

# SJ Stephens Associates

ARBORICULTURAL, LANDSCAPE & MANAGEMENT CONSULTANTS

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# **Tree Survey**

At:-

Firecrest Estate Firecrest Drive London NW3 7NF

On behalf of:-

Firecrest Management Company Ltd c/o Faraday Property Management 3<sup>rd</sup> Floor West High Holborn House 52-54 High Holborn London WC1V 6RL

Prepared by:

Simon Stephens MA Oxon, Dip Arb(RFS), MArborA, C Env, MICFor. Email: <u>simon@sjstephens.co.uk</u>

Survey Date:	22 <sup>nd</sup>	July	2014
Report Date:	28 <sup>th</sup>	July	2014
<b>Project Number:</b>			357

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## 1 BACKGROUND

- **1.1** This Tree Survey is intended to take account of the responsibility of the owner for duty of care under the Occupiers Liability Acts (1957 and 1984) for the reasonable safety of people and property. This duty of care extends to those who may come onto the property and for adjoining property that might be affected as a consequence of the structural failure of trees.
- **1.2** The tree survey and this report have been prepared by Simon Stephens MA Oxon, Dip Arb (RFS), MArborA, MICFor, CEnv a Registered Consultant with the Arboricultural Association, with over 20 years relevant experience.
- **1.3** Trees were surveyed in February 2012 and a tree survey report, dated 07-03-2012, produced. Trees were re-surveyed on 22<sup>nd</sup> July 2014 and results are now provided.

## 2 SURVEY DETAILS AND SCOPE

- 2.1 Tree inspection took place from ground level with the use of binoculars, sounding hammer and metal probe using the Visual Tree Assessment method (Mattheck & Breloer 1994). The presence and condition of bark and stem wounds, cavities, decay, fungal fruiting bodies and any structural defects that could increase the risk of structural failure were noted.
- **2.2** No information was supplied relating to any surveys prior to that undertaken by SJ Stephens Associates in 2012, or to any history of root disturbance or severance or to changes in local ground conditions.

- **2.3** The following information was recorded for each tree, or group of trees:
  - **Number:** individual trees numbers which cross reference with locations shown on the plan. For individual trees the number is suffixed with a "T", for groups it is suffixed with a "G".
  - Species: common name, with latin name added for more unusual species.
  - **Tree height**: approximate height in metres.
  - **Stem diameter**: approximate diameter in millimetres, taken at 1.5m above ground. Where there are a number of stems, the diameter has been assessed just above the root flare.
  - Crown spread: approximate spread in metres of the canopy.
  - Age class: Young, Middle aged, Mature, Over mature.
  - **Physiological condition**: Good, Fair, Poor, Dead.
  - **Tree condition**: features that affect the safe useful life expectancy and amenity of the tree, including the presence of decay or any physical defect as well as notes regarding any particular landscape or conservation value.
  - **Recommendations**: recommendations to ensure the health and safety of the tree, and to fulfill the objectives of the report.
  - Estimated Remaining Contribution: <10 years, 10-20 years, 20-40 years, >40 years.
  - **Category grading**: tree classification taken from BS 5837:2012, Trees in Relation to Construction (see appendix C for details), as follows:
    - Category U: trees with less than 10 years life expectancy, normally recommended for removal (Red)
    - Category A: high quality trees, able to make a substantial contribution for at least 40 years. (Green)
    - Category B: moderate quality trees, able to make a significant contribution for at least 20 years. (Blue)
    - Category C: low quality, in adequate condition to remain for at least 10 years, or young trees <150mm stem diameter.(Grey/Uncoloured)
  - **Gang Hours:** estimated completion time for a 2-man tree surgery gang
  - **Priority:** Low, Medium or High

## **3 SURVEY LIMITATIONS**

- **3.1** No internal decay devices, or other invasive tools to assess tree condition, were used.
- **3.2** No soil excavation or root inspection was carried out.
- **3.3** This survey has not considered the effect that trees or vegetation may have on the structural integrity of future building through subsidence or heave.
- **3.4** This report only considers conditions at the time of inspection.

