PricewaterhouseCoopers

Former SR Gent, Dodworth Rd, Barnsley

Tree Condition and Value Report

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1 SUMMARY

WYG Environment was commissioned by PWC to carry out a tree survey at the Former S. R. Gents site, Dodworth Road, Barnsley.

The site was visited January 2009 and the trees assessed in accordance with BSS5837:2005 '*Trees in relation to construction – Recommendations*'.

The site is currently derelict following the demolition of the former factory that stood on the site. The majority of the site comprises hardstanding remnants of the former factory footings.

The survey assessed one fifty-five individual trees and three groups of trees and shrubs.

No trees of high quality and value category (category A) were identified on or immediately adjacent to the site.

Fifteen individually assessed trees were assigned to moderate quality and value category (category B). These include one Norway maple, seven silver birch, two Scots pine, one silver maple, two sweet chestnut, one Italian alder and one weeping willow species trees.

Thirty five individually assessed trees and three groups of trees and shrubs were assigned to low quality and value category (category C). These include ash, false acacia, Italian alder, Scots pine, silver birch, weeping willow, crack willow, goat willow, Lawson cypress, myrobalan plum, rowan, wild cherry, whitebeam and silver birch species trees. Also included in this category were a group of crack willow, a group containing hawthorn and elder, and a group including western red cedar and Lawson cypress species trees.

Five individually assessed trees were assigned to 'R' category. These include include two false acacia, one goat willow, one sycamore and one wild cherry species trees.

Seven additional low quality and value trees were recommended for removal. These were trees that could be retained but prudent arboricultural management involves felling. These include two whitebeam, two silver birch, one false acacia, one Italian alder and one rowan species trees.

Trees on the site represent a constraint that should be taken into account when designing future development. It is recommended that the fifteen moderate quality and value trees are retained within the development with sufficient space to protect their root protection areas and provide sufficient space for future development without causing a nuisance. Where possible, low quality and value trees should be retained, but their presence should not represent a significant constraint on the design.

2 SCOPE AND BRIEF

This arboricultural report was commissioned by PWC. It relates to the site of the former S. R. Gents site, Dodworth Road, Barnsley.

The report was prepared by David Fawcett M. Arbor. A., HND (Arb), FdSc (Arb), Consultant Arboriculturalist at WYG Environment.

The scope of the commission was to prepare a tree survey report for the site in accordance with BS5837:2005 '*Trees in relation to construction – Recommendations*' (BSi, 2005). This would determine the size, condition and value of trees, shrubs and hedgerows on and immediately adjacent to the site and provide recommendations for remedial work and root protective distances to ensure the future health and stability of retained trees.

A topographical site plan prepared by APS Surveying Services (drawing ref. BBH06-15) was provided and has been used as the base plan for the tree constraints plan (Appendix D).

The impact of any future development proposals on the trees is not assessed in this report.

3 SITE DESCRIPTION

3.1 Introduction

The site is located on land to the south of the A628 Dodworth Road, approximately 1.5 km west of Barnsley Town Centre and some 1km distant from Junction 37 of the M1 motorway. Dodworth Road is the primary link road between the M1 motorway and Barnsley town centre.

The site is bounded by the A628 Dodworth Road to the north with recreational parkland beyond, residential developments to the east and west, and recreational playing fields to the south. To the immediate south-west of the site lies a 1970s housing development, which is accessed via Linton Close on Broadway Road.

3.2 Topography

The topography of the site is varied. The application site slopes away from the existing site entrance on Dodworth Road towards the middle of the site, before rising up towards the southern boundary edge. The south-eastern and north-eastern boundaries of the site are defined by exposed quarry faces. Levels rise from east to west of the site by approximately three metres. The nursing home and the residential development on the eastern boundary of the site are approximately four metres higher than the application site. Residential development that abuts onto the western boundary of the site is approximately 2 metres higher than the site.

