

Tree Survey and Arboricultural Constraints

for

103/105 Henderson Street Bridge of Allan

for and on behalf of

Simply UK Ltd

December 2020

ARBORICULTURAL CONSULTANTS

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1 INTRODUCTION

This survey and report relates to trees growing within the curtilage of 103 and 105 Henderson Street, Bridge of Allan. It was commissioned by Simply UK Ltd in connection with proposals for the demolition of the existing buildings and construction of a new care home. The area of survey is illustrated on the accompanying tree survey plan.

The **Tree Survey** records in detail the nature, extent and condition of the existing established tree cover within the proposed development area and provides interpretation and analysis on the findings. It provides a comprehensive and detailed pre-development inventory carried out in line with **British Standard 5837:2012** 'Trees in Relation to Design, Demolition and Construction - Recommendations'.

Arboricultural Constraints are identified in terms of tree retention category and root protection area, consistent with the recommendations contained within BS 5837:2012.

The survey is based on a comprehensive visual inspection carried out from the ground by Donald Rodger on 14 December 2020. The weather conditions at the time were dry, calm and overcast.

A photographic record is provided as Appendix 1.

Author's qualifications: Donald Rodger holds an Honours Degree in Forestry. He is a Chartered Forester, a Chartered Biologist, a Chartered Environmentalist and a Fellow and Registered Consultant of the Arboricultural Association. He has thirty years experience of arboriculture and amenity tree management at a professional level.

Limitations:

- □ The findings and recommendations contained within this report are valid for a period of twelve months from the date of survey (i.e. until 14 December 2021). Trees are living organisms subject to change it is strongly recommended that they are inspected on an annual basis for reasons of safety.
- ☐ The recommendations relate to the site as it exists at present, and to the current level and pattern of usage it currently enjoys. The degree of risk and hazard may alter if the site is developed or significantly changed, and as such will require regular reinspection and re-appraisal.
- ☐ The report relates only to those trees growing within the area of survey as shown on the accompanying plan. Trees outwith the survey area were not inspected.
- □ Whilst every effort has been made to detect defects within the trees inspected, no guarantee can be given as to the absolute safety or otherwise of any individual tree. Extreme climatic conditions can cause damage to even apparently healthy trees.
- ☐ The heavily overgrown nature of the site hampered access and inspection.
- ☐ This report has been prepared for the sole use of Simply UK Ltd and their appointed agents. Any third party referring to this report or relying on the information contained herein does so entirely at their own risk.

2 TREE SURVEY METHODOLOGY

2.1 Individual Trees

The tree survey encompasses all obvious and dominant individual trees within the curtilage of the properties with a trunk diameter measured at 1.5m from ground level of **75mm** and greater. A total of **20 individual trees** were surveyed in detail, providing a comprehensive record of the status and extent of the tree cover within and adjoining the site.

The trees have been tagged with a uniquely numbered aluminium identity disc approximately 2m from ground level. Tag numbers run sequentially from **0232** to **0251**.

Tree locations within the site were plotted as part of a topographical survey, carried out by others. The actual measured canopy spread of each individual tree is indicated on the Tree Survey Plan. This provides an accurate representation of the extent and configuration of the canopy cover as it affects the site.

Information on each numbered tree is provided in the Tree Survey Schedule (Section 5). Consistent with the approach recommended in **British Standard 5837:2012**, this records pertinent details, including:

- Tree number;
- Tree species;
- Trunk diameter;
- Tree height;
- Crown spread;
- Height in metres of crown clearance above adjacent ground level;
- Age;
- Condition category, Good, Fair, Poor or Dead as per BS 5837;

- Comments and observations on the overall form, health and condition of the tree, highlighting any problems or defects;
- Life expectancy;
- Retention category, A, B, C and U, as per BS 5837;
- Recommended arboricultural works;
- Priority for action.

All trees within the survey have been ascribed a **Retention Category**. In line with the recommendations contained within BS 5837:2012, this takes account of the health, condition and future life expectancy of the tree, as well as its amenity and landscape value and suitability for retention within any proposed development. The retention category for each tree is shown in the Tree Survey Schedule and the central discs colour coded on the plan accordingly.

- **A** High category: trees whose retention is most desirable (green on plan).
- **B** Moderate category; trees where retention is desirable (blue on plan).
- **C** Low category; trees which could be retained (grey on plan).
- U Unsuitable for retention; trees which should be removed (red on plan).

