



NOVEMBER 8, 2021

8a Parsonage Rd Withington M20 4PQ
TREE SURVEY BS5837:2012

GUY SMALLTHWAITE

TREESURE

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1 SUMMARY

- 1.1 The proposed development is for an extension to the existing dwelling.
- 1.2 To prevent compaction and to protect the root radial areas of the trees, all trees will be afforded protection (see Arboricultural Method Statement and Tree Protection Plan). Such trees shall be retained and shall not be lopped, topped, felled, pruned, have their roots severed or be uprooted without prior approval of the Local Planning Authority.
- 1.3 No trees will require removal to accommodate the development. On the site, there are two 'B' category silver birches, seven category 'C' trees, one category 'U' tree and the remaining groups and hedges are all 'B' and 'C' category. A neighbouring tree (T5) has been included in the assessment as it is in close proximity to the proposal. There is a requirement for tree protection fencing and Temporary Ground Protection. Please see the Tree Protection Plan (Appendix 2) for specific details.

2 INTRODUCTION

- 2.1 Guy Smallthwaite is an Arboricultural Consultant with Treesure. He has been awarded a Foundation degree in Arboriculture with the University of Central Lancashire in conjunction with Myerscough College. He is a Professional Member of the Arboricultural Association. He has 20 years of experience within the industry.
- 2.2 Treesure have been instructed by Anthony Russell to produce a Tree Survey Plan in accordance with BS5837:2012. The survey was carried out on the 4th of November 2021. The weather conditions were fine and dry.
- 2.3 For the purposes of carrying out the tree survey, Treesure were provided with the following documents: Existing and proposed plans in PDF and CAD.
- 2.4 This report details the arboricultural implication of development, recommendations and protective measures.

2.5 This report provides the results of the survey and includes:

- Tree Survey Schedule
- An Assessment of Tree Quality based on BS5837: 2012
- Arboricultural Impact Assessment
- Arboricultural Method Statement
- Tree Constraints Plan
- Tree Protection Plan

3 SCOPE AND LIMITATIONS OF THE SURVEY

3.1 The scope of the survey includes a visual inspection from ground level using the 'Visual Tree Assessment Methodology'. One site was surveyed. The brief was to conduct a Tree survey in accordance with BS5837:2012 Trees in relation to design, demolition and construction; Recommendations.

3.2 Any legal descriptions or information given by Treesure are understood to be accurate.

3.3 No responsibility is assumed by Treesure for legal matters that may arise from this report, and the consultant shall not be required to give testimony or to attend court unless subsequent contractual arrangements are made.

3.4 Any alteration or deletion from this report will invalidate it as a whole.

3.5 Trees are large dynamic organisms whose health and condition can change rapidly, therefore due to the changing nature of trees and other site considerations, this report and any recommendations made are only valid for a 1-year period.

3.6 Any operational practices recommended in this report are to be undertaken by the appropriate specialist company. Operatives are to carry out the relevant risk assessment and record such information, prior to commencement of tasks and work in accordance with current Health and Safety standards, practices and legislation.

4. SURVEY METHODOLOGY

- 4.1 The tree survey was carried out using the methodology set out in BS5837:2012 '*Trees in relation to design, demolition and construction – recommendations*'.
- 4.2 Tree canopies or branch spread was measured in four directions N-S-E-W using a Leica Disto. This gives an accurate representation of the tree crown.
- 4.3 Trunk diameters are measured at breast height in mm and rounded to the nearest 10mm.
- 4.4 Crown clearance is the existing height above ground level of the first significant branch along with its direction of growth (e.g., 3.5 – S). Measurements are recorded to the nearest half metre for dimensions up to 10m and the nearest whole metre for dimensions over 10m.
- 4.5 Height was measured using a Nikon Forestry Pro Laser Rangefinder. All were recorded to the nearest half metre for dimensions up to 10m and the nearest whole metre for dimensions over 10m. Stem diameter was recorded in millimetres and rounded to the nearest 10mm.
- 4.6 Photographs were taken on site recording any structural defects or decay/disease.
- 4.7 Life Stage is recorded as either Y- young, SM – Semi – Mature, EM – Early Mature, M – Mature or OM – Over Mature
- 4.8 Observations record the condition of the tree noting any decay/disease or physical defects
- 4.9 Category rating is given to all the trees surveyed. Category A (Green) Trees of high quality with an estimated remaining life expectancy of 40 years. Category B (Blue) - Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. Category C (Grey) - Trees of low quality with an estimated life expectancy of at least 10 years. Category U (Red) - Trees that are unsuitable for retention. Trees in

such poor condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.