3.3 Vegetation

The site contains a reasonable number of trees and shrubs that are sited either around the periphery or close to the main entrance into the site from Dodworth Road. Many of the trees encountered are growing to the west of the access road into the site.

The surrounding area has variable tree cover with mature trees growing on adjacent parkland to the north and occasional individual specimens within neighbouring residential property gardens.

3.4 Site access and visibility

The main point of access and egress to and from the site is via an entrance which fronts directly onto the A628 Dodworth Road on the north-western boundary. There is an operational petrol filling station situated on the front of the site. The filling station has direct access and egress onto the A628 Dodworth Road. Access and egress from the filling station operates independently to the main site entrance.

The site is also bounded by residential properties and public recreational land. The periphery trees in particular are highly visible from a public vantage point.

The site contains a mixture of established mature trees and self-seeded re-generation. The trees growing close to the site periphery are most visible from the vantage of the adjacent residential properties and the A628 Dodworth Road.

4 STATUTORY TREE PROTECTION

Tree Preservation Orders (TPOs) and location within Conservation Areas place various restrictions on the felling, pruning or damaging of trees, subject to various exemptions (DETR, 2000).

The local planning authority (LPA) is Barnsley Metropolitan Borough Council. Consultation was undertaken to establish the status of the trees. The results show that no TPO's or Conservation Areas are in force at this site.

Tree felling on non-residential land is also controlled by the need to obtain a Felling License from the Forestry Commission before felling more than $2m^2$ of timber per three month period, subject to various exemptions and variations (FC, 2005).

There is an exemption for the above statutory controls for tree felling and pruning for works strictly necessary to implement development that has received full planning permission. It is recommended that no tree felling is carried out until planning permission has been gained and that trees to be felled are shown on a tree protection plan (see 7.3), which is submitted to the LPA.

5 METHODOLOGY

The site was visited in January 2009 to carry out an assessment in accordance with BS5837:2005.

A topographical survey was provided by APS Surveying Services (drawing ref. BBH06-15) identifying the position of the trees and this forms the basis of the tree constraints plan (Appendix D).

The following information was collected for each tree: species, age class (see Table 1), height, stem diameter at 1.5m above ground level, crown spread in the four cardinal directions and height of the crown above the ground (excluding basal sprouts and epicormic branches).

Table 1. Age class categories

Age class	*Proportion of life expectancy*
Young	< 1/3
Middle-age	1/3 – 1/2
Early mature	1/2 - 2/3
Mature	>2/3
Over-mature	>2/3 and crown retracting as a result of age

Where multi-stemmed trees and shrubs were identified, the stem diameter was measured close to ground level, immediately above the root buttress flare. Where clusters of stems joining below ground level prevented the measure of a single basal stem diameter, a visual estimate was made of the effective basal stem diameter.

An assessment was made of the trees' physiological and structural condition, noting any disorders or biomechanical features that present an obvious hazard to present or future users of the site or affect the trees' life expectancy. Trees were assessed visually from ground level. No climbed inspection, removal of ivy or detailed investigation of decay was made.

Tree condition can change significantly over a relatively short period of time, and therefore the results and recommendations of this survey can only be held to be valid for a period of 12 months following the survey date.

Preliminary management works are proposed in order to either remove/reduce hazards or promote good future growth of the tree. These recommendations do not take account of any development proposals at this stage. All works carried out should comply with BS3998:1989 *British Standard Recommendations for Tree Work.*

The trees' overall quality and value for retention was assessed in accordance with BS5837:2005 Table 1 (Appendix B). This was dependent on the trees' physiological and structural condition, safe useful life expectancy and arboricultural, landscape, cultural, ecological value and amenity value (as a function of size, prominence, attractiveness and screening).

The root protection area (RPA) radius and area for each tree was also calculated in accordance with BS5837:2005. The RPA is an area of ground that provides sufficient soil rooting volume to ensure the survival of the tree.

6 SURVEY RESULTS

The survey results are shown in the survey schedule (Appendix A) and partially summarised on the tree constraints plan (Appendix D).