# 4 SURVEY FINDINGS

- **4.1** The Tree Schedule in Appendix A provides details of condition and recommendations for all major trees. Tree work recommendations have been given an urgency rating which is based on an assessment of a combination of:
  - the severity of the defect
  - the size of the part of the tree that is at risk of failing
  - the intensity of site occupancy by people or property
- 4.2 The following Urgency categories have been given:-

A – High Risk - Failure likely/Damage to people/property possible. Works recommended for completion within 6 weeks of the report, to maintain safety for users eg. felling of unsafe trees, removal of major deadwood from trees in more heavily populated areas.

B – Medium Risk – Failure possible but unlikely, or a high risk of failure but low risk of occupancy. Works recommended for completion within 4 months.

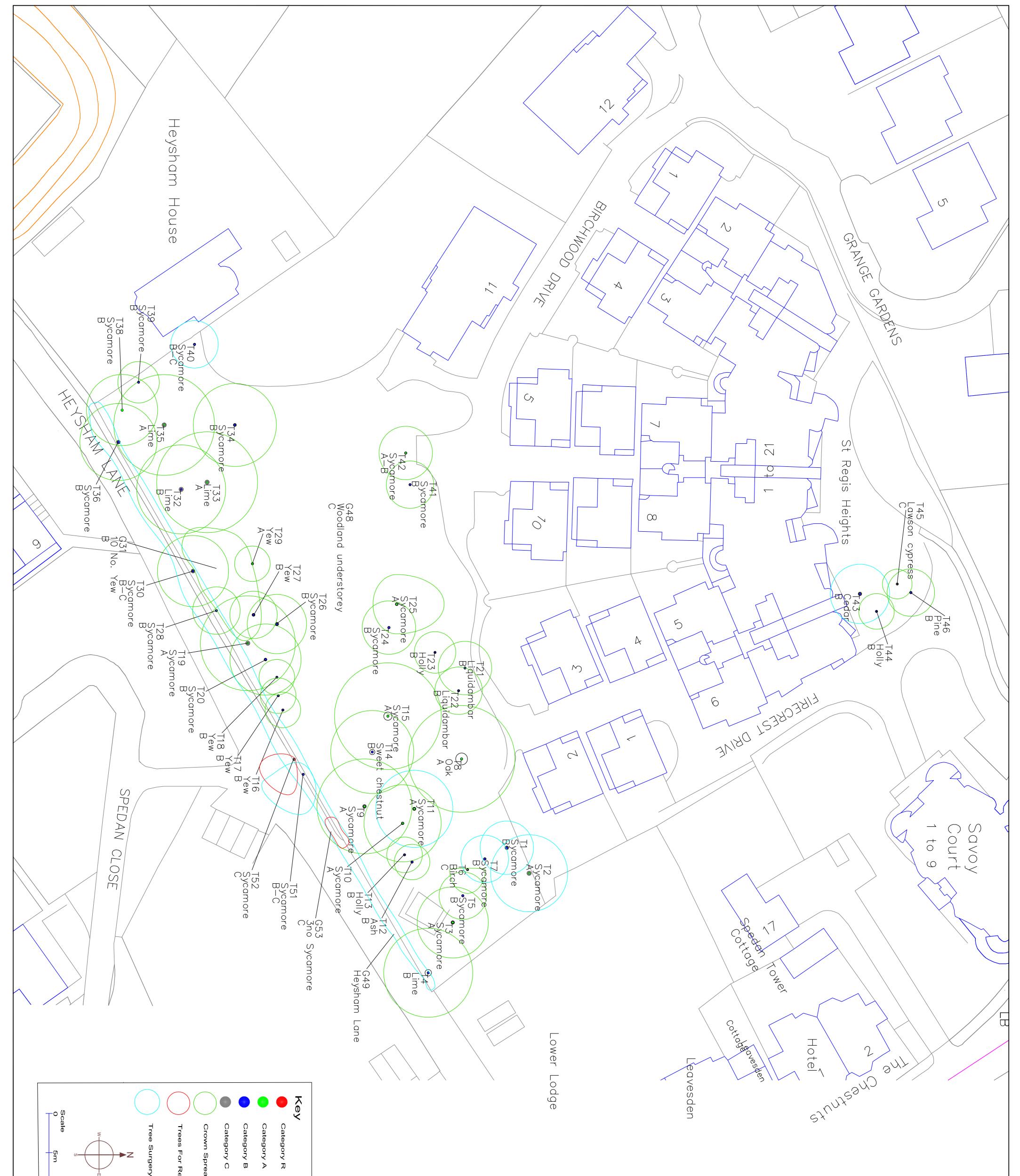
C – Low Risk – works not required for short term tree safety, but works proposed either to reduce the likelihood of risks developing in the future or to increase tree health eg.formative pruning, thinning to favour better trees, removing low grade trees with poor structure which are likely to become a risk in the future.

