structural condition	Good – site tolerance is questionable, one tree has been blown over already.
Estimated remaining contribution	10-20 years
Retention category	C2
Preliminary management recommendations	Remove for development
Protective fence distance from bark of tree.	4.6 metres.
Notes	

Tree Number	523
Species	Ash
Stem Diameter at 1.5m	350mm
Age Class	Mid aged
Physiological and structural condition	Good
Estimated remaining contribution	20-40 years
Retention category	C2
Preliminary management recommendations	None
Protective fence distance from bark of tree.	4 metres
Notes	

Tree Number	524
Species	Willow
Stem Diameter at 1.5m	450 mm
Age Class	Mature
Physiological and structural condition	Poor- A Large co-dominant stem has been remove. The crown is now poorly formed. Decay inad instablilty now threaten the tree.
Estimated remaining contribution	<10 years
Retention category	U
Preliminary management recommendations	Remove
Protective fence distance from bark of tree.	5.2 metres
Notes	

Tree Number	525
Species	Willow
Stem Diameter at 1.5m	475 mm
Age Class	Mature
Physiological and structural condition	Good
Estimated remaining contribution	20-40 years
Retention category	B2
Preliminary management recommendations	Remove for development
Protective fence distance from bark of tree.	5.5 metres
Notes	

Tree Number	526
Species	Ash
Stem Diameter at 1.5m	350 mm
Age Class	Mid-aged
Physiological and structural condition	Good
Estimated remaining contribution	20-40 years
Retention category	C2
Preliminary management recommendations	none
Protective fence distance from bark of tree.	4 metres
Notes	

Tree Number	527
Species	Ash
Stem Diameter at 1.5m	450 mm
Age Class	Mature
Physiological and structural condition	Good – tree will soon be in conflict with the wall of the abandoned house
Estimated remaining contribution	10-20 years
Retention category	C2
Preliminary management recommendations	Remove for development
Protective fence distance from bark of tree.	5.2 metres
Notes	

Tree Number	528
Species	Ash
Stem Diameter at 1.5m	300mm
Age Class	Mid aged
Physiological and structural condition	Fair- poor rooting area
Estimated remaining contribution	10-20 years
Retention category	U
Preliminary management recommendations	Remove
Protective fence distance from bark of tree.	3.5 metres
Notes	

The Tree Constraints Plan (TCP) shows an area where *Ailanthus altissima* (tree of heaven) is found. This has recently been cut down but will be liable to re-sprout and continue its growth. This species is very invasive and will not be eradicated by attempting to dig it up. It is important to use a systemic herbicide such as a glyphosate (brand names Round-up, Gallup, Glyphos) to treat newly cut stumps to kill off this tree before any work is carried out on site (at least 2 weeks). This will avoid damage to newly built structures and prevent the infection from getting out of hand.

There are a number of trees within hedgerows to the north east and west of the land. These trees have grown from the hedge line to a height of approx 8 metres and now look unkempt and scruffy. These hedges could be either cut back to a height of approx 2 metres to maintain a mature presence of hedging or removed and replaced with a newly planted hedge.

An additional hedge line to the south east is made of Spruce and Fir trees. These have grown to a height of over 10 metres and are not performing the duty of a hedge any more.

On balance, it would probably be best to remove all these hedging plants and begin again with new hedging, either purely hawthorn or a mix of hazel and hawthorn, to retain the character of the area.

6.0 Arboricultural Impact Assessment

- 6.1 Before any work commences upon trees, advice from the Local Planning Authority should be sought as to whether statutory protection is afforded to the trees. This may come in the form of Conservation Area status or Tree Protection Orders.
- 6.2 Removal or pruning work to trees on a site may have an additional affect on the amenity value of trees on or around the site. These factors should be taken into account in the design stage.
- 6.3 Trees can put constraints upon work both above and below ground. Care needs to be taken to protect the tree, both above and below ground throughout the design and construction process.
- 6.4 Trees proposed to be felled may be saved by modification of the plans, tree surgery and or engineering solutions to allow the retention of the tree. If this is put into practice it should be designed and executed in a way to ensure the long term protection of the tree.
- 6.5 Trees are often at risk from Infrastructure requirements such as underground services, street lighting or signage. Care in the positioning, design and installation is required throughout the building process.
- 6.6 Thought needs to be given to provide retained trees with adequate space, both above and below ground, after the construction work has ceased. The protection of a tree is not worthwhile, if it is cut down the following year by the new owner, because it 'drops leaves in their gutter'.
- 6.7 Where tree loss is inevitable, mitigation of this is possible by the planting of new trees. This should not be an afterthought, but well designed and executed.