The survey assessed one fifty-five individual trees and three groups of trees and shrubs.

No trees of high quality and value category (category A) were identified on or immediately adjacent to the site. Trees assigned to this category are attractive trees with high visibility and no significant defects, which are able to make a substantial contribution for a minimum of 40 years.

Fifteen individually assessed trees were assigned to moderate quality and value category (category B). These include one Norway maple (tree no. 1), seven silver birch (tree no's. 2, 9, 17, 18, 25, 28, 32), two Scots pine (tree no's. 11, 27), one silver maple (tree no. 24), two sweet chestnut (tree no's. 30, 35), one Italian alder (tree no. 34) and one weeping willow (tree no. 37). Trees assigned to this category are healthy attractive trees with no significant defects that are in a condition as to be able to make a significant contribution for a minimum of 20 years. These trees are either growing along the periphery of the site and offer high public amenity or are superior quality trees within the wider group of trees encountered.

Thirty five individually assessed trees and three groups of trees and shrubs were assigned to low quality and value category (category C). These include ash, false acacia, Italian alder, Scots pine, silver birch, weeping willow, crack willow, goat willow, Lawson cypress, myrobalan plum, rowan, wild cherry, whitebeam and silver birch species trees. Also included in this category were a group of crack willow, a group containing hawthorn and elder, and a group including western red cedar and Lawson cypress species trees. Trees assigned to this category include many self seeded trees of limited life span, small and young trees and trees of poor form and limited amenity value.

Five individually assessed trees were assigned to 'R' category. These include include:

- sycamore (tree no. 16) - ingrown with a chain link fence and has a short safe useful life expectancy
- false acacia (tree no. 20) - dead
- wild cherry (tree no. 42) – target canker and reduced safe useful life expectancy
- false acacia (tree no. 46) – splitting fork
- goat willow (tree no. 54) – shoot blight and has a short safe useful life expectancy

Seven additional low quality and value trees were recommended for removal. These were trees that could be retained but prudent arboricultural management involves felling. These include two whitebeam (tree no's. 21, 23), two silver birch (tree no's. 10, 29), one false acacia (tree no. 7), one Italian alder (tree no. 8) and one rowan (tree no. 38). The reason for the felling of these trees is given in the tree survey schedule (Appendix A). Overall twelve individual trees are recommended for removal.

7 RECOMMENDATIONS

7.1 Tree quality and value categories

Trees on the site represent a constraint that should be taken into account when designing future development. It is recommended that the fifteen moderate quality and value trees are retained within the development with sufficient space to protect their root protection areas and provide sufficient space for future development without causing a nuisance. Where possible, low quality and value trees should be retained, but their presence should not represent a significant constraint on the design.

7.2 Sustainable tree retention

In order to allow for the long-term sustainable retention of trees, two requirements need to be met. The first is that there is no adverse physical impact on the trees. This can be met by ensuring that no adverse construction takes place within the RPA given in the survey schedule and shown on the tree constraints plan.

In addition to reducing the physical impact on the tree, it is also important to allow the space for trees to grow and develop without causing significant nuisances such as severe loss of light to adjacent properties that will lead to pressure for their future felling or severe pruning. Provisional maximum heights are given in Appendix C and it is recommended that this information is taken account of during the design process.

7.3 Construction phase tree protection

It is recommended that all retained trees on or immediately adjacent to the site should be protected by protective fencing during the site clearance and construction phases. This construction exclusion zone should protect the RPA and ensure that trees to be retained and their essential rooting zone is not damaged during the works.

All potentially damaging operations should be excluded from within the construction exclusion zone, including: excavation, changes to levels, temporary access, vehicle parking or movements, fires and the storage, disposal or mixing of materials and chemicals.

It is recommended that an arboricultural method statement and tree protection plan is produced once the layout is finalised. The plan will show the location and design of the protective fencing and other tree protection measures, such as ground protection. It should also show trees to be retained and removed. The method statement should include procedures and details for tree protection and a schedule and specification for remedial works to trees that are necessary in order to accommodate the proposed development.

