



LidI GB Limited Church Road North, Wavertree L15 6TF

BS5837 Survey



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Church Road North, Wavertree L15 6TF

BS5837 Survey

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Cover Photo - view looking at the north aspect of the structure at Church Road North, Wavertree. The trees in the image are T2 and G1.

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1 SUMMARY

This report presents the findings and recommendations of a British Standard (BS) 5837 arboricultural survey for proposed retail development on land at Church Road North, Wavertree L15 6TF.

As an overview, individual trees on and adjacent to 'the site' are limited in number, considered to be semi-mature, poorly managed and of low quality.

The majority of trees are Category U trees with an estimated remaining life expectancy of less than 10 years in their current location. Most are considered to be in a poor structural condition and provide a limited contribution to the overall landscape setting as well as other benefits such as amenity, shade and biodiversity.

An outline method statement for construction works in relation to any retained trees is prescribed. Once the layout, services and construction compounds are fixed a more detailed arboricultural statement can be formulated.

Should trees be retained, it is recommended that a suitably qualified arboricultural consultant periodically visits prior to site clearance and during the construction programme to monitor and provide guidance on tree protection measures.

Mitigation to offset the loss of any trees has also been briefly outlined in Section 4, with particular emphasis on the site boundaries.

Any vegetation proposed for removal/management should be given due consideration with regards wildlife, in particular breeding birds.

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2 INTRODUCTION

This report has been prepared in respect of arboricultural related planning considerations for retail development at Church Road North, Wavertree L15 6TF (hereafter referred to as 'the site').

As the proposal relates to proposed construction works, the advice is produced in accordance with British Standard 5837: 2012 'Trees in Relation to Design, Demolition and Construction – Recommendations' (hereafter referred to as BS5837).

The scope of BS5837 is to provide guidance on how trees and other vegetation (where possible) can be integrated into construction and development design schemes. The overall aim is to ensure the protection of amenity trees which are appropriate for retention.

This report has been produced in accordance with BS5837 and is intended to demonstrate 'the site's' realistic arboricultural constraints and assist with the design process. The objective is to systematically assess and provide suitable recommendations regarding the potential impact of the proposals on trees and *vice versa*¹.

Following instruction (via Lidl GB Limited), the arboricultural consultant (Mr Donald Kernott Tech ArborA) surveyed the site on Monday 1st June 2020. As instructed, all trees on and around 'the site' boundary were assessed from ground level and plotted either as an individual tree or tree group.

No Tree Preservation Order (TPO) information has been sought as part of this report.

The survey data and site observations have been used to illustrate 'the site's' arboricultural restrictions in the form of a Tree Constraints Plan (TCP); the tree survey data are presented in **Appendix A** and the TCP takes the form of **Figure 2**; both should be read in conjunction with this report.

¹ Any and all information supplied by/on behalf of the client is assumed to be accurate unless otherwise informed. This advice is limited to the observations made on the date of the inspection as detailed herein and any deletion, editing or alteration will result in the advice becoming obsolete in its entirety. This advice may be considered obsolete if remedial works are undertaken on any area of the site on or after the date of the survey. No liability is assumed by the author for any misuse, misinterpretation or misrepresentation of this advice. This advice is not valid in adverse or unpredictable weather conditions or for any failure due to 'force majeure' or unpredictable events. No responsibility is assumed by the author of this advice for any legal matters that may arise as a consequence. The author will not be required to attend court or give testimony as part of this agreement. The responsibility for any works undertaken on the basis of the recommendations of this advice does not form part of this agreement.



3 SITE INFORMATION AND TREE ASSESSMENT

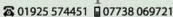
'The site' centre is located at Grid Ref: SJ3927 8937 (see **Figure 1**) lying at the junction of Church Road North and the B5178 Childwall Road, Wavertree, Liverpool L15 6TF.



Figure 1: shows location of 'the site with indicative red line site boundary.

