AMENITYTREE

ENVIRONMENTAL PLANNING CONSULTANTS

Tree Survey and Constraints Report

Miles Platting

Report prepared for
Jigsaw Homes North

NAME OF SITE:	**Miles Platting, Manchester, M40 8BS**
PROJECT No:	**12270**
CLIENT NAME:	**Jigsaw Homes North**
SPECIALIST:	**Amenity Tree Care Ltd**
DATE PREPARED:	**01.07.2025**
PREPARED BY:	**Paul Springett**
REVIEWED BY:	**Chris Gaughan**
DATE REVIEWED:	**01.07.2025**
VERSION CONTROL:	**Version 1**

AMENITY TREE CARE WILLOW HILL COTTAGE SCHOOL LANE BURWARDSLEY CHESTER, CH3 9NX
Tel: 01829 770075 www.amenitytree.com

Contents

1.0 Instruction 3
2.0 Report Limitations 4
3.0 Methodology and data collection 5
4.0 Arboricultural constraints 6
5.0 Summary 6
6.0 Conclusions and arboricultural risks and constraints 7
7.0 Recommendations 8

Appendices 7
Appendix 1 Survey key .....
Appendix 2 BS5837 Cascade Chart .....
Appendix 3 Survey Schedule .....
Appendix 4 Tree Constraints Plan .....

1.0 Instruction

1.1 Amenity Tree Care has been instructed by Jigsaw Homes North to prepare the following Tree Constraints Report for land at Miles Platting, Manchester, M40 8BS.

1.2 The survey was conducted using the client supplied topographical data, which was issued by Jigsaw Homes North.

1.3 The tree constraints report was carried out in line with the recommendations in BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* and evaluates the direct and indirect impacts of the current tree population.

1.4 The constraints assessment considers constraints posed above and below ground and should be used to inform any future design layout.

1.5 Further consideration will be required at the design stage in the form of an impact assessment that evaluates the direct and indirect effects of any proposed design and where necessary will recommend mitigation.

1.6 Below ground constraints are influenced by the root protection area and are determined in line with the recommendations set out in BS 5837:2012. These recommendations quantify the root protection area based on a measured stem diameter in accordance with Annex C, and the root protection area determined from Annex D of BS 5837:2012.

1.7 It is important to understand that when considering the root protection area with regards to the circular plot as delineated on the tree protection plan that a number of site factors can influence root morphology and disposition of tree roots. Root morphology is considered when determining the impacts of the proposed development on existing woody vegetation.

1.8 Above ground constraints are considered in line with the recommendations in BS 5837:2012 and include shade dominance, current and future crown spread as well as the ultimate height of those retained trees.

2.0 Report Limitations

2.1 The inspection has been carried out from ground level only, using visual observation. Where a more detailed inspection is required, this is highlighted in the recommendations.

2.2 Trees are living organisms whose health and condition can change rapidly. The health, condition and safety of trees should be checked on a regular basis, preferably at least once a year. The conclusions and recommendations in this report are only valid for a period of twelve months from the date of this report. This period of validity may be reduced in the case of any change in conditions to or in proximity to the tree.

2.3 I have not contacted the local planning authority to determine whether any Tree Preservation Order (TPO) covers the tree, nor to determine if the site is a Conservation Area. Before undertaking any work to the tree, it would be advisable to check whether either of these planning controls are in operation; if they are, it would be necessary to obtain consent (or in the case of a Conservation Area give six weeks' notice of intent) before undertaking any such work.

2.4 Any legal descriptions or information given to the consultant are understood to be accurate.

2.5 No responsibility is assumed by Amenity Tree Care Ltd 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.

2.6 Any alteration or deletion from this report will invalidate it as a whole and the conclusions of this report will remain valid for twelve months from the date of the inspection.