7.0 Generic Arboricultural Methods Statement (AMS)

(note: Site specific Arboricultural Method Statements may be required)

- 7.1 Before the commencement of any construction work or arrival of plant or materials. Trees to be retained are clearly marked as to the tree protection plan (TPP). Any protective fences necessary for the protection of trees are to be put in place at the time of construction within the vicinity of such.
- 7.2 All arboricultural work to trees to be completed before building stage to ease access and reduced risks to either construction or arboricultural contractors.
- 7.3 Tree protective fencing to comply with standards set out in BS5837:2012 Figure 2 (Appendix 2). Fencing must provide total exclusion to RPA by vehicular and foot passage. Tree protective fencing is marked as a dashed red line on the TPP.
- 7.4 Protective fencing to be placed at a distance specified for each tree in section 5. Do not attempt to scale from the TPP diagram.
- 7.5 Protected RPAs should be left clear. Use of RPAs as storage areas is not permitted. Any toxic chemicals including hydraulic oil, diesel and paint to be stored in a bund where leakage would not enter into the RPA.
- 7.6 Contractor to inform all employees and sub contractors of RPAs, protected areas and reasons for protection.
- 7.7 Re-grading of the soil depth within an RPA is not permissible. Where building work is to be carried out within the RPA, the use of ground pressure relieving products, such as Cell Web is permissible as long as it is used in the manner prescribed by the manufacturer.
- 7.8 Crowns of protected trees not to be cut back or damaged by vehicles, plant or materials.
- 7.9 No fires to be lit within 10 metres of the nearest canopy of any tree.
- 7.10 Once all building work has been completed and the contractors have left site, tree protection fences may be removed.
- 7.11 Where building work is to take place in RPA's using cell web, then special engineering solutions need to be sought.

8.0 Comment

- 8.1 The removal of a number of trees is required for the development to take place. All trees on site have low amenity value and would not be long lasting even if special measures were made to retain them (521, 525 and 524).
- 8.2 Other trees appear unsuited to the site due to the height and wind load they attain (522) or the rooting area they occupy (525, 527 and 528).
- 8.3 The remaining trees are of a good distance away from the buildings and should be easy to protect and will be allowed to develop after the build has been completed.
- 8.4 It is imperative that the Tree of Heaven occurrence is eradicated effectively to avoid continual problems to the newly built buildings. This must be carried out as early as possible to ensure the plant is effectively eradicated.
- 8.4 Replacement of the hedgerows, where they have become overgrown, will allow a much neater appearance to be achieved much quicker than drastically reducing the height of the current hedge stock.
- 8.5 Tree loss can be mitigated by planting replacement trees that will add to the amenity of the area and provide longer lasting alternatives to the current tree crop. Positions and suggestions are made in the TPP

Tree Constraints Plan

Land to South of Lane End, Penley, Wrexham
Showing existing building and all trees