'The site' is located in a predominantly urban residential/commercial area. 'The site' comprises a large four-storey brick-built structure with associated parking and limited landscape planting (see **Cover Image**). 'The site' was until recently occupied by the Cooperative Society supermarket with a closed snooker hall upstairs. Before that it was understood to have been a bingo club, Lennon's supermarket and originally the Abbey Cinema, constructed circa. 1939.

'The site' requires consideration from an arboricultural perspective due to the presence of trees within and adjacent to the boundaries and therefore potentially within impacting distance of the proposals. From discussions with Lidl GB Limited it is understood there are proposals to largely clear the site and develop a retail premises with associated parking and landscaping.





RESULTS AND RECOMMENDATIONS

The following results and recommendations, as with the prior contents of this report, should be read in conjunction with the tree data table in Appendix A and Figure 2.

To the north of 'the site' T1 an Elder Sambucus nigra appears to be self-set, unmanaged and adjacent to the structure. It is leggy and of poor form with broken branches beneath. T2, a Cherry Prunus sp. was probably planted originally for ornamental purposes. It is multi-stemmed from the base, unmanaged and of poor form, it exhibits broken limbs. G1 in a raised planter is again likely planted for ornamental reasons. It has two Cherries and two (likely) self-set Elder. All exhibit an approximately 10° lean eastwards and are poorly managed. One Cherry has some dieback in the crown and Elders show broken stems.

In the south-west corner of 'the site' G2 and T3 are planted in raised planters and of ornamental character. G2 has two multi-stemmed Norway Maple Acer platanoides and a small Cherry is crowded out by a Norway Maple. The Maple are in a fair condition and represent the principal offerings 'the site' has in terms of the tree population. T3, another Cherry is also multi-stemmed from the base and exhibits dieback in the crown. There is some scrubby Ash Fraxinus excelsior, Elder and Sycamore Acer psuedoplatanus underneath.

Overall, the majority of the trees contribute little to the overall landscape setting of the location and provide limited amenity, shade and biodiversity benefits.

It is considered that none of the trees appear to provide potential for protected species such as roosting bats, however, the habitat is suitable for certain nesting birds. Should vegetation require removal or significant management during the bird breeding season (March to September inclusive) then a suitably qualified ecologist must be engaged to provide an appropriate level of advice.

Should a landscape scheme be developed as part of wider proposals then it is recommended that appropriate tree and shrub planting be concentrated at the boundaries to provide benefits to the wider urban setting.

The appropriateness of trees/shrubs for planting and their ongoing management in space constrained urban environments should be given careful consideration. Future proofing in the form of small to medium sized native trees that would be tolerant of such locations could include; Field Maple Acer campestre, Rowan Sorbus aucuparia, Hornbeam or Silver Birch Betula pendula, in particular fastigiate forms, where available may lend themselves more favourably to any landscape design scheme. Medium sized non-native trees such as Chanticleer Pear Pyrus calleryana 'Chanticleer', Sweetgum Liquidambar styraciflua or Maidenhair Gingko biloba are all relatively tolerant of harsh urban environments and would provide reliable alternatives/replacements to native trees.

The design and layout of 'the site' should where possible incorporate the components of any retained trees (crown and rooting area) and provide a suitable level of clearance to allow for their long term safe retention.

The location of trees, should they be retained, indicates that restrictions to construction movements and processes to protect crown and rooting area will be required. Therefore should



it be required, it is necessary to advise and emphasise tree protection by site management, temporary fencing and monitoring as part of the works, i.e;

- Induction of construction personnel regarding the exclusion of works (including access and storage) from the retained trees Root Protection Areas (RPAs);
- Secure temporary barrier fencing around the site to exclude the retained trees RPAs from the working site;
- The storage of materials clear of all retained trees and conditions to ensure no contamination/run-off into soils in proximity of trees; and
- Periodic visits by a suitably qualified arboricultural consultant prior to site clearance and during the construction programme to monitor and provide guidance on tree protection measures.