- **4.3** The tree schedule included as Appendix B, recommends tree works under each urgency category.
- **4.4** All works recommended in the 2012 survey had been carried out to a good standard by the time of the 2014 inspection. All tree work now recommended is classed as either Medium or Low risk.
- **4.5** The woodland area to the south of the estate, contains some fine mature trees. In particular the Oak (T8) is a wonderful, veteran tree. There are also a number of mature Sycamore and Lime, which are of large size and good quality. Three of the trees closest to the development (T1, T2 and T7) are getting too large for their location so close to units 1 and 2, and crown reduction has been recommended.
- **4.6** There have been concerns with intruders scaling the boundary fence from Heysham Lane. Removal of overhanging branches and some insignificant Sycamore (G49 and T51) are recommended for improved security.
- **4.7** A branch has been shed from the Cedar (T43) since the last inspection. However, the tree is showing good vigour and does not need to be removed. Instead, a 20% reduction in crown spread is recommended, which will reduce the risk of further branches being lost.
- **4.8** All tree work should be undertaken to the standards set out in BS 3998:2010 British Standard recommendations for Tree Work.

- **4.9** Camden Council confirmed by phone on 07/03/2012 that the area of woodland to the south of the estate is part of the Hampstead Conservation Area. Six weeks notification must therefore be given to the Local Planning Authority of any intended tree surgery works, to allow them the option of placing a Tree Preservation Order. Trees to the north of St Regis Heights (T43 T47) are not protected.
- **4.10** To ensure the safety of site users and to ensure the estate fully meets its responsibilities under the Occupiers Liability Acts all tree works scheduled in this report should be carried out within the timescales proposed.
- **4.11** A full record of all tree works undertaken should be maintained. An excel spreadsheet is provided with this report. It is suggested that this be regularly updated to provide a record of all tree works undertaken, interim inspections and any further recommendations.
- **4.12** Within 18 months of the date of this report, it is recommended that a full re-inspection of trees should be undertaken by a suitably qualified arboriculturalist.

# 5 CONCLUSION

- 5.1 The trees on the estate are generally in good condition and are providing high amenity value.
- **5.2** Since the majority of the site is within a Conservation Area, Camden Council must be notified before any works are undertaken.
- **5.3** The tree works proposed, together with regular re-inspection, ensures that the risk of tree failure causing damage is reduced to an acceptable level.
- **5.4** In case tree related damage does occur, ongoing records need to be maintained to be able to demonstrate that recommendations in this report have been followed and the occupiers Duty of Care has been fulfilled.



