



WE KNOW SERVICES

ARBORICULTURAL SURVEY AND IMPLICATION ASSESSMENT

THE BRIDGE INN
CHILDWALL VALLEY ROAD
CHILDWALL

August 2016

Written:	Reviewed:	Approved:
CS	CN	CJ

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- 1.0 Introduction
- 1.1 We Know Trees were instructed by Condry and Lofthouse Limited on behalf of CLAMCO Limited, to carry out an arboricultural survey of trees on land at The Bridge Inn, Childwall.
- 1.2 This report details the arboricultural implications of developing the site, including:
- a survey of the trees on and near the development which may impact the proposal- from ground level, noting their location, species and all relevant parameters, i.e. stem diameter, height, crown spread, condition etc;
 - providing advice on the removal, retention and management of trees;
 - assessment of the potential effects of the proposal on retained trees and vice versa;
 - assessment of the requirement for tree protection for the duration of the works;
 - mitigation for any loss;
 - preparation of a tree schedule;
 - and report on the above matters.
- 1.3 The survey was carried out on 10 April 2015 by means of inspection from ground level by an experienced and qualified arboriculturalist. The inspection can be restricted in cases where trees were Ivy clad or surrounded by vegetation.
- 1.4 Under *BS5837: 2012 Trees in Relation to Construction - Recommendations*, the assessment of trees is made objectively. The tree categorisation method identifies the quality and value of the existing tree stock, allowing informed decisions to be made concerning development design layout.
- 1.5 The following documents have been made available by the client:
- Drawing- Existing Site Plan
 - Drawing- 14-123-103(N)
- 1.6 The supplied drawing included tree positions plotted, however it did not include all tree positions, they have therefore been added to the drawing indicatively. Any dimensions regarding tree positions and protective fencing must be checked on site.
- 1.7 Weather conditions during the survey were dry and still.
- 1.8 The survey was carried out noting the conditions of the trees at the time of inspection. As trees are part of the natural environment, conditions can naturally change; therefore the contents of this report are valid for one year only. After this period, re-inspection may be necessary.

2.0 Survey Methodology

- 2.1** The trees were surveyed (prefixed T, or G for group) and recorded in the tree schedule in appendix one. Where groups are recorded, average height and diameter at breast height (DBH) of the trees in the group are reported. Where access to the base of any trees was limited, stem size was estimated.
- 2.2** All the trees were assessed using: a grading A to C (retention) and U (removal); condition and age class as defined in appendix two.
- 2.3** Where appropriate, canopy spread for each tree was recorded at four cardinal points in order to reproduce an accurate representation of the crown shape of the tree on the tree plan in appendix three.
- 2.4** The survey included all trees within the proposal area and trees near to the proposal.

3.0 Development Proposals

- 3.1** Due to the proposed development and its associated infrastructure there are a number of locations where the proposals are in close proximity to the trees surveyed. The site layout plan within appendix three identifies the trees in relation to the proposed development.
- 3.2** In order to fully assess the impact of the proposals an Impact Table has been created detailing each tree, which shows the proximity of the associated works to the tree.
- 3.3** This can then be assessed in accordance with BS 5837:2012 to determine whether the development will have a detrimental impact on the health of each tree. Once this has been determined remedial measures can be detailed to reduce the impact the proposals will have on the treescape.

3.4 Impact Table:-

Tree No.	Root Protection Area identified in table 2 of BS5837:2012		Distance to proposed car parking/footpath (m)	Distance to proposed development (m)	Can the tree/s be successfully retained?
	Area (m ²)	Equal to a circle with radius (m)			
T1	1400	15.00	Fell Due to Condition		
T2	400	4.80	3.20	20.10	Yes as outlined in section 5.1 below.
T3	250	3.00	3.80	11.70	Yes
T4	305	3.66	Fell Due to Condition		
T5	680	8.16	8.20	35.50	Yes
G1	500	6.00	0.20	13.90	No
G2	120	1.44	Fell Due to Condition		
G3	400	4.80	4.50	15.60	Yes as outlined in section 5.2 below.
G4	400	4.80	Fell Due to Development		