In relation to trees to be potentially retained as part of any proposal, there are a number of construction/management issues which need to be addressed in order to ensure their ongoing and safe amenity/environmental contribution.

Prior to works commencing, construction contractors must submit a method statement providing consideration for retained trees RPAs (see **Figure 1**). The method statement should ensure avoidance of any works within the RPAs in order to ensure the protection of existing growing conditions. Specific attention must be made to tree protection measures as detailed in BS5837. The protected area should be regarded as sacrosanct. Once installed, barriers and ground protection should not be removed or altered without prior recommendation by the project environmental consultant and, where necessary, approval from the local planning authority.

British Standards permit the reproduction of two diagrams known as Figure 2 and Figure 3 from BS5837 to ensure that the standard is complied with. These diagrams are presented in **Appendix B** and comprise a tree constraints plan and a fencing plan. However, there are other methods of fencing that could be considered more appropriate and these could be reviewed as part of any detailed arboricultural method statement.

It is *sometimes* possible to undertake construction activities within the rooting areas of retained trees which will require greater attention to the tree protection measures, foundation designs, phasing of works and construction processes, etc. If it is proposed to undertake works within these areas, more specific advice should be sought from a suitably qualified arboriculturalist with a view to forming a suitable arboricultural method statement.

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5 CONCLUSIONS

This report has been produced in accordance with BS5837 and is intended to demonstrate 'the site's' realistic arboricultural constraints and assist with the design process of any proposed development. The objective is to systematically assess and provide suitable recommendations regarding the potential of the proposed development to impact on trees and *vice versa*.

The majority of trees are Category U trees of low quality with an estimated remaining life expectancy of less than 10 years in their current location. Most are considered to be in a poor structural condition and provide a limited contribution to the overall landscape setting as well as limited benefits such as amenity, shade and biodiversity.

In conclusion, it is recognised that it is unlikely that trees within 'the site' can be retained due to proposals requiring built structures and associated parking in the majority of the site.

Mitigation to offset the loss of any trees and enhance the general setting has also been suggested and should be considered within any new layout, particularly along the site boundaries and specifying robust appropriate species.

An outline method statement for construction works in relation to any retained trees is prescribed. Once the layout, services and construction compounds are fixed a more detailed arboricultural method statement may need to be formulated.

In addition, should any trees be retained, it is recommended that a suitably qualified arboricultural consultant periodically visits prior to site clearance and during the construction programme to monitor and provide guidance on tree protection measures.

Any vegetation proposed for removal/management should be given due consideration with regards wildlife, in particular breeding birds and removed outside of the breeding bird season (March to September inclusive).

Any tree felling or pruning works should be undertaken in reference to BS3998:2010.



6 **REFERENCES**

BS5837:2012 Trees in relation to design, demolition and construction – Recommendations. British Standards Institutution.

BS3998:2010 Tree Works - Recommendations. British Standards Institution.

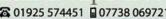
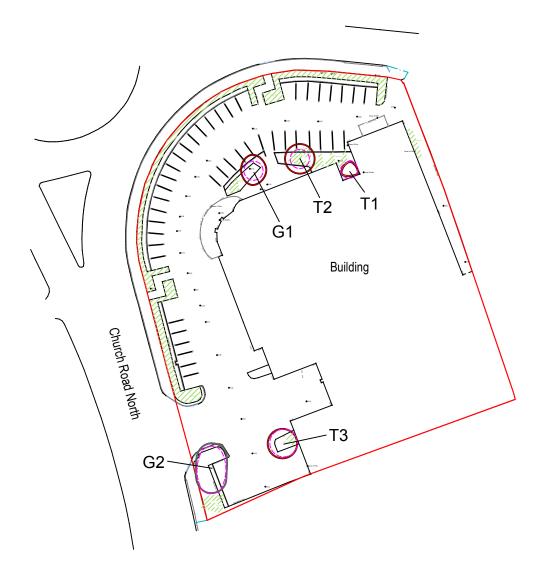