Tree categories and Root Protection Areas (RPA's)
Map File Reference: TCP

SCALE :
1 : 400

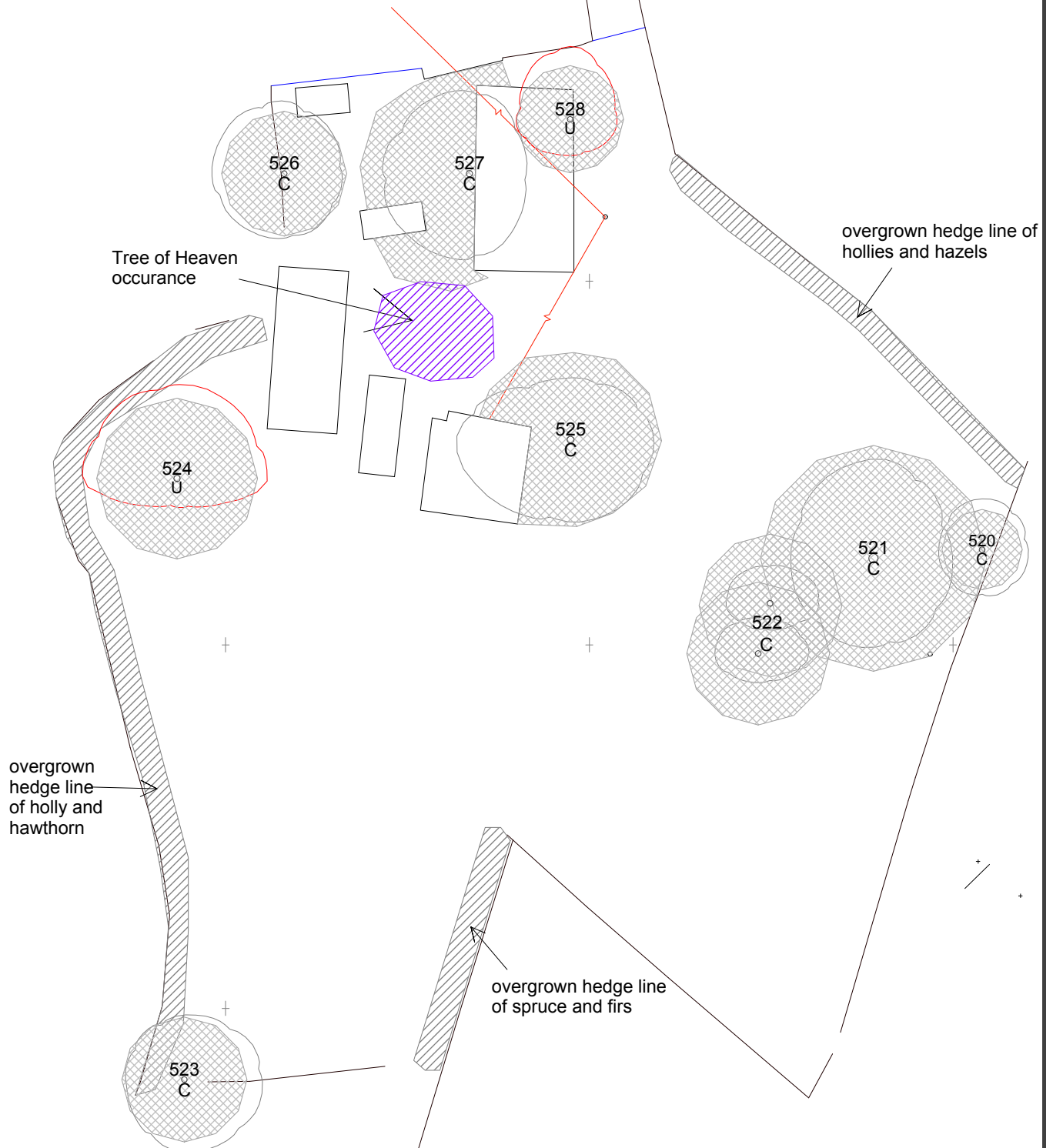
DATE :
1/20/2014

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-  Catagory A Tree
-  Catagory B Tree
-  Catagory C Tree
-  Root Protection Area (RPA)
-  Catagory U (remove) Tree



Tree Protection Plan

Land to South of Lane End, Penley, Wrexham
Showing proposed building and all retained trees

Tree categories, RPAs and protection
Map File Reference: TPP

SCALE :
1 : 400

DATE :
20/01/2014

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-  Category A Tree
-  Category B Tree
-  Category C Tree
-  Root Protection Area (RPA)
-  Protective Fencing to BS5837:2012
-  New planting