2.2 Shrub Group

The extent of a large swathe of overgrown shrub material is plotted on the tree survey plan as **G1**. This contains many shrubs and small, self-seeded trees of similar species, age and character. This accurately shows the extent of canopy spread into the site. It is surveyed as for individual trees.

3 SURVEY RESULTS

3.1 General Site Description

The area of survey comprises 103 and 105 Henderson Street, in Bridge of Allan (see photos 1 to 3). These are large, detached villas which stand on the northern side of the A9. Number 103 is heavily extended and was formerly used as a hotel. Both properties are vacant and in a poor and dilapidated state. The grounds of both properties are in a very overgrown and neglected condition. The grounds of number 105 are covered in a large, dense swathe of overgrown shrub material, making access extremely difficult (see photo 4).

The ground rises steeply to the rear of the properties and is wooded. The boundary is defined by a high stone retaining wall. The site falls within the Bridge of Allan Conservation Area.

A total of 13 individual trees were recorded in the grounds of number 103 (232 to 244) and a further seven in the grounds of number 105 (245 to 251). A single large group of overgrown shrubs (G1) was recorded in number 105.

The area of survey, site features and spatial distribution of the tree over is graphically illustrated on the accompanying Tree Survey Plan.

3.2 Tree Description and Assessment

A full description and assessment of each tree is provided in the survey schedule.

As noted previously, the properties have been vacant for some time and are in a neglected and parlous state. The grounds have not been maintained and are very overgrown, particularly in the case of 105.

The most prominent and visually dominant tree is a single mature Douglas fir (248), which stands on an area of raised ground to the front of 105 (see photos 2 and 3). This is of large proportions and has been topped at some time in the past. This is probably contemporary with the properties.

A further group of established trees (233 to 238) occupy the south west corner of number 103. Comprising two Lawson cypress, two cherry and a single silver birch, these are generally in satisfactory condition and collectively form a prominent group on the road frontage.

The remaining trees within the site consist of relatively poor and small ornamental trees and self-seeded growth which has established in recent years as the properties fell into neglect. G1 within 105 consists of overgrown laurel, rhododendron and holly, with occassional young, self seeded tree. This has run rampant and forms a very dense and impenetrable clump which completely obscures the house. It is of poor quality and has limited future potential.

Some of the trees (e.g. 241 to 243 and 250 and 251) are growing immediately adjacent to the buildings and are in inappropriate and unsustainable locations.

4 ARBORICULTURAL CONSTRAINTS

4.1 Tree Retention Category

A retention category (A, B, C or U), based on the grading system as set out within British Standard 5837:2012, has been ascribed to each tree. This is explained at the tree survey schedule. Categorisation is carried out without reference to any proposed development or site alterations, and is based solely on tree health, condition, safe life expectancy and amenity value. The retention values ascribed to the individual trees are summarised in the table below.

The majority of individual trees have been ascribed a U (unsuitable) retention category. These comprise poor quality self-seeded growth growing unacceptably close to buildings and structures. They are in inappropriate and unsustainable locations and their retention is neither feasible nor desirable. Tree 247, a large conifer, has split and collapsed. The early removal of these trees is recommended, irrespective of the development proposal.

The area of overgrown shrub material (G1) and the small trees associated with it are also unsuitable for retention or of low retention value.

Trees 233 to 237 and tree 248 are assessed as medium (B) retention category. They are in satisfactory health and condition, have a reasonable future life expectancy and posses landscape and amenity value.

4.2 Root Protection Area

Definition of the root protection area (**RPA**) for trees is provided within British Standard 5837:2012. This is a minimum **area** which should be left undisturbed around each tree and is calculated as an area equivalent to a circle with a radius

of 12 times the stem diameter. The RPA may change its shape depending on local site and tree factors, as assessed by an arboriculturalist. The RPA of the individually surveyed trees has been graphically plotted as a **grey circle** on the Tree Survey Plan.

The root protection area is strongly influenced by local site conditions and previous site history. The presence of roadways, walls and drains can restrict root development in certain directions. The root protection area, as conventionally defined by a circle centred on the trunk, must therefore be interpreted with caution and in the light of local site features.