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## Firecrest Estate

#### Appendix B BS 5837: 2012 Tree Schedule

Tree/ Group No.	Species	Height (m)	Stem Diam. At 1.5m (mm)	Bran	nch S	•	. ,	Age Class	Phys. Cond.	Condition	Preliminary Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Gang Hours	Priority Low/Medium/ High	Estimated cost at £80/hr
		+		N	S					Ivy severed. Side branches to west cut back. 22.7.14:	22.7.14: 20% crown					
T1	Sycamore	17	600	4.5	4.5	4.5	4.5	Mature	Fair	Becoming over large so close to adjacent buildings.	reduction.	20-40	В	3	Low	£240
T2	Sycamore	18	700	6.5	6.5	6.5	6.5	Mature	Good	Main stem bifurcates at 6m - good union. Good crown shape. 22.7.14: Becoming over large so close to adjacent buildings.	22.7.14: 20% crown reduction.	>40	A	6	Low	£480
Т3	Sycamore	17	580	6	6	6	6	Mature	Good	Ivy severed. Reasonable form and structure. 22.7.14: No action required.		>40	A			£0
T4	Lime	19	1100	7.5	7.5	7.5	7.5	Mature	Good	Crown overhanging road. Deadwood. 22.7.14: Dead branches over road removed since last inspection. No action required.		20-40	В			£0
T5	Sycamore	16.5	400	4	4	4	4	Middle aged	Fair	Ivy severed. Dead and broken branches - but low risk of causing damage. 22.7.14: No action required.		20-40	В			£0
Т6	Birch	17	300	3	3	4	0	Middle aged	Fair	Drawn up tree leaning to northwest. 22.7.14: Reasonable vigour. Small low dead branch - acceptable hazard. Compst piled against trunk.	Monitor. 22.7.14: Remove compost where against trunk.	10-20	с			£0
Τ7	Sycamore	17	440	4	4	4	4	Middle aged	Fair	Ivy severed. Dead and broken branches - but unlikely to cause damage. 22.7.14: Becoming over large so close to adjacent buildings.	22.7.14: 20% crown reduction.	20-40	В	3	Low	£240
Т8	Oak	17	2000	9	9	9	9	Mature	Good	Fine veteran tree. Occasional branches have broken out and majority have fully callused. Showing reasonable vigour. Occasional dead branches of up to 150mm diameter. 16/10/12: Beefsteak fungus reported. 22.7.14: Major deadwood removed since last inspection. Showing good vigour. Occasional minor deadwood less than 75mm diameter - acceptable risk.		>40	A			£0
Т9	Sycamore	18	600	8	8	8	8	Mature	Good	Main stem bifurcates at 6m - reasonable union. Ivy severed. 22.7.14: No action required.		>40	A			£0
T10	Sycamore	18	450	6.5	6.5	6.5	6.5	Mature	Good	Reasonable form and structure. Occasional dead and broken branches. 22.7.14: No action required.		>40	А			£0
T11	Sycamore	18	540	6.5	6.5	6.5	6.5	Mature	Good	Occasional minor deadwood. 22.7.14: Ivy to mid crown.	22.7.14: Remove section of ivy from base.	>40	A	0.5	Low	£40
T12	Ash	17	400	3	3	3	3	Middle aged	Good	Drawn up tree. Slight lean to north. 22.7.14: No action required.		20-40	В			£0
T13	Holly	14	300	3	3	3	3	Mature	Good	Good quality tree. 22.7.14: No action required.		20-40	В			£0
T14	Sweet chestnut	19	900	7	7	7	7	Mature	Good	Reasonable form and structure. 22.7.14: No action required.		20-40	В			£0
T15	Sycamore	21	1400	9	9	9	9	Mature	Good	Fine wide spreading specimen. 22.7.14: No action required.		>40	A			£0
T16	Yew	12.5	300	3	3	3	3	Middle aged	Good	Reasonable form and structure. 22.7.14: No action required.		>40	В			£0
T17	Yew	12.5	300	3	3	3	3	Middle aged	Good	Slight lean to south. Twin leaders from 6m. 22.7.14: No action required.		>40	В			£0
T18	Yew	12.5	300	3	3	3	3	Middle	Good	Reasonable form and structure. 22.7.14: No action required.		>40	В			£0
T19	Sycamore	21	700	8	8	8	8	Mature	Good	Minor deadwood hanging over road. Good wide spreading mature tree. 22.7.14: Major deadwood removed since last inspection. No further action required.		>40	A			£0
T20	Sycamore	18	480	6	6	6	6	Middle aged	Good	Occasional dead and broken branches. 22.7.14: No action required.		20-40	В			£0
T21	Turkish hazel	15	350	4.5	4.5	4.5	4.5	Middle aged	Good	Good form and structure. 22.7.14: No action required.		20-40	В			£0
T22	Turkish hazel	15	240	4	4	4	4	Middle aged	Good	Good form and structure. 22.7.14: No action required.		20-40	В			£0