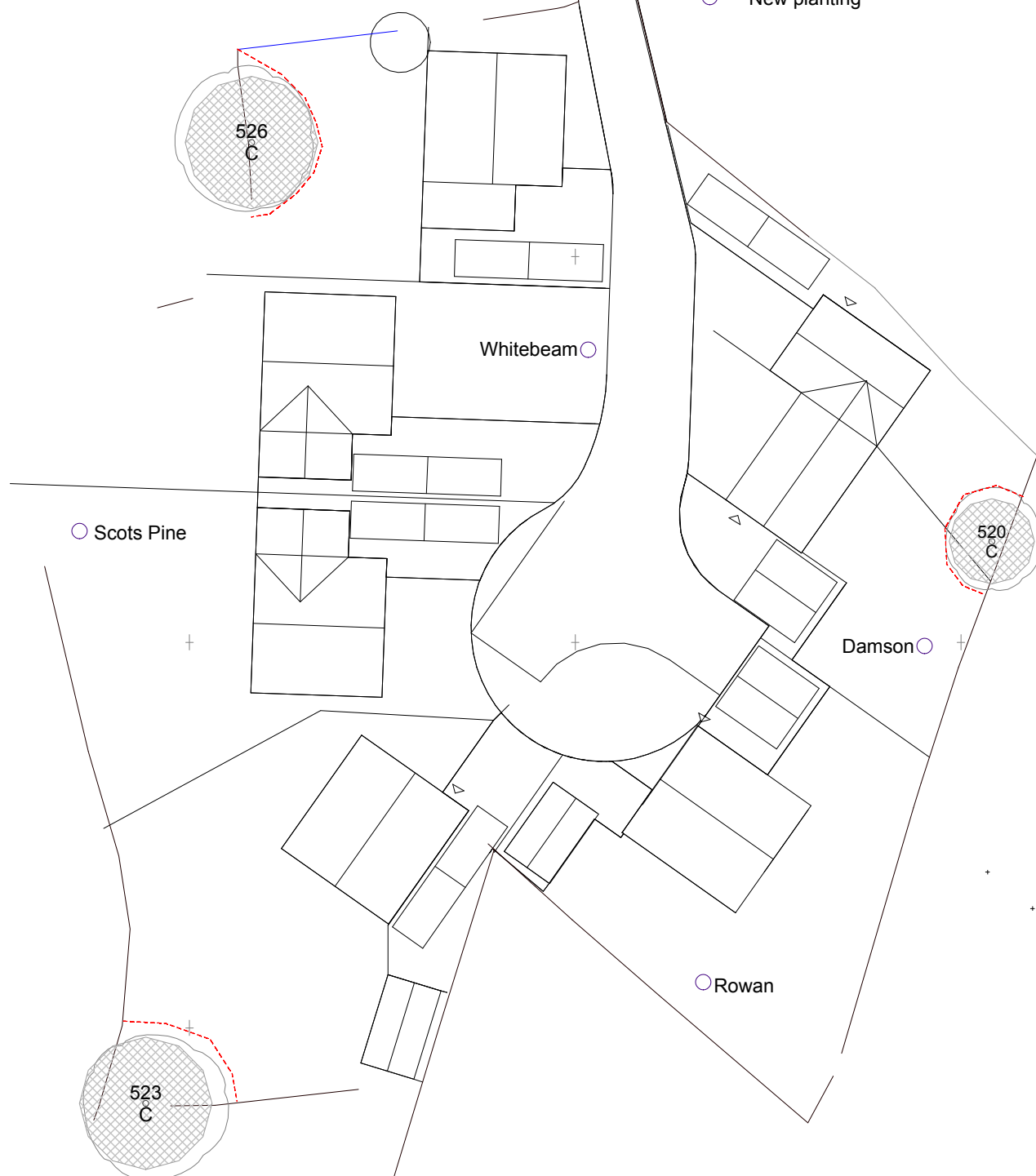
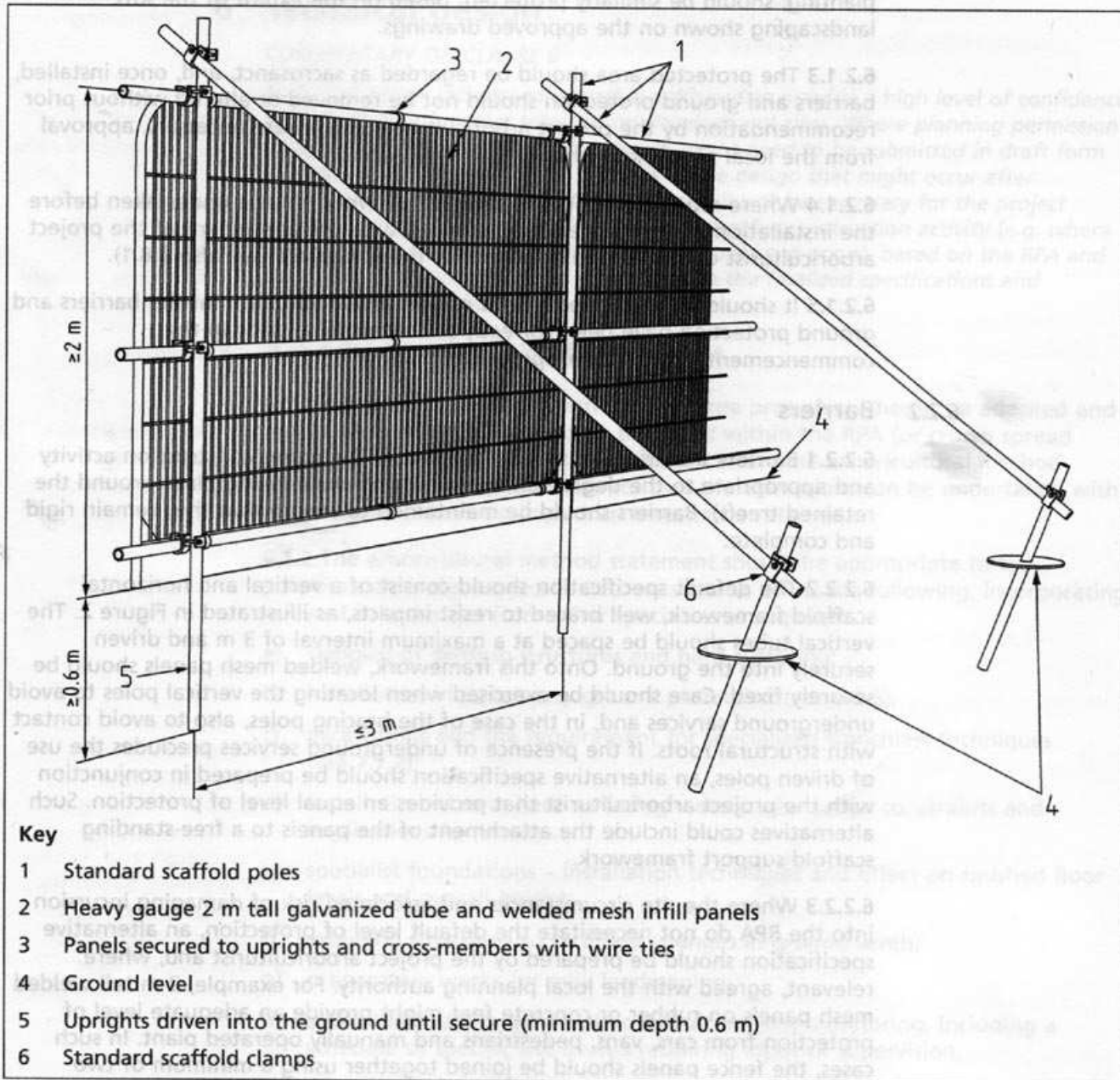