2.7 The responsibility for any tree work(s) undertaken on the surveyed trees rests with the land managers.

3.0 Methodology and data collection

3.1 The site was visited as indicated above and the trees were assessed visually utilising the Visual Tree Assessment methodology (Mattheck, C., et al.).

3.2 Each individual tree has been assessed with general regard to condition, health and structural suitability and commented upon in the report.

3.3 An individual and group schedule is appended to this report and includes detailed information relating to tree height *both current and future*, stem diameters, crown dimensions and estimated remaining contribution.

3.4 Where dimensions have been recorded the following measurement conventions have been observed

a) Height, crown spread, and crown clearance have been recorded to the nearest half metre (crown spread has been rounded up) for dimensions up to 10m and the nearest whole meter for dimensions over 10m.

b) Stem diameters have been recorded in millimetres and rounded to the nearest 10mm

c) Where dimensions have been estimated *(e.g. for those trees located off site or where access is restricted, and accurate data cannot be recorded) these trees will be suffixed with #.*

3.5 Where necessary recommendations for remedial tree works (Preliminary Management Recommendations) are provided on the basis of the tree(s) current condition.

3.6 Trees growing as groups or woodland have been identified and assessed by the arboriculturist. An assessment has been undertaken of the individual trees within the group/woodland in order to determine the category score and aid future management plans.

3.7 Trees that have not been identified on the topographical survey have been plotted by eye on site and identified as such on the tree survey schedule (#).

4.0 Arboricultural Constraints

4.1 Below ground constraints are influenced by the root protection area (RPA) and are determined in line with the recommendations set out in section 4.6 of BS 5837:2012. These recommendations quantify the RPA based on a measured stem diameter in accordance with Annex C, and the RPA determined from Annex D. The RPA for trees with two to five stems are assessed using the calculation in 4.6.1. It is important to understand that when considering the RPA with regards to the circular plot that a number of site factors can influence the root morphology and disposition of tree roots as stated in section 4.6.3 of BS 5837:2012. Trees that form the leading edge of groups/woodland are recorded at intervals along the woodland/group edge in order to accurately plot a root protection area. All these factors must be considered when contemplating the impacts of the potential development on existing woody vegetation.

4.2 Above ground constraints posed by existing trees can significantly affect the proposed land use and the subsequent condition will be considered by the planning officer should the development be allowed to proceed. Above ground, constraints are considered in line with the recommendations in section 5.2 of BS 5837:2012 and include shade dominance, current and future crown spread as well as the ultimate height of those retained trees.

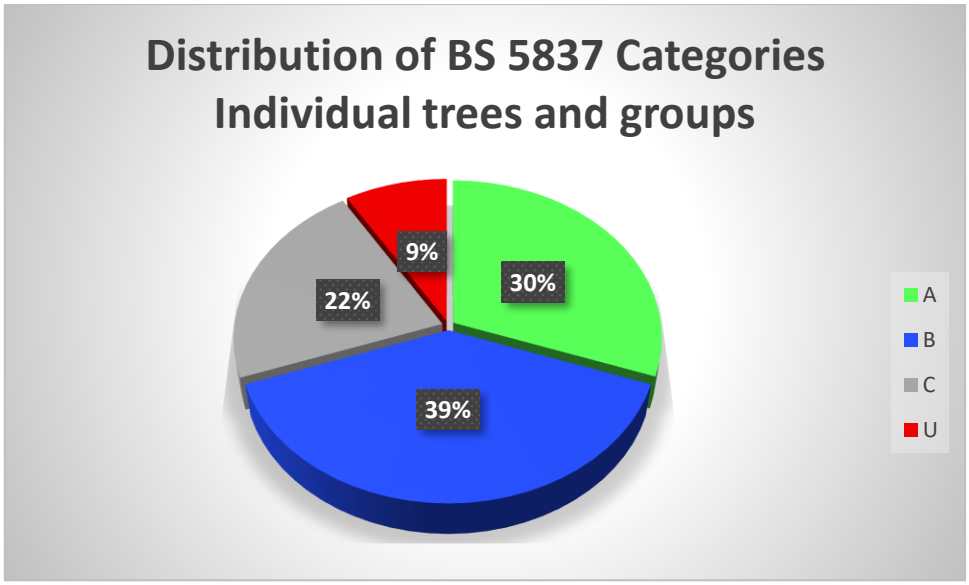
5.0 Summary

Category A	Category B	Category C	Category U
G1, G2, G3, T6, T7, T8, T13	G4, G5, G6, T9, T10, T12, G7, T15, T16	T1, T2, T3, T4, T11	T5, T14
Summary: A total of 16 trees, and 7 groups were surveyed across the site			

Note: *Please refer to tree survey schedule for detailed dimensions and specific site comments*

Of the individual trees recorded:
4 trees and 3 groups were Category A,
5 trees, and 4 groups were Category B.
5 trees, were Category C.
2 trees were Category U

Chart 1 below shows the distribution of the quality categories according to the British Standard (5837) that have been recorded for individual trees and groups.



6.0 Conclusions

6.1 The TCP (Appendix 4) outlines the limitations imposed on the site by the tree canopy and their Root Protection Areas (RPAs). This information should guide the design process for the proposed development and must be accessible to all disciplines engaged in the design of the school. The canopies and root protection zones of the boundary trees and groups should influence the development design to favour their retention.

7.0 Recommendations

7.1 It is advisable to seek early arboricultural guidance to ensure that the design layout effectively incorporates the retention of more prominent trees (Cat A, Cat B) in the initial design layout. This report should be made available to all disciplines involved in the scheme, in particular drainage engineers and landscape architects to avoid works within the RPA.

7.2 Once the design is finalised an Arboricultural Impact Assessment should be undertaken to assess all impacts to the trees on site. Full details should be provided including drainage plans, proposed surfacing, final levels, positions of proposed structures and any landscaping arrangements. In addition to the AIA and Arboricultural Method Statement (AMS) should be undertaken detailing the method of works and other protection methods. All site operatives should be made aware of the protection details in the AMS and should remain in place throughout construction.

Appendix 1

Survey Key

Tree No. Sequential reference number e.g., T1, T2 for individual trees, where trees are determined to be a group they will be denoted as follows G1, G2 and W1, W2 for woodlands.

Species: Recorded and listed by both common name and scientific name

Stem: Principal above ground structural component(s) of a tree that supports its branches.

Height: Provides indication of the height of the tree and is measured in meters from ground level to the upper canopy edge and is recorded up to the nearest half meter for heights up to 10 meters and the nearest meter for heights over 10 meters.

Stem diameter: Measured at a height of 1.5 meters from ground level using a diameter tape and recorded in millimetres. Where the stem cannot be measured at 1.5 meters due to irregular swellings on the stem or low branching then the position of measurement will be taken in accordance with the specification in Annex C of BS 5837:2012

Crown spread: Measured at the four cardinal points of a compass (north, south, east, and west) from the centre of the stem and rounded up to the nearest meter in order to provide an accurate representation of the crown spread in order to show above ground constraints.

Crown height: Measured distance between the lowest points of the crown from ground level.

Life stage: A method of age estimation e.g. young - the first one third of the estimated life expectancy, middle mature- the second third of the estimated life expectancy, mature- The last third of the estimated life expectancy, over mature- trees showing obvious signs of senescence

First significant branch (FSB): The direction of growth of the first significant branch from the point of attachment.

Comments: A brief evaluation and description of the tree in order to inform on significant defects or characteristics relating to tree form. Where comments are not present it should be assumed that no relevant features were exhibited.

Recommendations: Arboricultural recommendations based on the current land use only and are provided where action is required in order to aid in the long-term management of the tree or for reasons of site safety.

Survey restrictions: It may be necessary on occasion to estimate tree dimensions where access is not available or where structure(s) or vegetation is precluding the visual assessment. Where dimensions are estimated it will clearly be marked in the tree survey schedule and be suffixed with #.

Root protection area (RPA) Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability. All stem diameters are calculated in line with the guidance given in BS 5837:2012 Annexe D

Tree categorisation: a method of apportioning a value (non-fiscal) to trees in order to identify the quality and value of existing tree stocks, allowing for informed decisions to be made regarding which trees are to be retained or removed dependant on development occurring. Category U-Those in such a condition that cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Category A-Trees of a high quality with an estimated life expectancy of at least forty years. Category B-Trees of a moderate quality with an estimated remaining life expectancy of at least 20 years. Category C-Trees of a low quality with an estimated remaining life expectancy of at least 10 years.

Please refer to Table 1 Cascade chart for tree quality assessment, including subcategories, reference BS 5837:2012

Estimated remaining contribution: estimated remaining life expectancy e.g. <10, 10+, 20+, 40+

Statutory wildlife obligations: The Wildlife and Countryside Act 1981

The Wildlife and Countryside Act 1981 as amended, the Countryside and rights of Way Act 2000 and the Conservation (Natural Habitats) Regulations 1994.

These regulations protect all wild birds and make it an offence to intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Furthermore, the Act makes it an offence (with exception to species listed in Schedule 2) to intentionally:

- kill, injure, or take any wild bird,
- take, damage or destroy the nest of any wild bird while that nest is in use or being built (also [take, damage or destroy the nest of a wild bird included in Schedule ZA1] under the Natural Environment and Rural Communities Act 2006), or
- take or destroy an egg of any wild bird

Bats are protected under Schedule 2 of the Conservation (Natural Habitats) Regulations 1994 making it an offence to damage or destroy a roost site even if the roost is not occupied at the time. The potential fines for each offence is £5000 and if more than one bat is involved in the incident then the fine can be extended to £5000 per bat. A prison sentence can be issued with offenders serving up to six months in prison.

Appendix 2

Table 1 cascade chart

Category and definition	Criteria (including subcategories where appropriate)		Identification on plan
Trees unsuitable for retention (see Note)			
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 10 years	• 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) • 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; see 4.5.7**		
	1 Mainly arboricultural qualities	**2 Mainly landscape qualities**	**3 Mainly cultural values, including conservation**
Trees to be considered for retention			
Category A **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)
Category B **Trees of moderate quality** 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
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	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

© The British Standards Institution 2012

Appendix 3 Survey schedule

Tree No.	latin name	Life Stage	Diameter(mm)	Stem Count	Height(m) / Crown Height (m)	North(m)	South(m)	East(m)	West(m)	Category	Estimated Remaining Life Expectancy (yrs)	Pick Comments	Comments	Recommendations	RPR(m)	RPA(m)
G1	Populus nigra 'Italica' (Lombardy Poplar),Betula pendula (Silver Birch),Fraxinus excelsior (Ash),Crataegus monogyna (Hawthorn)	M	570	1	19(2)	4	4	4	4	A2	40+		Mixed species group with prominent Poplar trees. Dbh range 150mm-570mm.		6.84	147
G2	Crataegus monogyna (Hawthorn),Populus nigra 'Italica' (Lombardy Poplar),Betula pendula (Silver Birch),Sorbus aucuparia (Rowan)	M	620	1	18(3)	5	5	5	5	A2	40+		Mixed species group with prominent Poplar trees. Dbh range 150mm-570mm.Mixed species Dbh range 150mm-620mm.		7.44	173.92
G3	Populus nigra 'Italica' (Lombardy Poplar),Betula pendula (Silver Birch),Crataegus monogyna (Hawthorn)	M	730	1	19(4)	5	5	5	5	A2	40+		Mixed species group with prominent Poplar trees. Dbh range 150mm-730mm.		8.76	241.11
T1	Tilia X europaea (Common Lime)	SM	160	1	6(2)	3	3	3	3	C1	40+		Tree located in car park, poor rooting area.		1.92	11.58
T2	Tilia X europaea (Common Lime)	SM	160	1	6(1.5)	3	3	3	3	C1	40+		Tree located in car park, poor rooting area.		1.92	11.58
T3	Betula pendula (Silver Birch)	SM	100	1	8(2.5)	2	2	2	2	C1	40+		Tree located in car park, poor rooting area.		1.2	4.52
T4	Betula pendula (Silver Birch)	SM	130	1	8(3)	2	2	2	2	C1	40+		Tree located in car park, poor rooting area.		1.56	7.65
G4	Malus sylvestris (Crab Apple)	SM	220	1	6(2)	4	4	4	4	B2	40+		X2 trees located in a grassed area.		2.64	21.9
G5	Acer pseudoplatanus (Sycamore),Crataegus monogyna (Hawthorn),Metasequoia glyptostroboides (Dawn Redwood),Betula pendula (Silver Birch)	EM	480	1	16(2)	5	5	5	5	B2	40+		Mixed species group with prominent Birch and Sycamore, Dbh range 120mm-480mm.		5.76	104.24
T5	Sorbus aucuparia (Rowan)	SM	100	1	7(3)	2	2	2	2	U	<10		Standing dead tree located with in group 5.		1.2	4.52
G6	Betula pendula (Silver Birch),Crataegus monogyna (Hawthorn),Acer pseudoplatanus (Sycamore)	EM	460	1	16(1)	5	5	5	5	B2	40+		Mixed species group with prominent Birch and Sycamore, Dbh range 120mm-460mm.		5.52	95.74
S1	Stump															
T6	Robinia pseudoacacia (Locust Tree)	M	710	1	17(2)	8	6	8	8	A1	40+		Recent limb failure has left exposed sapwood on the lowest western limb at 8m above ground level. Minor deadwood present throughout the canopy. Tree located in grassed area.		8.52	228.08
T7	Acer platanoides (Norway Maple)	M	640	1	16(2)	7	10	11	8	A1	40+		Tree located in grassed area.		7.68	185.32
T8	Acer pseudoplatanus (Sycamore)	M	770	1	17(2)	7	9	7	9	A1	40+		Tree located in grassed area.		9.24	268.26
T9	Sorbus aria (Whitebeam)	EM	370	1	11(1)	5	5	4	5	B1	40+		Tree located in grassed area.		4.44	61.94
T10	Tilia X europaea (Common Lime)	EM	370	1	13(1.5)	5	5	5	5	B1	40+		Tree located in grassed area.		4.44	61.94
T11	Prunus avium (Wild Cherry)	EM	210,90,100,110,100,80	6	8(2)	4	4	4	4	C1	20+		Multi stemmed tree with with included unions present.		3.61	40.95
T12	Tilia X europaea (Common Lime)	EM	220,280,240,180,220	5	14(2)	5	5	5	5	B1	40+		Multi stemmed tree divides at ground level, included unions present.		6.18	120
T13	Populus serotina (Hybrid Black Poplar)	M	940	1	19(6)	9	9	9	9	A1	40+	Ivy on tree.	Ivy clad mature tree located with in group 7.		11.28	399.78
T14	Ulmus procera (English Elm)	SM	260	1	12(2)	2	2	2	2	U	<10		Standing dead tree located with in group 7.		3.12	30.59
G7	Salix caprea (Goat Willow),Salix fragilis (Crack Willow),Populus nigra 'Italica' (Lombardy Poplar),Populus serotina (Hybrid Black Poplar),Betula pendula (Silver Birch),Acer pseudoplatanus (Sycamore),Acer campestre (Field Maple),Platanus X hispanica (London Plane)	EM	390	1	15(2)	5	5	5	5	B2	40+		Ivy clad group with distorted growth present due to group pressure. Dbh range 90mm-390mm.		4.68	68.82
T15	Acer platanoides (Norway Maple)	EM	430	1	12(2)	6	6	6	6	B1	40+		Tree located on boundary fence line.		5.16	83.66
T16	Fagus sylvatica (Beech)	EM	310	1	13(2)	4	4	4	4	B1	40+		Off site tree located behind wall, measurements estimated due to no access.		3.72	43.48

Appendix 4 Tree Constraints Plan



TREE CONSTRAINTS PLAN

Retention value key

(RETENTION VALUE A)

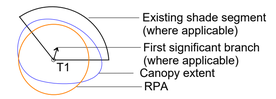
(RETENTION VALUE B)

(RETENTION VALUE C)

Trees to be removed
(RETENTION VALUE U)

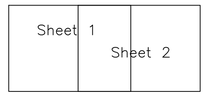
Root Protection Areas (RPA)

Root Protection Areas (RPA's) have been identified and are based on BS5837:2012. RPA's have been shown as a red polyline.



WARNING This drawing will not be read in black and white

Sheet Key



AMENITYTREE
ENVIRONMENTAL PLANNING CONSULTANTS

The Annexe, Willow Hill Cottage,
School Lane, Burwardsley, Chester.
CH3 9NX
Tel. 01829 770075

Client:
Jigsaw Homes North

Project:
Miles Platting, Manchester, M40 8BS
12720

Detail:
TREE CONSTRAINTS PLAN - Overview

Drawn By:	Date:	Scale:
PS	01/07/2025	1:1000 - A1

Drg No:	Revision:
TR-01-Overview Sheet	V1



N

TREE CONSTRAINTS PLAN

Retention value key

(RETENTION VALUE A)

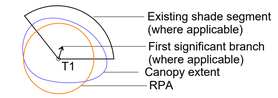
(RETENTION VALUE B)

(RETENTION VALUE C)

Trees to be removed
(RETENTION VALUE U)

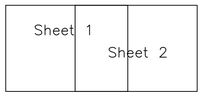
Root Protection Areas (RPA)

Root Protection Areas (RPA's) have been identified and are based on BS5837:2012. RPA's have been shown as a red polyline.



WARNING This drawing will not be read in black and white

Sheet Key



AMENITYTREE
ENVIRONMENTAL PLANNING CONSULTANTS

The Annexe, Willow Hill Cottage,
School Lane, Burwardsley, Chester.
CH3 9NX
Tel. 01829 770075

Client:
Jigsaw Homes North

Project:
Miles Platting, Manchester, M40 8BS
12720

Detail:
TREE CONSTRAINTS PLAN - Overview

Drawn By:	Date:	Scale:
PS	01/07/2025	1:500 - A1

Drg No:	Revision:
TR-01-Sheet 1	V1



TREE CONSTRAINTS PLAN

Retention value key

(RETENTION VALUE A)

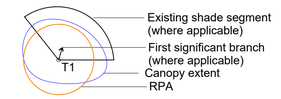
(RETENTION VALUE B)

(RETENTION VALUE C)

Trees to be removed
(RETENTION VALUE U)

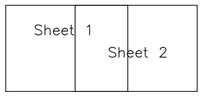
Root Protection Areas (RPA)

Root Protection Areas (RPA's) have been identified and are based on BS5837:2012. RPA's have been shown as a red polyline.



WARNING This drawing will not be read in black and white

Sheet Key



AMENITYTREE
ENVIRONMENTAL PLANNING CONSULTANTS

The Annexe, Willow Hill Cottage,
School Lane, Burwardsley, Chester.
CH3 9NX
Tel. 01829 770075

Client:
Jigsaw Homes North

Project:
Miles Platting, Manchester, M40 8BS
12720

Detail:
TREE CONSTRAINTS PLAN - Overview

Drawn By:	Date:	Scale:
PS	01/07/2025	1:500 - A1

Drg No:	Revision:
TR-01-Sheet 2	V1