8 REFERENCES

BSi. 1989. *BS 3998:1989 British Standard Recommendations for Tree Work.* British Standards Institute.

BSi. 2005. *BS5837:2005. Trees in Relation to Construction – Recommendations.* British Standards Institute.

DETR. 2000. *Tree Preservation Orders: a Guide to the Law and Good Practise.* Department of the Environment, Transport and the Regions.

FC. 2005. *Tree Felling – Getting Permission.* Forestry Commission.

NHBC. 2006. Chapter 4.2. Building near trees. National House Building Corporation.

APPENDIX A – TREE SURVEY SCHEDULE

Ref. no.	Species	Age class	Stem diam. @1.5m (cm)	Stem no.	Height (m)	Crown clearance height (m)	Crown spread radius (m)				Physiological condn.	Structural condn.	Comments	Preliminary work recommendations	Remaining contribution (yrs)	Quality and value grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W								
1	Norway maple	EM	280	1	5.5	2	3	3	3	1.5	G	G	• Suppressed crown due to competition from neighbouring tree to west. • Minor barkwounds.	• No action	20-40	B1	3.4	35
2	Silver birch	M	350	1	10	1.7	3.5	3.5	3.5	3	G	G	• Growing on western boundary. • Crown overhangs off-site access footpath to west.	• No action	20-40	B1	4.2	55
3	Lawson cypress	MA	180 basal	2	3.5	0.5	0.5	0.5	0.5	0.5	F	F	• Small tree of little significance.	• No action	10-20	C3	1.8	10
4	Lawson cypress	MA	200 basal	2	3.5	0.5	0.5	0.5	0.5	0.5	F	F	• Small tree of little significance.	• No action	10-20	C3	2.0	13
5	Silver birch	EM	250	1	7	2	2.5	1.5	1	3	G	F	• Stem kink at 1m height. • No significant defects observed.	• No action	10-20	C1	3.0	28
6	False acacia	EM	300	1	7.5	3.5	3	5	4.5	3	F	F	• Windswept from base biased to south-east. • Moderate deadwood - no targets.	• Monitor condition	10-20	C1	3.6	41
7	False acacia	EM	270	1	7.5	1.5	0.5	3	4.5	4	F	F	• Suppressed beneath canopy of tree no. 6. • One-sided crown overhanging off-site footpath to west. • Heavy lean.	• Recommend fell - heavy lean	10-20	C1	3.2	33
8	Italian alder	M	400	1	12.5	1	3.5	5	2	0	G	P	• Stem kink biased to east from 1.7m height due to competition from neighbouring tree. • Forked at 5m forming a multi-stemmed canopy. • Included bark union observed at fork.	• Recommend fell - included bark union	10-20	C1	4.8	72
9	Silver birch	EM	280	1	8	2	3	3.5	3	4	G	F	• Canopy extends over adjacent footpath to west. • No visible significant defects.	• No action	20-40	B1	3.4	35
10	Silver birch	MA	180	1	6.5	2	1.5	1.5	1	2.5	F	F	• Growing in close competition for space and light with superior quality neighbouring tree.	• Recommend fell to benefit neighbouring tree	20-40	C1	2.2	15