## Firecrest Estate

#### Appendix B BS 5837: 2012 Tree Schedule

Tree/ Group No.	Species	Height (m)	Stem Diam. At 1.5m (mm)	Brai		Spread	. ,	Age Class	Phys. Cond.	Condition	Preliminary Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Gang Hours	Priority Low/Medium/ High	Estimated cost at £80/hr
T23	Holly	12.5	150	N 3.5	<b>S</b>	3.5	<b>W</b> 3.5	Mature	Good	Good form and structure. 22.7.14: No action required.		20-40	В			£0
T24	Sycamore	16	400	4.5	1			Middle	Fair	Dense ivy to upper crown. 22.7.14: No action required.		20-40	B			£0
T25	Sycamore	16.5	480	8	4	5	5	Middle aged	Good	Growing at top of steep bank. Good form and structure 22.7.14: No action required.		>40	A			£0
T26	Sycamore	18	580	5	5	5	5	Middle aged	Good	Slight lean to northwest. 22.7.14: No action required.		20-40	В			£0
T27	Yew	14	500	4	4	4	4	Middle aged	Good	Twin stems from base. Reasonable form and structure. 22.7.14: No action required.		20-40	В			£0
T28	Sycamore	17	380	4	4	4	4	Middle aged	Good	Slight lean to south, over road. 22.7.14: Occasional branch stubs, but acceptable risk. No action required.		20-40	В			£0
T29	Yew	10	400	3	3	3	3	Middle aged	Good	Good form and structure. 22.7.14: No action required.		>40	A			£0
Т30	Sycamore	15	620	6	6	6	6	Middle aged	Fair	Dense ivy to upper crown. 22.7.14: Ivy removed since last inspection. No action required.		15-30	B-C			£0
G31	10 No. Yew	9-12	150-190					Middle aged	Good	Approx 10 trees growing at close spacing. 22.7.14: Weaker trees thinned out since last inspection.		>40	В			£0
T32	Lime	19	700	7.5	7.5	7.5	7.5	Mature	Good	Main stem lean to south, but straightens. 22.7.14: No action required.		20-40	В			£0
Т33	Lime	20	700	8.5	8.5	8.5	8.5	Mature	Good	Wide spreading mature tree. Deadwood, but unlikely to cause damage. 22.7.14: No action required.		>40	A			£0
T34	Sycamore	18	500	7	7	7	7	Middle aged	Good	Slight lean to south, but reasonable form and structure. 22.7.14: No action required.		>40	В			£0
T35	Lime	20	700	8.5	8.5	8.5	8.5	Mature	Good	Deadwood of up to 100mm diameter - but unlikely to cause damage. Well balanced crown. 22.7.14: No action required.		>40	A			£0
T36	Sycamore	17	600	6.5	6.5	6.5	6.5	Middle aged	Fair	Dense ivy to upper crown. 22.7.14: No action required.		20-40	В			£0
Т37	Sycamore	17	600	6	6	6	6	Middle aged	Poor	Base completely hollow. Fruiting bodies of <i>Kretzschmaria deusta</i> and <i>Ganoderma</i> prevalent. 22.7.14: Removed since last inspection.		<10	U			£0
T38	Sycamore	17	400	6	6	6	6	Middle aged	Good	Leaning to south. Dense ivy to mid crown. 22.7.14: Ivy removed since last inspection.		20-40	В			£0
Т39	Sycamore	16	360	3.5	3.5	3.5	3.5	Middle aged	Fair	Slight lean to west. Ivy to mid crown. 22.7.14: Ivy removed since last inspection.		20-40	В			£0
T40	Sycamore	16.5	400	4	4	4	4	Middle aged	Fair	Partially suppressed. 22.7.14: Foliage growing against building in adjacent property.	22.7.14: Reduce crown by 20%, pruning as necessary to provide 2m clearance to adjacent property.	15-30	B-C	4	Medium	£320
T41	Sycamore	14.5	360	4	4	4	4	Middle aged	Fair	Main stem bifurcates at 4m. Broken branch hanging. 22.7.14: No action required.	······	20-40	В			£0
T42	Sycamore	14.5	400	4.5	4.5	4.5	4.5	Middle aged	Good	Good form and structure. 22.7.14: No action required.		>40	A-B			£0
T43	Cedar	21	600	5	5	5	5	Mature	Good	Growing in small brick planter - cracked by, with soil piled around stem. Good form and structure. 22.7.14: Planter removed and path relandscaped since last inspection. Brick paviours laid directly against trunk - will become embedded as tree grows. Branch - circa 150mm diameter - has broken out since last inspection.	22.7.14: Adjust paving to provide at least 50mm clearance around trunk, to allow for growth. Reduce crown spread by 20%, to reduce risk of further breakout.	20-40	В	3	Medium	£240
T44	Holly	10	200	3	3	3	3	Middle aged	Good	Vigorous tree. 22.7.14: No action required.		20-40	В			£0