Figure 2 Default specification for protective barrier



BS5837:2012 Tree Survey Form

1 General details

Date of survey	11th Jan 2014	Survey conducted by Allan David Bailey BSc (hons), M.Arbor.A, Cert. Arb. (RFS)
Map/Location	Lane End, Penley	
Owner		
Tree number	520	

2 Tree details

Species	sycamore					
Height /m	11.5					
Single trunk Circm	0	millimetres	If RPA is maxed, give acutual girth:			
2-5 stem Circ at 1.5m	0	0	0	0	0	millimetres
>5 stem av. Dia at 1.5m	75	no. Stems	9			
	North	East	South	West		
Spread from trunk /m						
Crown height /m						
Single trunk tree stem diameter	0	millimetres	radius	0	millimetres	
2-5 multi stem combined diameter	0	millimetres	radius	0	millimetres	
>5 stems combined diameter	225	millimetres		113	millimetres	

3 Tree Health

Age class - young, mid-aged, mature, over-mature, veteran	young	(Extra notes if necessary)
Physiological condition - good, fair, poor, dead	good	
Structural condition - colapsing, decay, defects	good	
Estimated remaining contribution - <10, 10-20, 20-40, >40	10 to 20	

4 Tree Quality Assesment

Category U	<10 yrs	serious physiological/ structural defects, low quality trees, tress which will be lost after removal of other U trees
Category A	>40 yrs	Tree making substantial contribution, of high quality and value
Category B	20-40 yrs	Tree making significant contribution, of moderate quality and value
Category C	10-20 yrs	Currently in adequate condition to remain, young trees below 150mm dia. Of low quality and value
Sub-cat. - 1- Mainly arboricultural value -2- Mainly landscape value, -3- Mainly cultural and conservation value		

Category and sub-cat.	C2
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5) RPA Calculations

RPA radius/m	2.70	RPA radius minus tree radius/m	2.59	(for measuring of RPA from tree)
RPA area/m2	23	Irspective of tree, RPA limited to 15 m radius and 707 metres2 or square with approx 26 metre sides		

5 Preliminary work required

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6 Other notes

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BS5837:2012 Tree Survey Form

1 General details

Date of survey	11th Jan 2014	Survey conducted by Allan David Bailey BSc (hons), M.Arbor.A, Cert. Arb. (RFS)
Map/Location	Lane End, Penley	
Owner		
Tree number	521	

2 Tree details

Species	willow				
Height /m	16.5				
Single trunk Circm	0	millimetres	If RPA is maxed, give acutual girth:		
2-5 stem Circ at 1.5m	628	1335	1335	0	0 millimetres
>5 stem av. Dia at 1.5m	0	no. Stems	0		
	North	East	South	West	
Spread from trunk /m	6.75	5.50	6.25	5.75	
Crown height /m	4	4	2	9	
Single trunk tree stem diameter	0	millimetres	radius	0	millimetres
2-5 multi stem combined diameter	633	millimetres	radius	317	millimetres
>5 stems combined diameter	0	millimetres		0	millimetres

3 Tree Health

Age class - young, mid-aged, mature, over-mature, veteran	mature	(Extra notes if necessary)
Physiological condition - good, fair, poor, dead	good	
Structural condition - colapsing, decay, defects	good	
Estimated remaining contribution - <10, 10-20, 20-40, >40	10 to 20	

4 Tree Quality Assesment

Category U	<10 yrs	serious physiological/ structural defects, low quality trees, tress which will be lost after removal of other U trees
Category A	>40 yrs	Tree making substantial contribution, of high quality and value
Category B	20-40 yrs	Tree making significant contribution, of moderate quality and value
Category C	10-20 yrs	Currently in adequate condition to remain, young trees below 150mm dia. Of low quality and value
Sub-cat. - 1- Mainly arboricultural value -2- Mainly landscape value, -3- Mainly cultural and conservation value		

Category and sub-cat.	C2
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5) RPA Calculations

RPA radius/m	7.60	RPA radius minus tree radius/m	7.28	(for measuring of RPA from tree)
RPA area/m2	181	Irspective of tree, RPA limited to 15 m radius and 707 metres2 or square with approx 26 metre sides		

5 Preliminary work required

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6 Other notes

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BS5837:2012 Tree Survey Form

1 General details

Date of survey	11th Jan 2014	Survey conducted by Allan David Bailey BSc (hons), M.Arbor.A, Cert. Arb. (RFS)
Map/Location	Lane End, Penley	
Owner		
Tree number	522	