Ref. no.	Species	Age class	Stem diam. @1.5m (cm)	Stem no.	Height (m)	Crown clearance height (m)	Crown spread radius (m)				Physiological condn.	Structural condn.	Comments	Preliminary work recommendations	Remaining contribution (yrs)	Quality and value grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W								
11	Scots pine	MA	200	1	6	1.5	2	2	1	1.5	G	G	• Slight lean biased south east from base. • No visible significant defects. • Good potential.	• No action	>40	B1	2.4	18
12	Wild cherry	EM	250	1	6	1.7	3	4	2	3	F	F	• Basal canker. • Forked at 1.5m forming a multi-stemmed canopy. • No visible significant defects.	• No action	10-20	C3	3.0	28
13	Silver birch	M	270	1	8	2	2	4	3	4	G	F	• Leans biased south east from base. • No visible significant defects.	• No action	20-40	C1	3.2	33
14	Wild cherry	EM	240	1	5.5	1.7	1.5	3.5	2.5	3	F	F	• Forked at 1.5m forming a twin stemmed canopy. • No visible significant defects.	• No action	10-20	C3	2.9	26
15	Silver birch	EM	250	1	6.5	2	1.5	2.5	2	2.5	F	F	• Slight lean biased east from base. • No visible significant defects. • Minor deadwood noted - no targets.	• No action	20-40	C1	3.0	28
16	Sycamore	Y	90, 100	2	4.5	1.5	1	1	1	2.5	P	P	• Self-seeded tree ingrown with chain link fence. • Limited safe useful life expectancy. • Crown overhangs footpath beyond western boundary.	• Fell	<10	R	1.3	5
17	Silver birch	EM	330	1	9.5	2	3	3.5	2.5	1.5	G	G	• No visible significant defects.	• No action	>40	B1	4.0	49
18	Silver birch	M	450	1	8	2.5	2	4	3.5	3.5	G	G	• Dense bramble limits inspection. • No visible significant defects.	• Clear bramble and re-inspect	20-40	B1	5.4	92
19	Wild cherry	M	460	1	6.5	1.5	4	4	5	5	G	F	• Forked at 1.5m forming a twin-stemmed canopy. • Large surface root exposed to west of base. • Growing in elevated location approximately 0.5m above existing access road to east. • No major structural problems.	• No action	10-20	C3	5.5	96

Ref. no.	Species	Age class	Stem diam. @1.5m (cm)	Stem no.	Height (m)	Crown clearance height (m)	Crown spread radius (m)				Physiological condn.	Structural condn.	Comments	Preliminary work recommendations	Remaining contribution (yrs)	Quality and value grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W								
20	False acacia	EM	290	1	4.5	1.7	2	1.5	2	2	VP	VP	• Dead tree overhanging off-site footpath to west of base.	• Fell	0	R	3.5	38
21	Whitebeam	EM	110, 130, 120, 160, 130	5	5	0.5	4	2	1.5	2.5	F	P	• Self-seeded tree. • Clump of stems from ground level. • Rubbing stems noted. • This tree is not considered worthy of retention.	• Recommend fell due to condition	10-20	C3	2.9	26
22	Scots pine	Y	130	1	4	2	0.5	0	0.5	1	F	F	• Young self-seeded tree of little significance.	• No action	20-40	C1	1.6	8
23	Whitebeam	M	350	1	4.5	1	4.5	5.5	4	0	F	P	• Leans heavily from base biased east. • Forked at 1m forming a multi-stemmed crown. • Limited safe useful life expectancy.	• Recommend fell due to limited safe useful life expectancy	10-20	C3	4.2	55
24	Silver maple	M	520	1	9	1.5	6	4.5	5.5	4	G	G	• No visible significant defects.	• No action	>40	B1	6.2	122
25	Silver birch	M	370	1	7.5	1.5	4	3	2.5	3.5	G	G	• Minor deadwood - no targets. • Slight lean biased east. • No visible significant defects.	• No action	20-40	B1	4.4	62
26	False acacia	MA	190	1	9	0	2	3	1.5	2.5	F	F	• Minor deadwood - no targets. • Slight lean biased east.	• No action	10-20	C1	2.3	16
27	Scots pine	EM	260	1	9	2	0.5	1	2	3	G	G	• No visible significant defects.	• No action	>40	B1	3.1	31
28	Silver birch	M	260	1	8	2	2	3	3	1.5	G	G	• Slightly one sided due to competition from neighbouring tree.	• No action	20-40	B1	3.1	31
29	Silver birch	MA	140	1	4.5	1.5	1.5	1.5	1.5	1	F	F	• Self-seeded tree of little significance. • Growing in competition for space and light with superior quality neighbouring tree.	• Recommend fell to benefit neighbouring tree	10-20	C3	1.7	9
30	Sweet chestnut	MA	310	1	4.5	1.7	3	3.5	2	1.5	G	G	• Good potential. • No visible significant defects.	• No action	>40	B1	3.7	43