In the case of the adjoining woodland area to the north, the presence of the retaining wall and the marked difference in levels presents a physical barrier to root growth into the subject site.

5 TREE SURVEY SCHEDULE

Explanation of Terms

Tag no.	-	Identification number of tree as shown on plan.
Species	-	Common name of species.
Dia	-	Trunk diameter in cm measured at 1.5m. MS = multi-stemmed.
Hgt	-	Height of tree in metres.
Crown spread	-	Radial crown spread in metres measured to the four cardinal compass points N, E, S and W.
Crown height	-	Height in m of crown clearance above ground.
Age Class	-	Age class category. Young Semi-Mature Early Mature Mature
Cond Cat	-	Condition category (Good, Fair, Poor, or Dead).
Notes	-	General comments on tree health, condition and form, highlighting any defects or areas of concern.
Life Expect	-	Life expectancy, estimated in years.
BS 5837 Cat	-	BS 5837:2012 Retention category (A , B , C or U - see explanation overleaf.
Rec Management	-	Recommended remedial action/arboricultural work.
Priority	-	Priority for action.

BS 5837:2012 Category Grading

 $Categories \ for \ tree \ quality \ assessment, \ based \ on \ guidance \ given \ in \ British \ Standard \ BS \ 5837: 2012 \ `Trees \ in \ Relation \ to \ Design, \ Demolition \ and \ Construction - Recommendations'.$

Trees unsuitable for retention

Category and definition	Criteria – Subcategories
Category U	
Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than	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).
10 years	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, or very low quality trees suppressing adjacent trees of better quality
	NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve.

Trees to be considered for retention

Category and definition	Criteria – Subcategories							
Category A High quality and value with an estimated life expectancy of at least 40 years. Category B	Particularly good example of their species, especially if rare or unusual; or those that are essential components of formal or semi-formal arboricultural feature.	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.					
Moderate quality and value with an estimated life expectancy of at least 20 years.	Trees that might be in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management or 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.					
Category C Low quality and value with an estimated life expectancy of at least 10 years, or young trees with a diameter <150mm.	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 landscape value, and/or trees offering low landscape benefit.	Trees with no material conservation or other cultural value.					

APPENDIX 1

Photographs



Photo 1. 103 Henderson Street.



Photo 2. 105 Henderson Street (house obscured).



Photo 3. 103 and 105 Henderson Street.



Photo 4. 105 Henderson Street (G1).



Photo 5. 103 Henderson Street (rear).



Photo 6. 103 Henderson Street (rear).

BS 5837:2012 Tree Survey 103/105 Henderson Street, Bridge of Allan

Tag no	Species	Dia	Hgt	N	E	S	W	Cr Cl	Age	Cond Cat	Notes	Life expect	BS 5837 Cat	Rec action	Priority
232	Hawthorn	37	3	1	1	2	3	2	Mature	Poor	Small, stunted tree with heavily branched and contorted crown with bias to west. Significant areas of decay on main limbs at 1m. Crown exhibiting symptoms of low vigour and vitality. Poor specimen with limited future potential.	<10	U		
233	Silver birch	37	12	3	4	5	4	2	Early mature	Good	Single trunk. Slightly suppressed on north face by adjacent conifers with crown bias to south. Basal shoots developing. Partially obscuring street light.	20-40	В		
234	Lawson cypress	45	14	3	4	4	4	1	Early mature	Fair	Forms one of a close pair with tree 235. Two well established secondary stems arise at base. Slightly suppressed on north face. Bushy crown to ground level.	20-40	В		
235	Lawson cypress	46	15	3	4	2	2	1	Early mature	Fair	Forms a close pair with tree 234. Slightly suppressed on south face. Single trunk with bushy crown to ground level.	20-40	В		
236	Cherry kanzan	21	6	1	4	4	4	3	Early mature	Poor	Multi stemmed and spreading crown from 1m. Suppressed crown development with bias to south.	10-20	С		
237	Cherry kanzan	29	9	5	7	4	5	2	Early mature	Fair	Multi stemmed and spreading crown from 1m. Pronounced crown bias to east. Suppressed development. Dead central branch.	20-40	В		
238	Lawson cypress	55	13	4	3	3	3	1	Early mature	Fair	Open grown tree with well shaped and bushy crown to ground level. Forks into two codominant stems at 2m. Union acute and poorly formed.	20-40	В		
239	Holly	9	4	1	2	1	1	1	Young	Fair	Small, young tree. Probably self seeded origin. Single trunk with compact crown form. Slight lean to east. Limited landscape value.	20-40	С		
240	Apple	24	4	2	3	4	3	2	Mature	Fair	Small, domestic fruit tree. Slight lean and bias to south. Decaying branch stubs on trunk at 1.5m. Limited landscape value.	20-40	С		
241	Holly	MS 38	7	4	4	4	4	1	Early mature	Fair	Multi stemmed from base with bushy crown to ground level. Limited future potential due to location very close to structure. Unsustainable location.	10-20	U		
242	Ash	MS 30	7	4	2	3	4	2	Semi mature	Poor	Multi stemmed from base. Probably self seeded origin. Early infection by ash dieback disease. Poor specimen with limited future potential due to condition and location very close to structure. Unsustainable location.	<10	U		