2 Tree details

Species	group of 3 macrocarpa				
Height /m	22				
Single trunk Circm	1257	millimetres	If RPA is maxed, give acutual girth:		
2-5 stem Circ at 1.5m	0	0	0	0	0 millimetres
>5 stem av. Dia at 1.5m	0	no. Stems	0		
	North	East	South	West	
Spread from trunk /m	2.50	3.50	2.00	3.00	
Crown height /m	4	4	4	4	
Single trunk tree stem diameter	400	millimetres	radius	200	millimetres
2-5 multi stem combined diameter	0	millimetres	radius	0	millimetres
>5 stems combined diameter	0	millimetres		0	millimetres

3 Tree Health

Age class - young, mid-aged, mature, over-mature, veteran	early mature	(Extra notes if necessary)
Physiological condition - good, fair, poor, dead	good	
Structural condition - colapsing, decay, defects	good	
Estimated remaining contribution - <10, 10-20, 20-40, >40	10 to 20	

4 Tree Quality Assesment

Category U	<10 yrs	serious physiological/ structural defects, low quality trees, tress which will be lost after removal of other U trees
Category A	>40 yrs	Tree making substantial contribution, of high quality and value
Category B	20-40 yrs	Tree making significant contribution, of moderate quality and value
Category C	10-20 yrs	Currently in adequate condition to remain, young trees below 150mm dia. Of low quality and value
Sub-cat. - 1- Mainly arboricultural value -2- Mainly landscape value, -3- Mainly cultural and conservation value		

Category and sub-cat.	C2
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5) RPA Calculations

RPA radius/m	4.80	RPA radius minus tree radius/m	4.60	(for measuring of RPA from tree)
RPA area/m2	72	Irspective of tree, RPA limited to 15 m radius and 707 metres2 or square with approx 26 metre sides		

5 Preliminary work required

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6 Other notes

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BS5837:2012 Tree Survey Form

1 General details

Date of survey	11th Jan 2014	Survey conducted by Allan David Bailey BSc (hons), M.Arbor.A, Cert. Arb. (RFS)
Map/Location	Lane End, Penley	
Owner		
Tree number	523	

2 Tree details

Species	ash				
Height /m	14				
Single trunk Circm	1100	millimetres	If RPA is maxed, give acutual girth:		
2-5 stem Circ at 1.5m	0	0	0	0	0 millimetres
>5 stem av. Dia at 1.5m	0	no. Stems	0		
	North	East	South	West	
Spread from trunk /m	4.50	5.50	5.00	4.00	
Crown height /m	4	4	4	4	
Single trunk tree stem diameter	350	millimetres	radius	175	millimetres
2-5 multi stem combined diameter	0	millimetres	radius	0	millimetres
>5 stems combined diameter	0	millimetres		0	millimetres

3 Tree Health

Age class - young, mid-aged, mature, over-mature, veteran	mid-aged	(Extra notes if necessary)
Physiological condition - good, fair, poor, dead	good	
Structural condition - colapsing, decay, defects	good	
Estimated remaining contribution - <10, 10-20, 20-40, >40	20 to 40	

4 Tree Quality Assesment

Category U	<10 yrs	serious physiological/ structural defects, low quality trees, tress which will be lost after removal of other U trees
Category A	>40 yrs	Tree making substantial contribution, of high quality and value
Category B	20-40 yrs	Tree making significant contribution, of moderate quality and value
Category C	10-20 yrs	Currently in adequate condition to remain, young trees below 150mm dia. Of low quality and value
Sub-cat. - 1- Mainly arboricultural value -2- Mainly landscape value, -3- Mainly cultural and conservation value		

Category and sub-cat.	C2
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5) RPA Calculations

RPA radius/m	4.20	RPA radius minus tree radius/m	4.03	(for measuring of RPA from tree)
RPA area/m2	55	Irspective of tree, RPA limited to 15 m radius and 707 metres2 or square with approx 26 metre sides		

5 Preliminary work required

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6 Other notes

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BS5837:2012 Tree Survey Form

1 General details

Date of survey	11th Jan 2014	Survey conducted by Allan David Bailey BSc (hons), M.Arbor.A, Cert. Arb. (RFS)
Map/Location	Lane End, Penley	
Owner		
Tree number	524	

2 Tree details

Species	willow				
Height /m	14				
Single trunk Circm	1414	millimetres	If RPA is maxed, give acutual girth:		
2-5 stem Circ at 1.5m	0	0	0	0	0 millimetres
>5 stem av. Dia at 1.5m	0	no. Stems	0		
	North	East	South	West	
Spread from trunk /m	6.50	6.25	2.00	6.50	
Crown height /m	4	4	4	4	
Single trunk tree stem diameter	450	millimetres	radius	225	millimetres
2-5 multi stem combined diameter	0	millimetres	radius	0	millimetres
>5 stems combined diameter	0	millimetres		0	millimetres