4.0 Impact Assessment

4.1 To assess the implications of the Impact Table each tree can be categorised in the following way: -

	Trees to be retained		Trees to be removed	
	With no impact	With detailed construction	Due to condition	Due to development
Tree No.	T3, T5 & G3	T2	T1, T4, G2 & G3 (3 trees)	G1 & G4

5.0 Mitigation Proposals

5.1 Property Construction

5.1.1 As shown above, the Impact Table raises concern of the proximity of the development to T2 and the effect the proposals would have on the safe useful life expectancy of the tree.

- 5.1.2 This impact can be reduced should the following design principal be implemented: -
- The building should have a designed foundation to reduce the amount of excavation required for its construction. This can be achieved by constructing the extension with a pile and beam foundation.
- 5.1.3 If the above foundation is implemented and in general the ground levels remain the same the only detrimental effect the proposals would have on this tree would be slight root severance in localised areas which would allow the successful retention of the trees.

5.2 Car Parking Construction in Relation to G3

- 5.2.1 The impact table shows a minor encroachment into the root protection area of G3. It is felt that due to the age, species and only minor encroachment of the development it is felt that the proposals can be implemented without the requirement for any special surfaces.

5.3 Replacement Tree Planting

- 5.3.1 Due to the loss of the trees identified in the Impact Table, it is proposed that along with the general soft landscaping for the development, further more substantial supplementary tree planting will support the application.
- 5.3.2 This will have a number of benefits for the development and the character of the area. These being:-
- Give a greater diversity of age class on the site; increasing sustainability.
 - Give a greater diversity of species and therefore wildlife habitat.

6.0 Conclusions and Arboricultural Recommendations

- 6.1 The tree categorisation method identifies the quality and value of the existing tree stock but it is not meant to be interpreted rigidly and is presented in order to form a balanced judgement on tree retention and removal.
- 6.2 A precautionary method of working near trees is detailed in the accompanying Arboricultural Method Statement.
- 6.3 Following site development, regular (annual or biannual) inspections of all retained trees should be undertaken by a qualified arboricultural consultant.
- 6.4 It is considered that in following the advice in this document, any negative factors affecting trees on the site will be minimised.

Appendix One

Tree Survey Schedule

Arboricultural Implications Study- The Bridge Inn, Childwall

TREE SURVEY SCHEDULE

Arboricultural Data Sheet: The Bridge Inn, Childwall					Date of Survey: 10/04/15				Surveyor: J. Barnes				
Tree No.	Species	DBH (mm)	Height (m)	Age	Crown Spread (m)				Crown clearance	Condition rating	Comments and preliminary management recommendations	Estimated remaining contribution	Tree quality category rating
					N	E	S	W					
T1	Lombardy poplar	1400	25	OM	4	4	4	4	5	3	An individual specimen with reasonable form covered with ivy situated in an area of scrub adjacent to domestic property. Mallet sounding indicated that the stem is hollow. Fell subject to ecological assessment	0-10	U
T2	Hawthorn (off-site)	120 Est.	12	M	6	5	4	4	1.5	2	An individual specimen with reasonable form situated in the garden of an adjacent property separated from the site by a wall, with low branches hanging into the footpath and part of the site. Crown lift to 3m.	20-40	C1
T3	Pear (off-site)	250 Est.	4	EM	1	1	1	1	2	3	An individual specimen with poor form situated in the garden of an adjacent property separated from the site by a wall. Tree has been previously heavily reduced to 3m.	0-10	C2
T4	Silver Birch	200, 230	14	SM	4	4	4	1	2	3	An individual tree that appears to be self-seeded as it has established in a thin layer of soil on the surface of the tarmacked area. Extensive root damage was evident therefore future stability compromised. Fell	0-10	U