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BS 5837:2012 Tree Survey 103/105 Henderson Street, Bridge of Allan

Tag no	Species	Dia	Hgt	N	E	S	W	Cr Cl	Age	Cond Cat	Notes	Life expect	BS 5837 Cat	Rec action	Priority
243	Cherry laurel	MS 46	8	5	4	4	5	1	Mature	Poor	Large, overgrown shrub. Immediately adjacent to stone boundary wall and corner of building. Multi stemmed from base with bushy and spreading crown. Poor specimen with limited future potential due to location.	<10	U		
244	Cherry plum	24	7	3	3	4	4	2	Early mature	Poor	Congested forking between codominant limbs at 2m. Single trunk. Unions very acute and with included bark. This creates a significant structural defect and predisposes tree to failure.	10-20	С		
245	Silver birch	10	7	1	4	4	1	1	Semi mature	Fair	Small, self seeded tree. Suppressed on north face with lean and bias to south. Large branch arises at 0.5m and extends to south.	10-20	С		
246	Silver birch	20	8	2	2	3	3	2	Semi mature	Good	Self seeded tree. Single, straight trunk with compact and well formed crown.	20-40	С		
247	Sawara cypress	56	7	1	7	8	6	1	Mature	Poor	Trunk split and decayed. Tree collapsed to south. Heavily engulfed in ivy. Still alive.	<10	U		
248	Douglas fir	97	17	7	7	7	7	3	Mature	Fair	Large, prominent conifer standing on raised mound. Topped many years ago, with truncated height. Healthy and widely spreading crown. Open grown. Heavy ivy encroachment.	20-40	В		
249	Ash	MS 34	11	3	4	4	4	7	Semi mature	Fair	Self seeded tree. Forks into three codominant stems at base. Lower trunk bare.	10-20	С		
250	Elm	21	13	1	4	7	4	8	Semi mature	Poor	Self seeded tree growing immediately adjacent to wall of building. Suppressed on north face and heavily overhangs roof of building. Unsustainable location.	<10	U		
251	Elm/ Goat willow	15	9	1	5	5	4	4	Semi mature	Poor	Spindly elm and goat willow wrapped around each other. Self seeded. Very close to building. Poor specimen in unsustainable location.	<10	U		
G1	Rhododendron Cherry laurel Holly Shrubs	MS	5 to 7	-	1	ı	_	1	Early mature	Poor	Large area of very overgrown shrubs and a few small, self-seeded trees. Very dense and impenetrable. Poor and scrubby. Obscuring house.	<10	U		

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PLAN

Tree Survey and Constraints



Tree Survey



TREE, SHOWING TAG NUMBER. TRUNK DIAMETER AND CANOPY SPREAD DRAWN TO SCALE

TREES BS 5837 CATEGORY A

TREES BS 5837 CATEGORY B

TREES BS 5837 CATEGORY C TREES BS 5837 CATEGORY U



AREA OF YOUNG TREES/SCRUB

Tree survey details recorded in accordance with BS5837:2012. Numbers refer to tree tags. Refer to accompanying report and schedule for tree details.

Do not scale from drawing.



TITLE:

Tree Survey and Constraints 103/105 Henderson Street, B of A

Client: Simply UK Ltd

Scale: 1 to 500 @ A3 | Drwg no.: 20472/1

Drawn by : DR

Date: December 2020



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