4.10 A, B and C trees are also given a sub – category of 1, 2 or 3 which reflects their arboricultural, landscape or cultural values respectively.

4.11 Life expectancy is the length of time that the tree is estimated to make a useful contribution is expressed in years as: <10, 10+, 20+, and 40+.

5.0 PROPOSAL

The proposed development is for an extension to the existing dwelling.

6. TREE DETAILS

6.1 Land

Details of all the trees can be found in the Tree Survey Schedule in Appendix 1 and their location can be found on the Tree Constraints Plan in Appendix 2. All trees except those proposed for removal are to be protected in accordance with BS: 5837 (2012) guidelines.

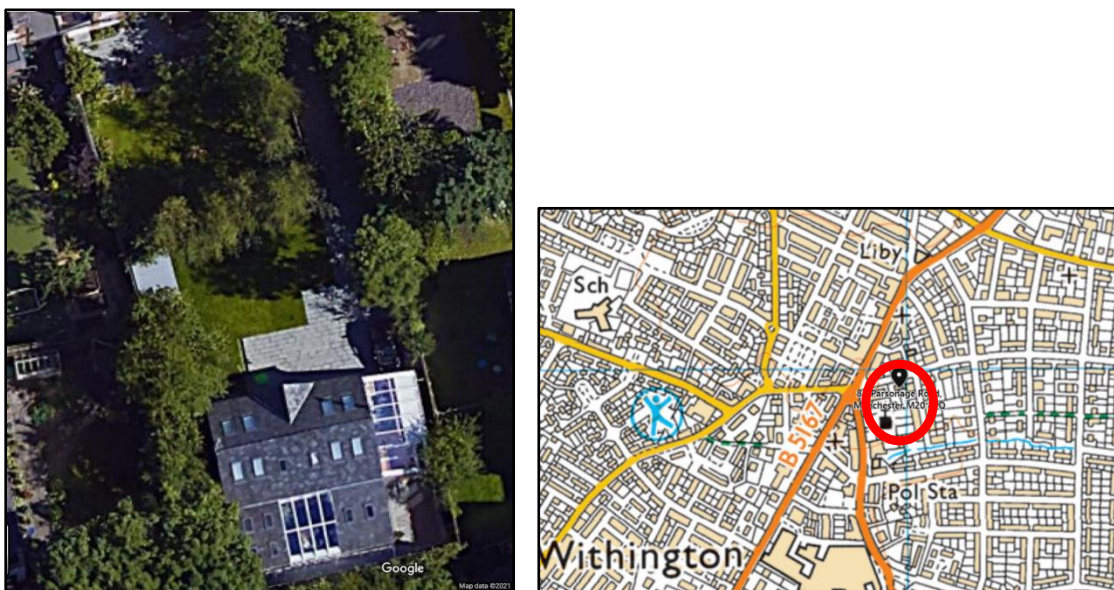


Fig 1. Aerial and OS image of 8a Parsonage Rd Withington.

6.2 Statutory Protection

Manchester City Council was consulted on the 10/11/2021. According to the information provided, the Application Site is within Withington Conservation Area.

7. Legal Protection for Wildlife

7.1 Any tree work should be undertaken outside of the nesting season (1st March – 31st July inclusive), although the nesting period may start before this and extend beyond it, in many cases (e.g., barn owls can breed at any month of the year in the UK). This is to avoid impact to nesting birds and infringement of the Wildlife and Countryside Act 1981.

7.2 The quality and value of the tree stock has been broken down by BS5837 quality grade in Table 7.4 below. The grading system can be summarised as follows: For a tree to qualify under any given category, it should fall within the scope of that category's definition (U, A, B, C) and for trees in categories A to C, it should qualify under one or

more of the three subcategories (1, 2, and 3). Subcategories 1, 2 and 3 are intended to reflect arboricultural and landscape qualities, and cultural values, respectively.

7.3 Quality and Value of Existing Individual Trees

Table 7.4 Quality of Existing Individual Trees (Removal and Retention)

Total No of Individual Trees	A Grade	B Grade	C Grade	U Grade
No of Individual Trees	0	2	7	1
Remove	NA	NA	NA	Recommended
Retain	NA	2	7	NA

8.0 SOIL DETAIL

1:50 000 scale bedrock geology description: Wilmslow Sandstone Formation - Sandstone. Sedimentary Bedrock formed approximately 247 to 252 million years ago in the Triassic Period. Local environment previously dominated by hot deserts.

9.0 PLATES

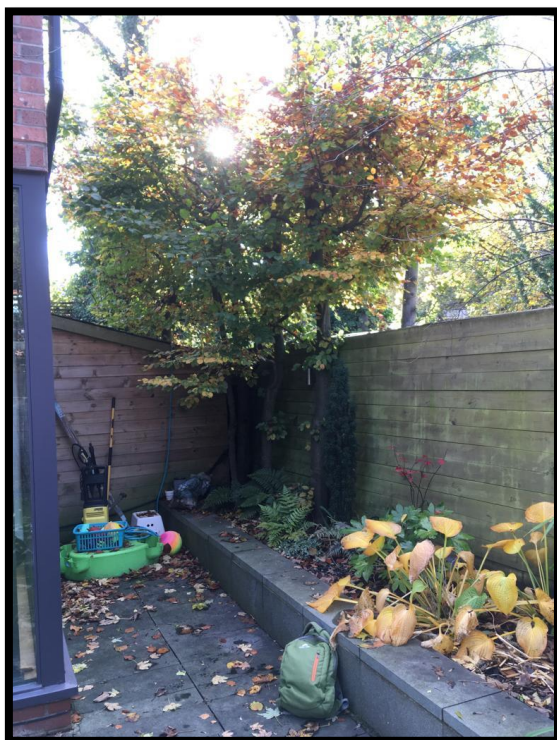


Plate 1. A line of young beech trees (G1)



Plate 2. Two prunus trees (T1 and T2) to be retained.

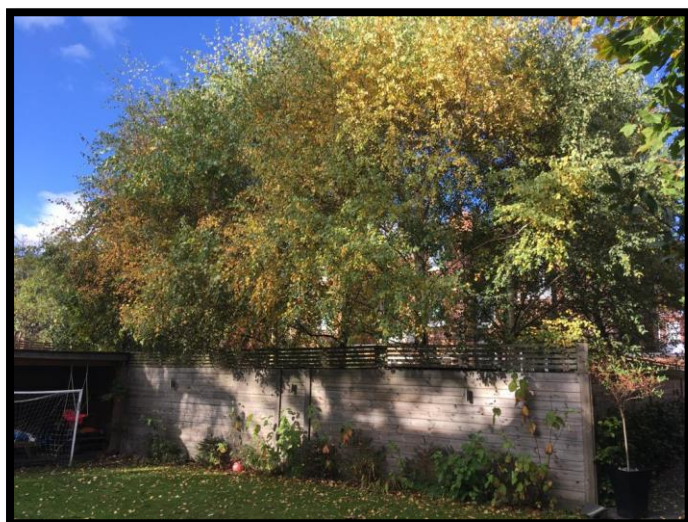


Plate 3. Group of neighbouring trees (G2).



Plate 4. Ash tree located adjacent to driveway (T4).

10. ARBORICULTURAL IMPACT ASSESSMENT

The purpose of the assessment is to identify, evaluate and possibly mitigate the extent of direct and indirect impacts on existing trees that may arise as a result of the implementation of the site layout proposals.

10.1 Tree protection

Before any building works commence it is essential that all tree protection fencing is in place to protect the root protection areas (see Tree Protection Plan).

10.2 Protection of Retained Trees

The successful retention of trees depends on the quality of protection and the procedures that are set in place to ensure that trees are protected. An Arboricultural Method Statement is an effective means of ensuring this protection. Details are set out in the Method Statement in section 11.

10.3 Temporary Ground Protection

Before any building works commence it is essential that all tree protection fencing is in place to protect the root protection areas. There is marginal incursion of the proposed into the RPA of T5, this should not affect the overall health of the tree (see Tree Protection Plan). Any access within this area of exposed RPA would be limited to pedestrian access only. For pedestrian movements only, a single thickness of scaffold boards or ply board placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100mm depth of woodchip), laid onto a geotextile membrane. The Temporary Ground Protection also includes G1, T1 and T2.

implications. It is advisable that new tree planting is kept at distances from structures of at least those in Table A.1 (see BS5837:2012). BS 4428:1989 contains recommendations and guidance on general landscape operations, with sections on preliminary investigations, drainage, grading and cultivation, tree planting, and woodland planting. Establishment of new planting can be maximised by good planting practice – see Section 17 for additional guidance.

11 ARBORICULTURAL METHOD STATEMENT

- 11.1 The information contained within the Arboricultural Method Statement conforms to BS5837:2012. The controlling authority is Manchester City Council.
- 11.2 For details of the trees to be retained, their location and Tree Protection Fencing, reference should be made to the Tree Protection Plan.
- 11.3 Any development activity which affects the adaptation of trees to a site could be detrimental to their health, future growth and safety. Tree species differ in their ability to tolerate change, but all tend to become less tolerant after they have reached maturity or suffered previous damage. Planning and subsequent site management aims need to minimise the effect of change.
- 11.4 The implementation, supervision and monitoring of a Tree Protection Plan is necessary to ensure the continued well-being of trees and to comply with BS5837:2012.

12.0 SCHEDULE OF SPECIFIC SITE EVENTS

- 12.1 Whenever trees on or adjacent to a site have been identified within the tree protection plan for protective measures, there should be an auditable system of arboricultural site monitoring. Effective tree protection relies on following a logical sequence of events and arboricultural inspection and supervision

12.2 Pre- Commencement meeting

Before any start to development a meeting should be scheduled with the site manager, tree officer and the arboricultural consultant. The extent of the tree constraints will be discussed. Working space requirements will be reviewed to consider barrier and ground protection with regard to site functionality. Any potential conflicts should be addressed and a resolution worked towards.

Subjects to be discussed during the meeting

- Location of Materials/Deliveries
- Fire: 20 metres away from retained trees and shrubs
- Waste
- Location of Fuel/Generators
- Waste cement
- Excavations/Drainage
- Ideal sites for any mitigation tree planting.

12.3 Tree Works

All tree works are to be carried out before there is any commencement of work for reasons of public safety and adhere to recommendations set out in BS: 3998 (2010).

12.4 Schedule of Specific Site Events (Table 12.4)

Stage	Action	Involved parties	Reference
1	Issue Arboricultural survey to site manager	Client/Contractor	N/A
2	Notify Arboricultural Consultant (AC) of date of pre-development meeting	Client/Contractor	N/A
3	Pre-development meeting	Site Manager	N/A
4	Installation of Tree Protection Fencing and temporary ground protection.	Contractor	14.0
5	Development	Contractor	10.0
6	Remove tree protection once development is completed	Contractor	N/A

13.0 TREE PROTECTION PLAN

13.1 In accordance with BS5837:2012 the Tree Protection Plan is superimposed on to the proposed site layout plan. In addition, the Tree Protection Plan shows the following information accompanied by descriptive text as required.

13.2 The Tree Protection measures shown in the Tree Protection Plan demonstrate the feasibility of the proposed development in relation to the retained trees. The tree Protection Plan must always be read in conjunction with the Arboricultural Method Statement (see attached Tree Protection Plan).

13.3 Construction Exclusion Zones

Construction exclusion zones are fenced areas of the site that protect soil, surfaces and roots in the proximity of retained trees. The area of these zones (the root protection area) is calculated as an area equivalent to a circle with a radius 12x the stem diameter in accordance with Annexe C and determined from Annexe D in the BS standards.

14.0 TREE PROTECTION FENCING

14.1 All trees that are being retained on site should be protected by barriers and /or ground protection before any materials or machinery is brought on to the site and before any demolition or development. The barrier fencing to be used would be the default type which has uprights that are driven into the ground (see Tree Constraints Plan or Fig 2 in BS5837:2012 guidelines) All weather notices should be attached to the barrier with words such as: "CONSTRUCTION EXCLUSION ZONE- NO ACCESS"

14.2 Stages for installation of Tree Protection Fencing

Tree protection fencing will not be removed until all machinery has been removed from site and written authorisation has been granted by either the LPA or the arboricultural consultant.

- Hand clearance of any vegetation to allow clear working access
- Setting out of fencing
- Site meeting with arboriculturist to sign off Tree Protective Fencing
- Site now accessible for vehicular access

14.3 Once installed Tree Protection Fencing will be regarded as sacrosanct and not removed without approval of the Local Planning Authority.

14.4 Protective fencing is a condition of planning approval, if it is removed or repositioned the construction firm is in breach of a condition and may be subject to legal action without written authorisation from either the local planning authority or the arboricultural consultant.

15.0 PRECAUTIONS INSIDE THE CONSTRUCTION EXCLUSION ZONE

- No mechanical excavation
- No excavation without arboricultural site supervision

- No hand digging without a written method statement approved by the arboriculturist
- No lowering or raising of levels
- No storage of plant or materials
- No storage or handling of any chemicals including waste from cement mixing
- No vehicular access

15.1 Underground services

15.2 Mechanical trenching for the installation of underground apparatus and drainage severs any roots present and can change the local soil hydrology in a way that adversely affects the health of the tree. Wherever possible apparatus should be routed outside Root Protection Areas. Where this is not possible it is preferable to keep apparatus together in common ducts. Inspection Chambers should be sited outside the Root Protection Areas. NJUG guidelines for the planning, installation and maintenance of utility services in proximity to trees can be followed.

16.0 PRECAUTIONS OUTSIDE THE CONSTRUCTION EXCLUSION ZONE

- 16.1 Planning of site operations should take sufficient account of wide loads, tall loads and plant with booms, jibs and counterweight. Such contact can result in serious damage to the trees and might make their safe retention impossible.
- 16.2 Fires on site should be avoided.
- 16.3 Material whose spillage could cause damage to a tree should be stored and handled away from the outer edge of the RPA, downhill and at least 10m away.

17.0 CONCLUSION

- 18.1 Providing that the methodology prescribed on this Arboricultural Method Statement and Tree Protection Plan is strictly adhered to I would expect there to be no harmful effects on the retained trees, their health and condition should be as if there had been no development.

18.2 Contact Details for all Relevant Parties

Name	Contact Details
ANTHONY RUSSELL	07900240651
MANCHESTER CITY COUNCIL	0161 234 5000
GUY SMALLTHWAITE (ARBORICULTURAL CONSULTANT)	0151 336 5060 / 07765195443

19. REFERENCES

BS5837:2012 Trees in Relation to Design Demolition and Construction

BS4428:1989 Code of Practice for General Landscape Operations

Patch D, Holding B. 2007. Through the Trees to Development APN 12. Arboricultural Advisory and Information Service.

Appendix 1

Survey Schedule

Classification Key

SURVEY SCHEDULE COMPLIANT TO BRITISH STANDARD 5837: 2012 DATE 04/11/2021													
Ref No	Species	Height (m)	Stem diameter (mm)	N	S	E	W	First sig. branch and direction (m)	Canopy height (m)	Life stage	Estimated remaining contribution (years)	Category grading	Observations and Management recommendations
T1	Winter Flowering Cherry <i>Prunus nigra</i>	6m	290mm	2	2	2	2	1 (S)	2m	S/M	10+	C2	In good condition with no apparent defects with a trifurcated stem.
T2	Winter Flowering Cherry <i>Prunus nigra</i>	6m	290mm	2	2	3	3	2 (W)	2m	S/M	10+	C2	In good condition with no apparent defects with a single stem.
T3	Cherry <i>Prunus avium</i>	8m	270mm x 2	2	2	2	2	2 (W)	3m	M	NA	U	Dual stemmed with v shaped junction. Wounds evident with decay evident. Audible sounds of internal decay could be heard with sounding hammer. Remove for safety reasons
T4	Ash <i>Fraxinus excelsior</i>	10m	270mm	3	3	2	3	4 (S)	6m	S/M	10+	C2	Small amount of ash die back evident in crown. Monitor for signs of further decline
T5	Sycamore <i>Acer pseudoplatanus</i>	16m	400mm	3	3	3	3	5 (E)	5m	M	20+	B2	Mature Sycamore clad in ivy. Appears healthy with no apparent defects. Thorough visual assessment was not undertaken as it is a third party tree.

SURVEY SCHEDULE COMPLIANT TO BRITISH STANDARD SURVEY SCHEDULE COMPLIANT TO BRITISH STANDARD 5837: 2012 DATE 04/11/2021													
Ref No	Species	Height (m)	Stem diameter (mm)	N	S	E	W	First sig branch and direction (m)	Canopy height (m)	Life stage	Estimated remaining contribution (years)	Category grading	Observations and Management recommendations
T6	Silver Birch <i>Betula pendula</i>	5m	50mm	1	0	1	1	0.5(N)	0.5	Y	10+	C2	A healthy sapling with no apparent defects.
T7	Silver Birch <i>Betula pendula</i>	8m	150mm	2	2	2	2	2 (W)	2	Y	10+	C2	A healthy young tree with no apparent defects.
G1	Beeches	4.5m	180mm	1	1	1	1	NA	2	Y	10+	C2	Small linear group of young beech trees with no apparent defects.
G2	Silver Birch and an Apple tree.	8m	200mm	3	3	3	3	4 (N)	2	S/M	20+	B2	Trees in good condition with no apparent defects. All single stemmed with well- balanced crowns. Located on third party land.

SURVEY SCHEDULE COMPLIANT TO BRITISH STANDARD SURVEY SCHEDULE COMPLIANT TO BRITISH STANDARD 5837: 2012 DATE 04/11/2021													
Ref No	Species	Height (m)	Stem diameter (mm)	N	S	E	W	First sig branch and direction (m)	Canopy height (m)	Life stage	Estimated remaining contribution (years)	Category grading	Observations and Management recommendations
G3	Silver Birch and a Cherry Tree	8m	180mm	3	3	3	3	NA	2	S/M	20+	B2	Trees in good condition with no apparent defects. All single stemmed with well- balanced crowns. Located on third party land.
G4	Linear group of saplings including beech, bamboo, hawthorn, Norway maple, yew, apple and Bay trees.	5m	75mm	2	2	2	2	NA	2	Y	20+	B2	Linear group of saplings located adjacent to driveway. Branches are extending over driveway. Prune back branches extending over driveway to allow clear vehicular access.

Key: Survey Classification key

Tree no.	Numerical reference for tree on survey plan and tag number
Species.	Scientific name and common name
Height	In metres
RPA	Root Protection Area
TPP	Tree Protection Plan
TCP	Tree Constraints Plan
Stem diameter	In millimetres
Branch spread	Branch spread in metres taken at four cardinal points to give an accurate representation of the crown
First significant branch and direction	First large limb and its cardinal direction
Canopy	Clearance in metres until the start of the canopy
Life stage	Y = Young MA = Middle Aged M = Mature OM = Over Mature V = Veteran
Estimated remaining contribution	This is measured in years (<10, 10+, 20+, 40+)
Category rating	Category A (Green) Trees of high quality with an estimated life expectancy of at least 40 years Category B (Blue) Trees of moderate quality with an estimated remaining life expectancy of at least 20 years Category C (Grey) Trees of low quality with an estimated remaining life expectancy of at least 10 years Category U (Dark Red) Tree of such condition that cannot be realistically retained
Subcategories	1 Mainly arboricultural qualities 2 Mainly landscape qualities 3 Mainly cultural values, including conservation
Observations	Structural and physiological condition
Management recommendations	Remedial work needed to either improve the condition of the tree or to protect the canopy from access during development

APPENDIX 2

TREE CONSTRAINTS PLAN

TREE PROTECTION PLAN

General Notes
Do Not scale off drawing - refer to the tree data schedule for accurate crown spread measurements.
Depictions of tree canopies are based on measurements taken to four cardinal compass points.
No liability of any kind is accepted for any omissions or inaccuracies in respect of this plan.
The original of this drawing was produced in colour a monochrome copy should not be relied upon.
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Parsonage Road

Key

Trees
Showing Canopy extents, category colour and tag number (with category).

Category A
Trees of high quality with an estimated remaining life expectancy of at least 40 years.

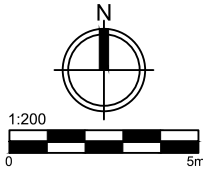
Category B
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

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 150 mm.

Category U
Trees in such a condition that they can not realistically be retained as living trees in the context of the current land use for longer than 10 years.

Tree Groups

BS 5837:2012 Root Protection Area



Drawing Title

Tree Constraints Plan

Client

Anthony Russell.

Site/Project

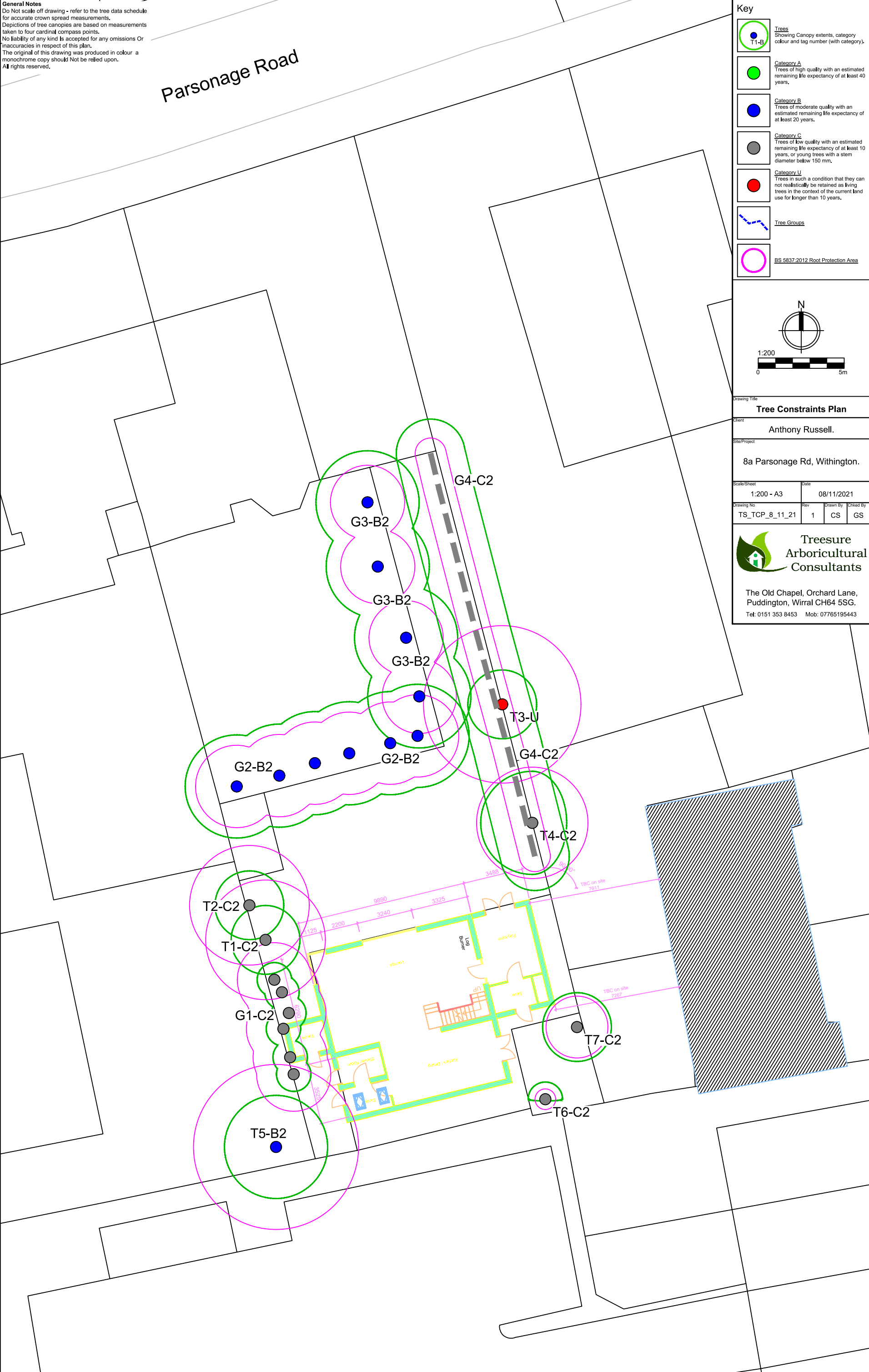
8a Parsonage Rd, Withington.

Scale/Sheet	Date
1:200 - A3	08/11/2021

Drawing No	Rev	Drawn By	Checked By
TS_TCP_8_11_21	1	CS	GS

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Do Not scale off drawing - refer to the tree data schedule for accurate crown spread measurements.
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Parsonage Road

Key



Trees
Showing Canopy extents, category colour and tag number (with category).



Category A
Trees of high quality with an estimated remaining life expectancy of at least 40 years.



Category B
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.



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 150 mm.



Category U
Trees in such a condition that they can not realistically be retained as living trees in the context of the current land use for longer than 10 years.



Tree Groups
Shown as dashed centre/boundary line. Colour represents category (see above)



BS 5837:2012 Root Protection Area



Tree Protective Fencing



Trees for Removal



Ground Protection



Materials Storage Area



Existing Hard Surface

Drawing Title

Tree Protection Plan

Client

Anthony Russell.

Site/Project

8a Parsonage Rd, Withington.

Scale/Sheet	Date
1:200 - A3	30/11/2021

Drawing No	Rev	Drawn By	Checked By
TS_TPP_8_11_21	1	CS	GS



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