## Firecrest Estate

## Appendix B BS 5837: 2012 Tree Schedule

Tree/ Group No.	Species	Height (m)	Stem Diam. At 1.5m (mm)	Brai	nch S	prea	d (m)	Age Class	Phys. Cond.	Condition	Preliminary Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Gang Hours	Priority Low/Medium/ High	Estimated cost at £80/hr
				Ν	S	E	W									
T45	Lawson cypress	13	180	2.5	2.5	2.5	2.5	Middle aged	Poor	Low vigour. 22.7.14: Minor deadwood. No action required.		10-20	С			£0
T46	Pine	20	420	4	4	4	4	Middle aged	Good	Slight lean to south, but good form and structure. 22.7.14: Minor deadwood.		15-30	B-C			£0
T47	Pine	15	280	2.7	2.7	2.7	2.7	Middle aged	Fair	Longitudinal wound from ground to 3m to west, with heartwood decaying.	Remove. 22.7.14: removed since last inspection	<10	U			£0
G48	Woodland understorey							Mature	Fair	Areas of dense undergrowth, Laurel. Occasional young saplings and areas of young Yew/Holly where spacing is too close.	Commission woodland management plan to remove dead and dying trees, thin out where overcrowded, clear undergrowth in openings and plant native trees.	20-40	С			£0
G49	Heysham Lane									22.7.14: Trees growing adjacent to fence, with low hanging branches that could assist unauthorised entry.	22.7.14: Remove all branches overhanging the security fence to provide 4m clearance.	15-30	B-C	4	Low	£320
T51	Sycamore	15	300/300	2	6	6	2	Middle aged	Fair	22.7.14: Twin stem from base. Dense ivy to upper crown.	22.7.14: Remove section of ivy from base. Improve security fencing behind tree.	15-30	B-C	0.5	Low	£40
T52	Sycamore	11	180	0	5	5	0	Semi- mature	Fair	22.7.14: Growing close to boundary fence and leaning over Heysham Lane. Assisting anybody wishing to climb fence - security risk.	22.7.14: Remove.	10-20	С	1	Low	£80
G53	3 No. Sycamore	7 - 9	100 - 140	0	0	0	0	Semi- mature	Fair	22.7.14: Three low quality trees growing close to fence - security risk.	22.7.14: Remove.	10-20	С	1	Low	£80
													Total estima	ted cost		£2,080

Category and definition	Criteria (including subcategories where appropriate)	ippropriate)		Identification on plan
Trees unsuitable for retention (see Note)	(see Note)			
Category U Those in such a condition that thev cannot realistically	<ul> <li>Trees that have a serious, irremediable, structural defect, such that thei including those that will become unviable after removal of other categ reason, the loss of companion shelter cannot be mitigated by pruning)</li> </ul>	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)	is expected due to collapse, (e.g. where, for whatever	See Table 2
be retained as living trees in	Trees that are dead or are showing s	Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline	e overall decline	
the context of the current land use for longer than 10 vears	Trees infected with pathogens of significance to the hea quality trees suppressing adjacent trees of better quality	Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality	trees nearby, or very low	
	NOTE Category U trees can have existin see 4.5.7.	NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.	tht be desirable to preserve;	
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention	ention			
<b>Category A</b> 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; or those that are essential components of groups or 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)	See Table 2
<b>Category B</b> <b>Trees of moderate quality</b> 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 growing 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	See Table 2
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below	Unremarkable trees of 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 collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	See Table 2