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					N	E	S	W					
T5	Oak	680	10	M	5	5	5	5	3	2	An individual specimen with reasonable form situated on the south boundary adjacent to a tarmacked area and neighbouring domestic property. An old wound was located at 4m with no significant decay present. Dead wood was present in the upper crown. Crown clean and monitor annually.	40+	B1
G1	Lime x3	500 Avg.	18 Avg.	M	-	-	-	-	1.5	2	A single species linear group with reasonable form situated on the west boundary in scrub with low branches. The inspection was limited as the stems could not be accessed due to dense bramble. Crown lift to 3m.	20-40	B1
G2	Hawthorn	120 Avg.	6 Avg.	M	-	-	-	-	0	2/3	A single species group with poor form situated on the west boundary. The trees are suppressed by extensive ivy growth. Fell.	0-10	U

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					N	E	S	W					
G3	Lime x26 & Hawthorn x1	400 Avg.	18	M	-	-	-	-	1.5	2/3	A mostly single species linear group with reasonable form situated in scrub along the south boundary also adjacent to domestic property. Some trees have co-dominant stems and cankers that do not yet present structural concern. Two dead trees were noted- one Lime to the west of the group and one Hawthorn noted on the plans. Many of the trees had low branches and epicormic growth. Fell three dead trees. Crown lift group to 3m, remove epicormic growth and monitor trees annually.	20-40	B1
G4	Sycamore x3	400 Avg.	16 Avg.	M	-	-	-	-	4	2	A single species group with reasonable form situated in scrub and adjacent to parking and neighbouring properties. Again, the inspection was limited as the stems could not be accessed due to dense bramble.	40+	C1

Appendix Two

Tree Survey Key

Arboricultural Implications Study- The Bridge Inn, Childwall

Trees for removal				
Category and definition		Criteria		
Category U 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, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other R category trees (i.e. 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 (e.g. Dutch elm disease), or very low quality trees suppressing adjacent trees of better quality Note – Habitat reinstatement may be appropriate (e.g. R category tree used as a bat roost: installation of bat box in nearby tree).		
Trees to be considered for retention				
Category and definition		Criteria - Subcategories		
		1 Arboriculture values	2 Landscape values	3 Conservation values
Category A Those of high quality and value: in such a condition as to be able to make a substantial contribution (a minimum 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 arboriculture features (e.g. 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 (e.g. avenues or other arboricultural features assessed as groups)	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood pasture)
Category B Those of moderate quality and value: those 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 (e.g. presence of remediable 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 arboriculture features (e.g. trees of moderate quality within avenue that includes better, A category specimens), or trees situated mainly internally to the site, therefore individually having little impact on the wider locality	Trees with clearly identifiable conservation or other cultural benefits
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 150 mm		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
Note - Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150 mm should be considered for relocation				

Age Class

Y	Young	Trees that have not yet established
SM	Semi-Mature	Established trees up to 1/3 of expected height and crown
EM	Early mature	Between 1/3 and 2/3 expected height and crown
M	Mature	Between 2/3 and full expected height and crown
FM	Fully Mature	Full expected height and crown
OM	Over-Mature	Crown beginning to break up and decrease in size
S	Senescent	Crown in advanced stage of break-up






Condition

1	Good
2	Fair
3	Poor
4	Dead

Appendix Three

Plans



-  Category A trees
-  Category B trees
-  Category C trees
-  Category U trees
-  Root protection area