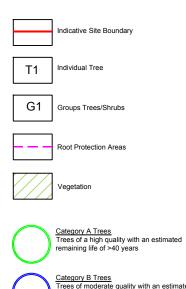
Figure 2

Figure 2: Tree Constraints Plan





KEY





Category C Trees
Trees of low quality with an estimated remaining life of at least 10 years or trees with stem diameter <150mm

Category U Trees
Cannot realistically be retained as living trees in context to current land use for >10 years





Appendix A

Tree Schedule



Tree Survey in accordance with BS5837:2012 'Trees in Relation to Design, Demolition and Construction – Recommendations'

KEY

TPO/CA - On client request: presence of Tree Preservation Orders (TPO) or Conservation Area (CA) designation.

Tree Ref No. - Tree reference number: tag or plan number (T - individual tree, G - group of trees/shrubs);

Species - Genus, species and/or common name;

Age - Age classification (Y - young, SM - semi mature, M - mature, OM - over mature, V - Veteran);

Height (in m) - Approximate height of tree in metres;

Canopy (in m) N - S - E - W - Approximate branch spread in metres of the four principal compass points;

Stem (in mm) - Stem diameter in millimetres: measured at 1.5 metres above ground level for single stem trees and ground level for multi-stemmed trees;

Clearance (in m) - Height in metres of crown clearance above the adjacent ground level;

Vitality - A measure of physiological and structural condition typically (good, fair, poor, dead);

- G = good no apparent problems
- $\mathbf{F} = \mathbf{fair} \mathbf{minor}$ problems
- P = poor major problems
- D = dead

Estimated Remaining Contribution - Approximate number of years the tree will continue to make a contribution without the need for oppressive arboricultural intervention, categorised in years as <10, 10-20, 20-40 and >40;

BS Categorisation - BS5837 tree quality assessment category: resulting from structural/physiological condition and remaining contribution (approximate useful life expectancy);

- Standard retention category **U**: in such a condition that any existing value would be lost within 10 years, though there may be an existing conservation value;
- Standard retention category **A**: high quality and value, in such a condition as to be able to make substantial contribution of 40+ years;
- Standard retention category **B**: moderate quality and value, in such a condition as to make a significant contribution of 20+ years;
- Standard retention category C: low quality and value, currently in adequate condition to remain until new planting could be established 10+ years;
- Standard retention sub-category, mainly due to: 1- Arboricultural values, 2- Landscape values, 3- Cultural values, including conservation;

RPA (in m²) - Root Protection Area: calculated as a function of the stem measurement (single stem/multiple stem variant, as outlined within BS5837);

'* ' - Within the survey schedule denotes an estimate

BS5837:2012 Tree Schedule

Client - Lidl GB Limited

Site - Church Road North, Wavertree L15 6TF

Tags - N/A

Ref - LEL CRN L156TF BS5837 REV A

Inspector: Mr Donald Kernott Survey Date: 01/06/20

* denotes unable to access - all data estimated without close inspection

Tree No	Species	Grid Reference	Height (m)	Stem dia. (mm)	Crown Spi	Height of ad Crown Clearance (m)	Age Class	Structural Condition	Physiological Condition	Additional Notes	Estimated Remaining Contribution (years)	Retention Category	RPA (m²)
T1	Elder	SJ	3	<150	N	0.25	SM	Poor	Fair	adjacent to & constrained by structure	<10	U	10
	Sambucus nigra	3927			s 0	5				self-set with poor form			
	944-17	8939		l .	E 1	5				unmanaged - leggy			
					W					broken branches beneath			
T2	Cherry	SJ	4	170	N	0.25	SM	Poor	Fair	multi-stemmed from base	<10	U	13
	Prunus sp.	3989		l .	S					ornamental			
	AND	2639		l .	E					unmanaged - broken limbs			
					w					477			
G1	Cherry x2	SJ	4.5	190	N	1	SM	Poor	Fair	Cherry ornamental, Elder likely self-set	<10	U	17
	Elder x2	3989		max.	s					approx 10° lean east	1		
		2539		l .	E					dieback in x1 Cherry + dead stems in Elder	1		
					w					in raised planter			
G2	Norway Maple	SJ	5	210	N	2	SM	Fair	Fair	Maple multi-stemmed from base	>10	С	20
	Acer platanoides	3924		max.	s		24 (55,00)			small Cherry crowded out by Maple			
	Cherry	8932		l .	E					in raised planter	1		
					W					Laurel P. laurocerasus beneath Maple to S			
	C.	61	1	240	272 8	2.5	61444			multi-stemmed from base + constrained by wall	40	199	27
T3	Cherry	V		240 N	N	2.5	SM-M	Fair	Poor	to east - in raised planter	<10	U	27
		3926		l	S					ivy into lower crown	l		
		8933		l	E					exhibits dieback			
-					W					scrubby ash, elder & sycamore under			1