Ref. no.	Species	Age class	Stem diam. @1.5m (cm)	Stem no.	Height (m)	Crown clearance height (m)	Crown spread radius (m)				Physiological condn.	Structural condn.	Comments	Preliminary work recommendations	Remaining contribution (yrs)	Quality and value grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W								
31	False acacia	EM	390	1	6.5	2	2.5	6	4	4	F	F	• *Slight lean biased south east from base.* • Overhangs off-site footpath to west.	• *No action*	10-20	C1	4.7	69
32	Silver birch	EM	280	1	7.5	2	2	2	2	2.5	G	F	• No visible significant defects.	• No action	20-40	B1	3.4	35
33	Silver birch	MA	230	1	4	1.5	1.5	2.5	3	2	F	F	• Forked at 1.5m height. • Squat form.	• No action	10-20	C3	2.8	24
34	Italian alder	M	640	1	8.5	1.7	5	5	5.5	4.5	G	F	• Large and well proportioned tree. • No visible significant defects. • Wide angled fork at 2.5m height.	• No action	20-40	B1	7.7	185
35	Sweet chestnut	EM	440	1	6	1.5	3.5	4	4.5	2	G	F	• Reasonable shape and form. • Broken branch stubs. • Growing adjacent to existing site entrance. • No visible significant defects.	• No action	>40	B1	5.3	88
36	Weeping willow	M	610	1	9	0	2	5	7	7.5	G	F	• Heavy lean biased south from base. • Moderate deadwood - no targets. • Canopy overhangs adjacent petrol station to east.	• Monitor lean	10-20	C1	7.3	168
37	Weeping willow	M	620	1	8	1.7	6.5	6.5	4	6.5	G	G	• Slight lean biased south from 1m stem kink. • Moderate deadwood - no targets. • Highly visible tree from adjacent views.	• No action	20-40	B1	7.4	174
38	Rowan	M	180	1	4.5	1.5	2	2	1.5	1.5	F	P	• Self-seeded tree. • Poor old pruning wound at 1m height resulting in large barkwound. • This tree is not considered worthy of retention.	• Recommend fell due to condition	10-20	C3	2.2	15

Ref. no.	Species	Age class	Stem diam. @1.5m (cm)	Stem no.	Height (m)	Crown clearance height (m)	Crown spread radius (m)				Physio-logical condn.	Struct-ural condn.	Comments	Preliminary work recommendations	Remaining contribution (yrs)	Quality and value grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W								
39	Weeping willow	M	440	1	7	1.5	4.5	3	4.5	4	F	F	• Forked at 1.7m forming a multi-stemmed canopy. • Subsidiary lateral limbs failed in past. • Recent excavations close to base - root severance likely to have occurred. • Large cherry tree failed / removed resting beneath crown.	• Monitor condition	10-20	C1	5.3	88
40	Silver birch	MA	130, 140	2	5.5	2	1.5	1.5	1	1.5	F	F	• Twin stemmed from base. • No visible significant defects.	• No action	10-20	C3	1.9	11
G41	Western red cedar, Lawson cypress	Y	100, 150	2	to 6.5	0+	see plan	see plan	see plan	see plan	F	F	• No visible significant defects.	• No action	10-20	C2	crown spread	crown spread
42	Wild cherry	MA	90, 80, 80	3	5	1	1	2.5	2	2	F	F	• Self seeded tree. • Multi stemmed from base. • Target canker noted.	• Fell	<10	R	1.4	6
43	Whitebeam	M	400 basal	3	5	1	4	4	3	3	F	P	• Leans biased east from base.	• No action	10-20	C3	4.0	50
44	Whitebeam	EM	260	1	5	1	4	3.5	2	2	F	F	• One sided canopy due to competition from neighbouring trees.	• No action	10-20	C3	3.1	31
45	Silver birch	EM	260	1	6	2.5	2.5	2	1	1.5	F	F	• No visible significant defects.	• No action	10-20	C3	3.1	31
46	False acacia	EM	260, 380	2	9	3	3	5	5	3	F	P	• Twin stemmed from base. • Eastern stem leans heavily. • Western stem splitting out from 6.5m fork. • Short safe useful life expectancy.	• Fell	<10	R	4.6	66
47	Silver birch	M	400	1	9	1.7	7.5	3	3	3	F	F	• Minor old pruning wounds. • No visible significant defects.	• No action	20-40	C3	4.8	72
48	Silver birch	MA	230	1	7.5	1.5	3	3	2.5	1.5	F	F	• Reasonable potential. • No visible significant defects.	• No action	10-20	C3	2.8	24
49	Silver birch	Y	90	1	3.5	2	1	0.5	1	0.5	F	F	• Young self seeded tree. • Stem kink at 1.5m.	• No action	10-20	C3	1.1	4