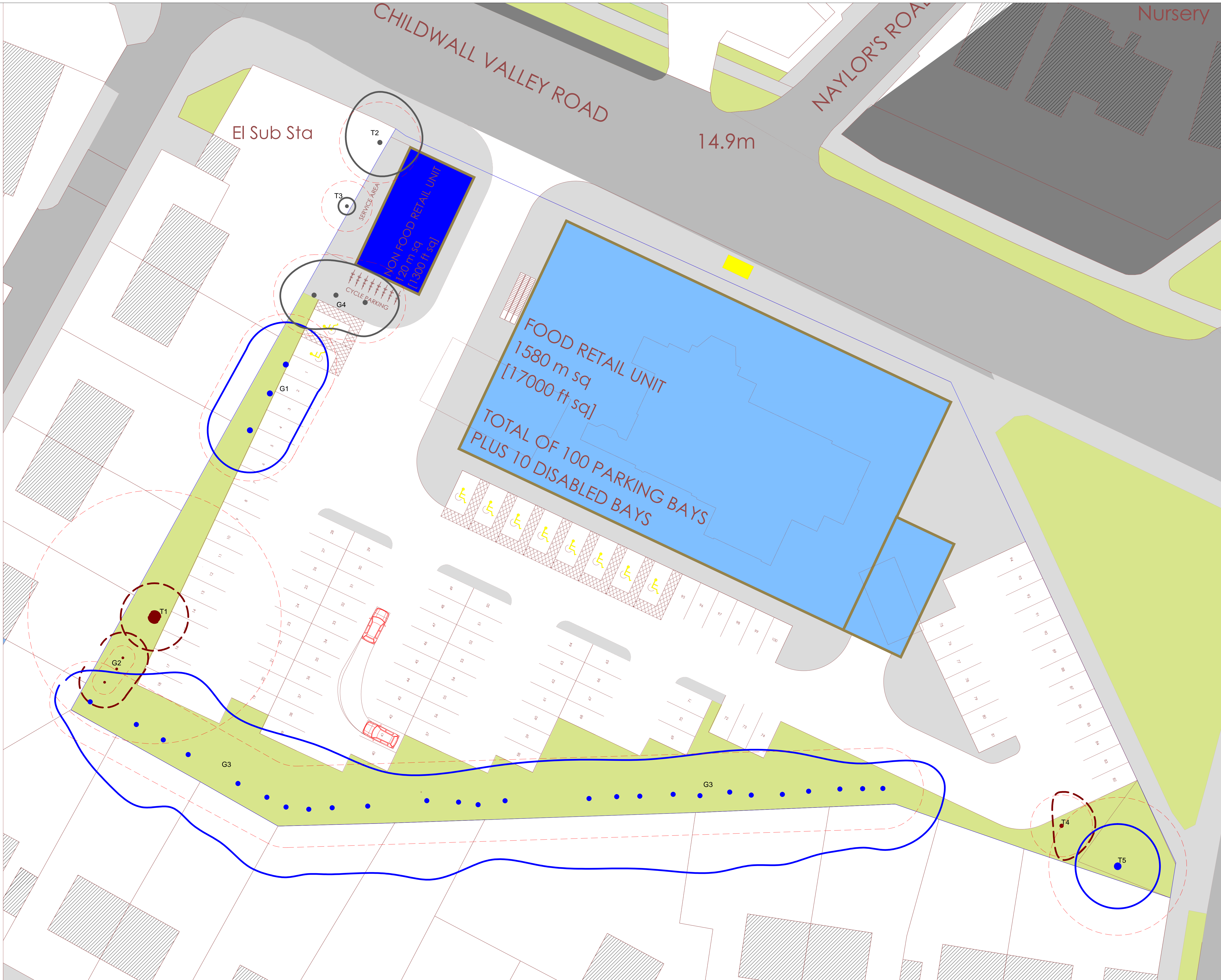
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Client:
CLAMCO Ltd

Site Address:
14-123 The Bridge Inn
Childwall Valley Road
Liverpool

Drawing Title: BS 5837 Plan	Drawing No: 15/00007(2)
Date: 10/04/15	Scale: 1:200 @ A1
Drawn by: JB	

Note: Dimensions are not to be scaled from this drawing.
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- Category A Trees
- Category B Trees
- Category C Trees
- Category U Trees
- Root protection area

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Client:
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Site Address:
The Bridge Inn
Childwall Valley Road
Liverpool

Drawing Title: AIA Plan	Drawing No: 15/00007
Date: 06/09/2016	Scale: 1:200@A1
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