3 Tree Health

Age class - young, mid-aged, mature, over-mature, veteran	mature	(Extra notes if necessary)
Physiological condition - good, fair, poor, dead	fair	large co-dominant stem recently removed.
Structural condition - colapsing, decay, defects	defects	decay and instability now threaten tree
Estimated remaining contribution - <10, 10-20, 20-40, >40	<10	

4 Tree Quality Assesment

Category U	<10 yrs	serious physiological/ structural defects, low quality trees, tress which will be lost after removal of other U trees
Category A	>40 yrs	Tree making substantial contribution, of high quality and value
Category B	20-40 yrs	Tree making significant contribution, of moderate quality and value
Category C	10-20 yrs	Currently in adequate condition to remain, young trees below 150mm dia. Of low quality and value
Sub-cat. - 1- Mainly arboricultural value -2- Mainly landscape value, -3- Mainly cultural and conservation value		

Category and sub-cat.	U
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5) RPA Calculations

RPA radius/m	5.40	RPA radius minus tree radius/m	5.18	(for measuring of RPA from tree)
RPA area/m2	92	Irspective of tree, RPA limited to 15 m radius and 707 metres2 or square with approx 26 metre sides		

5 Preliminary work required

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6 Other notes

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BS5837:2012 Tree Survey Form

1 General details

Date of survey	11th Jan 2014	Survey conducted by Allan David Bailey BSc (hons), M.Arbor.A, Cert. Arb. (RFS)
Map/Location	Lane End, Penley	
Owner		
Tree number	525	

2 Tree details

Species	willow				
Height /m	13.5				
Single trunk Circm	1492	millimetres	If RPA is maxed, give acutual girth:		
2-5 stem Circ at 1.5m	0	0	0	0	0 millimetres
>5 stem av. Dia at 1.5m	0	no. Stems	0		
	North	East	South	West	
Spread from trunk /m	4.25	5.75	5.75	7.75	
Crown height /m	1.5	1	0.5	4	
Single trunk tree stem diameter	475	millimetres	radius	237	millimetres
2-5 multi stem combined diameter	0	millimetres	radius	0	millimetres
>5 stems combined diameter	0	millimetres		0	millimetres

3 Tree Health

Age class - young, mid-aged, mature, over-mature, veteran	mature	(Extra notes if necessary)
Physiological condition - good, fair, poor, dead	good	
Structural condition - colapsing, decay, defects	good	
Estimated remaining contribution - <10, 10-20, 20-40, >40	20 to 40	

4 Tree Quality Assesment

Category U	<10 yrs	serious physiological/ structural defects, low quality trees, tress which will be lost after removal of other U trees
Category A	>40 yrs	Tree making substantial contribution, of high quality and value
Category B	20-40 yrs	Tree making significant contribution, of moderate quality and value
Category C	10-20 yrs	Currently in adequate condition to remain, young trees below 150mm dia. Of low quality and value
Sub-cat. - 1- Mainly arboricultural value -2- Mainly landscape value, -3- Mainly cultural and conservation value		

Category and sub-cat.	C2
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5) RPA Calculations

RPA radius/m	5.70	RPA radius minus tree radius/m	5.46	(for measuring of RPA from tree)
RPA area/m2	102	Irspective of tree, RPA limited to 15 m radius and 707 metres2 or square with approx 26 metre sides		

5 Preliminary work required

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6 Other notes

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BS5837:2012 Tree Survey Form

1 General details

Date of survey	11th Jan 2014	Survey conducted by Allan David Bailey BSc (hons), M.Arbor.A, Cert. Arb. (RFS)
Map/Location	Lane End, Penley	
Owner		
Tree number	526	

2 Tree details

Species	ash					
Height /m	14.5					
Single trunk Circm	1100	millimetres	If RPA is maxed, give acutual girth:			
2-5 stem Circ at 1.5m	0	0	0	0	0	millimetres
>5 stem av. Dia at 1.5m	0	no. Stems	0			
	North	East	South	West		
Spread from trunk /m	5.00	4.00	4.50	5.00		
Crown height /m	4	1	4	4		
Single trunk tree stem diameter	350	millimetres	radius	175	millimetres	
2-5 multi stem combined diameter	0	millimetres	radius	0	millimetres	
>5 stems combined diameter	0	millimetres		0	millimetres	

3 Tree Health

Age class - young, mid-aged, mature, over-mature, veteran	mature	(Extra notes if necessary)
Physiological condition - good, fair, poor, dead	good	
Structural condition - colapsing, decay, defects	good	
Estimated remaining contribution - <10, 10-20, 20-40, >40	20 to 40	

4 Tree Quality Assesment

Category U	<10 yrs	serious physiological/ structural defects, low quality trees, tress which will be lost after removal of other U trees
Category A	>40 yrs	Tree making substantial contribution, of high quality and value
Category B	20-40 yrs	Tree making significant contribution, of moderate quality and value
Category C	10-20 yrs	Currently in adequate condition to remain, young trees below 150mm dia. Of low quality and value
Sub-cat. - 1- Mainly arboricultural value -2- Mainly landscape value, -3- Mainly cultural and conservation value		

Category and sub-cat.	C2
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5) RPA Calculations

RPA radius/m	4.20	RPA radius minus tree radius/m	4.03	(for measuring of RPA from tree)
RPA area/m2	55	Irespective of tree, RPA limited to 15 m radius and 707 metres2 or square with approx 26 metre sides		

5 Preliminary work required

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6 Other notes

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BS5837:2012 Tree Survey Form

1 General details

Date of survey	11th Jan 2014	Survey conducted by Allan David Bailey BSc (hons), M.Arbor.A, Cert. Arb. (RFS)
Map/Location	Lane End, Penley	
Owner		
Tree number	527	

2 Tree details

Species	ash					
Height /m	17					
Single trunk Circm	1414	millimetres	If RPA is maxed, give acutual girth:			
2-5 stem Circ at 1.5m	0	0	0	0	0	millimetres
>5 stem av. Dia at 1.5m	0	no. Stems	0			
	North	East	South	West		
Spread from trunk /m	5.75	4.00	6.00	6.00		
Crown height /m	4	1	4	4		
Single trunk tree stem diameter	450	millimetres	radius	225	millimetres	
2-5 multi stem combined diameter	0	millimetres	radius	0	millimetres	
>5 stems combined diameter	0	millimetres		0	millimetres	

3 Tree Health

Age class - young, mid-aged, mature, over-mature, veteran	mature	(Extra notes if necessary)
Physiological condition - good, fair, poor, dead	good	
Structural condition - colapsing, decay, defects	good	
Estimated remaining contribution - <10, 10-20, 20-40, >40	10 to 20	

4 Tree Quality Assesment

Category U	<10 yrs	serious physiological/ structural defects, low quality trees, tress which will be lost after removal of other U trees
Category A	>40 yrs	Tree making substantial contribution, of high quality and value
Category B	20-40 yrs	Tree making significant contribution, of moderate quality and value
Category C	10-20 yrs	Currently in adequate condition to remain, young trees below 150mm dia. Of low quality and value
Sub-cat. - 1- Mainly arboricultural value -2- Mainly landscape value, -3- Mainly cultural and conservation value		

Category and sub-cat.	C2
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5) RPA Calculations

RPA radius/m	5.40	RPA radius minus tree radius/m	5.18	(for measuring of RPA from tree)
RPA area/m2	92	Irspective of tree, RPA limited to 15 m radius and 707 metres2 or square with approx 26 metre sides		

5 Preliminary work required

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6 Other notes

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BS5837:2012 Tree Survey Form

1 General details

Date of survey	11th Jan 2014	Survey conducted by Allan David Bailey BSc (hons), M.Arbor.A, Cert. Arb. (RFS)
Map/Location	Lane End, Penley	
Owner		
Tree number	528	

2 Tree details

Species	ash				
Height /m	15				
Single trunk Circm	942	millimetres	If RPA is maxed, give acutual girth:		
2-5 stem Circ at 1.5m	0	0	0	0	0 millimetres
>5 stem av. Dia at 1.5m	0	no. Stems	0		
	North	East	South	West	
Spread from trunk /m	5.00	3.25	2.50	3.75	
Crown height /m	7	6	7	8	
Single trunk tree stem diameter	300	millimetres	radius	150	millimetres
2-5 multi stem combined diameter	0	millimetres	radius	0	millimetres
>5 stems combined diameter	0	millimetres		0	millimetres

3 Tree Health

Age class - young, mid-aged, mature, over-mature, veteran	mid-aged	(Extra notes if necessary)
Physiological condition - good, fair, poor, dead	good	
Structural condition - colapsing, decay, defects	defects	poor rooting area
Estimated remaining contribution - <10, 10-20, 20-40, >40	10 to 20	

4 Tree Quality Assesment

Category U	<10 yrs	serious physiological/ structural defects, low quality trees, tress which will be lost after removal of other U trees
Category A	>40 yrs	Tree making substantial contribution, of high quality and value
Category B	20-40 yrs	Tree making significant contribution, of moderate quality and value
Category C	10-20 yrs	Currently in adequate condition to remain, young trees below 150mm dia. Of low quality and value
Sub-cat. - 1- Mainly arboricultural value -2- Mainly landscape value, -3- Mainly cultural and conservation value		

Category and sub-cat.	U
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5) RPA Calculations

RPA radius/m	3.60	RPA radius minus tree radius/m	3.45	(for measuring of RPA from tree)
RPA area/m2	41	Irspective of tree, RPA limited to 15 m radius and 707 metres2 or square with approx 26 metre sides		

5 Preliminary work required

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6 Other notes

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