Ref. no.	Species	Age class	Stem diam. @1.5m (cm)	Stem no.	Heig-ht (m)	Crown clear-ance height (m)	Crown spread radius (m)				Physio - logical condn.	Struct-ural condn.	Comments	Preliminary work recommendations	Rem-aining contr-ibut-ion (yrs)	Qual-ity and value grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W								
G50	Hawthorn, elder	EM-M	mixed	multi-stem	to 5.5	0+	see plan	see plan	see plan	see plan	F	F	• Self-seeded trees.	• No action	10-20	C2	crown spread	crown spread
51	Goat willow	EM	300 basal	3	5	0	3	1	2.5	2.5	F	F	• Self seeded tree of little significance.	• No action	10-20	C3	3.0	28
52	Crack willow	EM	350 basal	3	6	0	4.5	4	2.5	4	F	F	• Multi stemmed from 1m fork.	• No action	10-20	C3	3.5	38
G53	Crack willow	MA-EM	mixed	multi-stem	to 7.5	0+	see plan	see plan	see plan	see plan	F	F	• Self-seeded trees.	• No action	10-20	C2	crown spread	crown spread
54	Goat willow	EM	290 basal	4	4.5	0+	2.5	2.5	2.5	2.5	P	F	• Shoot blight observed. • Reduced safe useful life expectancy.	• Fell	<10	R	2.9	26
55	Silver birch	EM	330, 290	2	7.5	1.5	2.5	2	2.5	2.5	F	F	• Twin stemmed from base. • Ivy clad stems limits inspection.	• No action	10-20	C3	4.4	61
56	Myrobalan plum	EM	200 basal	3	4.5	1	1	1.5	1	1	F	F	• Multi stemmed from close to base.	• No action	10-20	C3	2.0	13
57	Silver birch	MA	230	1	7	3.5	1	2	2	1.5	F	F	• Ivy on stem. No visible significant defects.	• No action	10-20	C3	2.8	24
58	Ash	MA	320	1	7.5	2	4	3	2.5	0.5	F	F	• Stem kink at 2m. • No visible significant defects. • Self seeded tree with ivy clad stem.	• No action	20-40	C1	3.8	46

Schedule Key

Age class: Y- young, MA – middle-age, EM – early mature, M – mature, OM – over-mature

Condition: G – good, F – fair, P – poor, VP – very poor

APPENDIX B - TREE QUALITY AND VALUE ASSESSMENT CATEGORIES

Table B1. From BS5837:2005, Table 1 – 'Cascade chart for tree quality assessment'.

TREES FOR REMOVAL				
Category and definition	***Criteria***			***Plan colour***
Category R 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, irreversible, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other R category tree (ie: 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 (eg: Dutch elm disease) or very low quality trees suppressing adjacent trees if better quality • NB: Habitat reinstatement may be appropriate (eg: R category tree used as a bat roost: installation of bat box in nearby tree).			Dark red
TREES TO BE CONSIDERED FOR RETENTION				
Category and definition	***Criteria - Subcategories***			***Plan colour***
	1. Mainly arboricultural values	**2. Mainly landscape values**	**3. Mainly cultural values, including conservation**	
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 (eg: 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 (eg: avenues or other arboricultural features assessed as groups).	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (eg: veteran trees or wood-pasture).	Light green
Category B **Those of moderate quality and value:** 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 (eg: presence of remedial 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 (eg: trees of moderate quality within an avenue that include 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.	Mid blue
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 150mm.	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.	Grey
	NB: Whilst C Category trees will usually not be retained where they impose a significant constraint on development, young trees with a stem diameter of less than 150mm should be considered for relocation.			

APPENDIX C – SPECIES LIST AND POTENTIAL TREE HEIGHT

Table C1. Potential ultimate height for tree and shrub species and cultivars on the survey site, based on Chapter 4.2 Building Near Trees National House Building Corporation.

Species	Common name	Potential height (m)
Acer platanoides	Norway maple	18*
Acer saccharinum	Silver maple	22**
Alnus cordata	Italian alder	18*
Betula pendula	Silver birch	14*
Castanea sativa	Sweet chestnut	24*
Chamaecyparis lawsoniana	Lawson cypress	18*
Crataegus monogyna	Hawthorn	10*
Fraxinus excelsior	Ash	23*
Pinus sylvestris	Scots pine	20*
Prunus avium	Wild cherry	17*
Prunus cerasifera	Myrobalan plum	10*
Robinia pseudoacacia	False acacia	18*
Salix babylonica	Weeping willow	16*
Salix caprea	Goat willow	10*
Salix fragilis	Crack willow	24*
Sambucus nigra	Elder	10*
Sorbus aria	Whitebeam	12*
Sorbus aucuparia	Rowan	11*
Thuja plicata	Western red cedar	20*

* - Typical mature height given by NHBC Chapter 4.2 Building near trees.
** - Typical mature height (not given by NHBC Chapter 4.2 Building near trees).

APPENDIX D – TREE CONSTRAINTS PLAN

(WYG drawing no. A051835-2-6-4104-578-01)

APPENDIX E – REPORT CONDITIONS

WYG Environment Planning Transport Ltd

Former S. R. Gents Site – Tree Survey Report

This report is produced solely for the benefit of PricewaterhouseCoopers and no liability is accepted for any reliance placed on it by any other party unless specifically agreed in writing otherwise.

This report is prepared for the proposed uses stated in the report and should not be used in a different context without reference to WYG. In time improved practices, fresh information or amended legislation may necessitate a re-assessment. Opinions and information provided in this report are on the basis of WYG using due skill and care in the preparation of the report.

This report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times.

This report is limited to those aspects reported on, within the scope and limits agreed with the client under our appointment. It is necessarily restricted and no liability is accepted for any other aspect. It is based on the information sources indicated in the report. Some of the opinions are based on unconfirmed data and information and are presented as the best obtained within the scope for this report.

Reliance has been placed on the documents and information supplied to WYG by others but no independent verification of these has been made and no warranty is given on them. No liability is accepted or warranty given in relation to the performance, reliability, standing etc of any products, services, organisations or companies referred to in this report.

Whilst skill and care have been used, no investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather related conditions.

Although care is taken to select monitoring and survey periods that are typical of the environmental conditions being measured, within the overall reporting programme constraints, measured conditions may not be fully representative of the actual conditions. Any predictive or modelling work, undertaken as part of the commission will be subject to limitations including the representativeness of data used by the model and the assumptions inherent within the approach used. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions.

The potential influence of our assessment and report on other aspects of any development or future planning requires evaluation by other involved parties.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. WYG accept no liability for issues with performance arising from such factors

Feb 2009