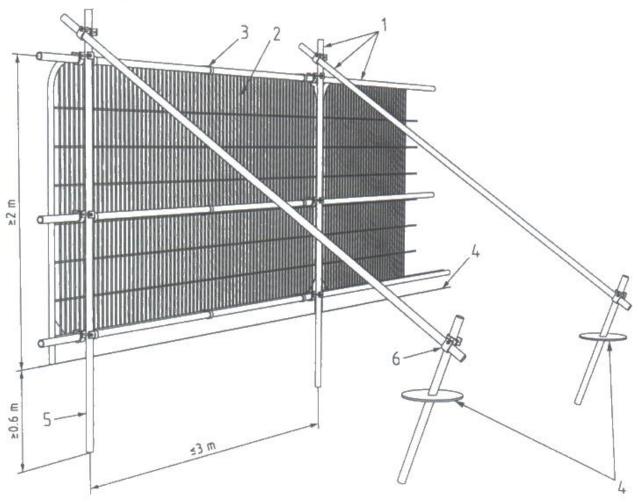


Appendix B

Tree Protection Fencing

BRITISH STANDARD BS 5837:2012

Figure 2 Default specification for protective barrier

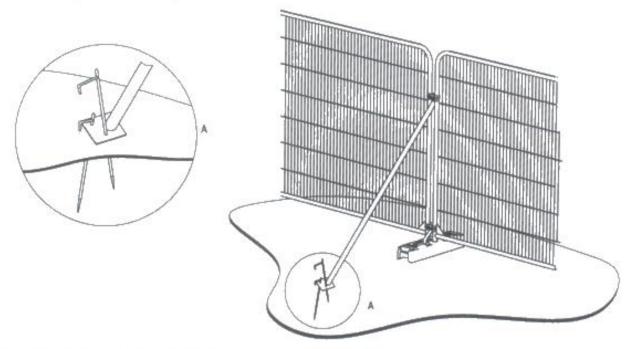


Key

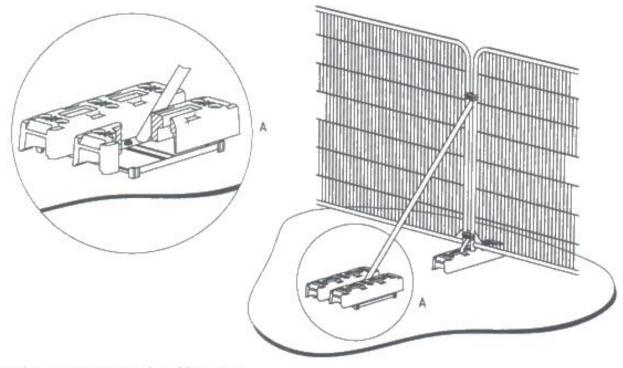
- 1 Standard scaffold poles
- 2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
- 3 Panels secured to uprights and cross-members with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6 m)
- 6 Standard scaffold clamps

BRITISH STANDARD BS 5837:2012

Figure 3 Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray