

# Arboricultural Impact Assessment



**Homebase, Waltham Cross**

**13<sup>th</sup> April 2021**



**Tyler  
Grange**

TG Report No. 13452\_R01a\_JJ\_MM

<b>Report No:</b>	<b>Date</b>	<b>Revision</b>	<b>Author</b>
13452_R01a	13 <sup>th</sup> April 2021	A	Jack Jewell BA (Hons) MLA CMLI

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## Summary

- S.1. This report has been prepared by Tyler Grange Group Limited (TG) to accompany a planning application for the proposed refurbishment, extension and external alterations to existing non-food retail unit to enable it to trade as part foodstore and part non-food retail unit, alongside modifications to existing external garden centre, car parking layout, and other associated site works at the existing Homebase development off Sturlas Way, Waltham Cross, hereafter referred to as 'the site'.
- S.2. The report sets out the baseline findings of a BS5837 Tree Quality Survey and confirms the retention of existing tree cover across the site boundaries following completion of the proposed works.
- S.3. The site's tree cover comprises a mix of moderate value (Category B) boundary trees interspersed with tracts of low quality (Category C) stock. The surveyed trees are influenced by the existing developed land use within the site and represent ornamental trees and structure planting as part of the existing car park edge soft landscaping and screening vegetation.
- S.4. The proposed development proposes the removal of a single boundary tree (T1) owing to the specimen's poor structural condition but retains all other existing trees given that the proposals relate largely to internal works and reconfiguration of existing parking areas.
- S.5. The site will be enhanced by introducing native scrub mixes in place of existing ornamental planting on the eastern boundary. There will also be new landscaping in the north-western corner of the site, in the form of native hedge and shrub planting. The tree proposed for removal on safety grounds at the north-eastern corner of the site (Tree T1), will be replaced by a new tree at the north-western corner of the site (as part of the new pocket of native planting).
- S.6. It is recommended that a detailed Arboricultural Method Statement is prepared in accordance with a suitably worded pre-commencement planning condition to provide details in terms of protecting retained trees within influence of the site during the course of the proposed development.



# Section 1: Introduction

- 1.1. This Arboricultural Impact Assessment (AIA) has been prepared by Tyler Grange Group Ltd (TG). It sets out the findings of a tree survey and associated assessment of development impacts in relation to a proposed refurbishment, extension and external alterations to existing non-food retail unit to enable it to trade as part foodstore and part non-food retail unit, alongside modifications to existing external garden centre, car parking layout, and other associated site works at the existing Homebase development off Sturlas Way, Waltham Cross, hereafter referred to as 'the site'.
- 1.2. The objective of the development proposals is to modify, refurbish and extend the existing non-food retail unit on Sturlas Way in order to enable joint occupation by both Aldi Stores Ltd and Homebase. This will enable Aldi to make a positive investment within Waltham Cross town centre, whilst retaining the home improvement retail offer of Homebase and the existing benefits this brings to the area. The reduced size of Homebase's unit will be more commensurate with their future business requirements and will safeguard the viability of their operation. Given its town centre location the site is both sustainably and accessibly located to the surrounding residential areas that it will serve. The introduction of Aldi at the northern end of the high street will provide an important convenience retail anchor for Waltham Cross town centre which will help drive footfall and spin-off trade for existing businesses, thereby enhancing the centre's overall vitality and viability.
- 1.3. The purpose of this report is to:
  - Set out the findings of a baseline / pre-development tree survey of the site which has been undertaken in accordance with British Standard BS5837:2012 'Trees in Relation to Design, Demolition and Construction – Recommendations' (hereafter referred to as BS5837); and
  - Provide an assessment of the development layout / landscape proposals (see Appendices 5 and 6) and the implications for development in relation to the retained tree cover within the site to inform the overall planning balance.



## Section 2: Baseline Information

### Site Description

- 2.1 The site measures 1.23ha and occupies the existing Homebase development, including garden centre, service yards and associated parking areas. It is located off Sturlas Way, south of the A121 Winston Churchill Way in Waltham Cross, Broxbourne, London. The land surrounding the site comprises a mix of residential and commercial development.
- 2.2 Existing vegetation is limited to ornamental boundary stock and structure planting comprising a mix of car park edge trees (T1, T2, G1) with a linear belt of screen planting (G2) present to the southern site boundary. G2 (see Photo 1 below) has been crown lifted across the site-side lower canopies to reduce vehicular strike along the adjoining service yard access route. Some thinning and dieback is noted to the lower canopies with an opportunity to strengthen the boundary cover through the re-stocking of shade tolerant understorey planting.



**Photo 1** – G2 (southern site boundary Cypress screening belt)





- 2.3 The site occupies hard standing with some incidental planting beds and grassed verges. Existing tree cover is influenced by the site's developed land use with concrete and retaining structures occupying much of the surveyed rooting environment. T1 (Alder) is contained to the site-side by a low brick retaining structure which has been damaged as a result of heave and stem exertion (see Photo 2 below). The tree itself is leaning notably to the north and east and is proposed for removal and replacement owing to the reduced future contribution.



**Photo 2 – T1 (illustrating existing damage to retaining structure to site-side base)**

- 2.4 G3 to the west comprises largely naturalised trees to the rear gardens of properties off Leven Drive.
- 2.5 The site lies within the planning remit of Broxbourne. Local planning policies applicable to trees and hedgerows are summarised at Appendix 1 to the rear of this report.



## Tree Survey Summary

- 2.6 A full tree survey of the site was undertaken in September 2020.
- 2.7 The survey was completed in accordance with BS5837 and the methodology as detailed at Appendix 2 to the rear of this report. In accordance with the above recommendations, the tree survey included all trees within / in influence of the site and the site boundaries that were over 75mm diameter at breast height (dbh).
- 2.8 Measured topographical survey data was used to inform the locations and surrounding context of the sites individual and groups of trees. Any trees not included within the topographical survey have been approximated using measurements taken during the tree survey and further informed by aerial photography.
- 2.9 A total of 2no. individual trees and 3no. groups of trees were identified during the tree survey of the site. The survey findings are illustrated on the Tree Constraints Plan (TCP 13452/P01a) located at the rear of this report. The TCP shows the distribution of the trees surveyed together with details of their constraints to new development in accordance with BS5837, including:
- Tree Quality Gradings;<sup>1</sup>
  - Root Protection Areas (RPA's);<sup>2</sup>
  - Tree canopy spreads;<sup>3</sup>
  - Tree Shading.<sup>4</sup>
- 2.10 Findings for each of the tree groups surveyed are detailed in the Tree Survey Schedule (see Appendix 4). This provides a tabulated record of the trees surveyed, including reference numbers, species composition, tree dimensions, life stage, physiological and structural condition, and the arboricultural value of each survey entry.

## Tree Grading Summary

- 2.11 The trees surveyed have been categorised using the 'cascade chart for tree quality assessment' (see Appendix 3) recommended by the BS5837. Grading subcategories (1, 2 and 3) are intended to reflect the arboricultural, landscape and cultural values, respectively. The grading system allows informed decisions to be made concerning the design and impact of potential development in relation to the arboricultural value of the trees surveyed.
- 2.12 Surveyed trees groups comprise a mix of Low Value (Category C) and Category B (Moderate Value / Quality) trees with no 'Category A' (High Value / Quality) specimens being present.

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<sup>1</sup> The value of arboricultural features surveyed in accordance with the methodology set-out in Appendix 3.

<sup>2</sup> A layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority. See further explanation at Appendix 3.

<sup>3</sup> Dimensions of the trees crown spread and clearance from ground level. See further explanation at Appendix 3.

<sup>4</sup> Shade cast by existing trees which may affect the availability of sunlight and daylight within a new development. See further explanation at Appendix 3.





- 2.13 Category C trees represent largely unremarkable examples in terms of species, quality, context and condition. Category C trees are denoted by a Grey tree canopy outline as illustrated on the TCP. These provide limited or transient benefits in the existing site context which may be readily replaced.
- 2.14 Category B trees are denoted by a 'Blue' tree canopy outline as illustrated on the TCP. Category B trees include specimens or groups with notable maturity and / or good future potential, whilst not representing a tree or groups of trees with any particularly distinctive distinct arboricultural functions or merit.

### **Tree Preservation Orders**

- 2.15 As shown on the Broxbourne Interactive Planning map online, no trees within influence of the site are covered by a Tree Preservation Order (TPO).
- 2.16 The site does not lie within a Conservation Area. No ancient or Veteran trees or woodlands are present on nor in the vicinity of the site.



## Section 3: Arboricultural Impact Assessment

- 3.1. This Arboricultural Impact Assessment is informed by a composite of the tree survey findings and the proposed layout drawings (see Appendix 5) and soft landscape proposals (see Appendix 6) which have been prepared by The Harris Partnership and Vector Design Concepts in conjunction with the wider project team.
- 3.2. The development proposals will involve the following works:
  1. External alterations to the elevations of the existing non-food retail unit (including the creation of two shop fronts on the northern elevation) in order to form two adjoining retail units.
  2. The use of part of the existing floorspace (i.e. one of the new units) as a foodstore to be occupied by Aldi stores Ltd (1,756 sq.m GIA / 1,262 sq.m net). Aldi's introduction will involve the construction of a new loading dock extension to the building's eastern elevation and the removal of Homebase's existing customer entrance.
  3. Introduction of a non-food mezzanine floor of 962 sq.m GIA to the second unit, which will continue to be occupied by Homebase. The ground floor of this unit will extend to 1,735 sq.m.
  4. Modifications to existing 'garden centre' to the west of the Homebase unit (reduced size - 768 sq.m).
  5. Associated physical works to the existing car park and site layout (delivering 168 spaces).
- 3.3. The Tree Retention Plan (Ref. 13452/P02a) located to the rear of this report confirms that a single specimen (T1), which is located on-site, will be removed on safety grounds owing to poor arboricultural condition. The removal of the tree is also required in order to undertake localised public realm works to fix the damaged boundary wall and pedestrian highway.

### Works within Root Protection Areas

- 3.4. Given the presence of existing hardstanding across the site, any retained vegetation to the edges of the proposed scheme will have adapted to an existing developed context. Works towards the periphery of the site and adjacent to retained tree cover can adopt a sensitive construction methodology including the use of hand tools to break up areas of existing hardstanding to sensitively work around any significant tree roots that may be extending into the construction area from off-site. A process of monitored manual excavation will be required within the RPAs in such instances to safeguard any tree roots that may be encountered, but this is not considered to pose a significant risk given the limited condition and age or the surrounding tree cover within influence of the site and the presence of existing hardstanding.
- 3.5. A sensitive construction methodology will be required, outlining how contractors will deal with any significant roots found during initial hand tool exploratory excavation works, including the possibility of pruning minor roots deemed acceptable by an appointed arboricultural consultant who will be required to monitor such works under a specific clerk of works.
- 3.6. Tree Protection Measures will also be required during the construction phase, including protective fencing for the canopy and tree stem of all retained trees. Given that existing hardstanding is



present across many of the site-side RPAs this will serve to protect the root protection areas during construction where the existing sub-bases can be left in situ.

### **New Tree Planting Opportunities**

- 3.7. The proposed layout shows the provision of new trees and shrub bed planting, including enhancements to G1 which will be re-stocked with native specimens to maintain a habitat connection and presence of low-level screening across the eastern site boundary parking bays.
- 3.8. The proposed landscaping shown at Appendix 6 includes for the establishment of a new Silver Birch tree and length of hornbeam hedgerow at the north western corner of the site in conjunction with the new eastern boundary mixed species hedgerow planting. The proposals, in conjunction with the retention of existing surveyed trees (aside from T1), will offer a net-gain in on-site planting, whilst representing an opportunity to diversify and enhance the species selection and canopy coverage across the site.

### **Construction Mitigation**

- 3.9. As noted above, it will be necessary to demonstrate how the above and below ground structures of retained tree cover will be protected during the site preparation and construction phases of development in accordance with BS5837:2012. It is therefore recommended that a full Arboricultural Method Statement (AMS) is prepared as part of a reserved matters application, or to discharge applicable and suitably worded pre-commencement planning Conditions.
- 3.10. An AMS will set out a practical and robust strategy for the protection of retained trees for the site preparation, construction of the proposed access arrangement and the wider development works. The AMS scope would typically be agreed in writing with the LPA but is recommended to include:
  - a schedule and specification of any tree works;
  - specifications for barriers and ground protection;
  - procedures for any specialist construction techniques and any supervised excavations within RPAs;
  - phasing of work;
  - an auditable system of site monitoring; and
  - a Tree Protection Plan.



# Appendix 1: Planning Policy Context

A1.1 Under the Town and Country Planning Act 1990 (as amended) the requirement to consider trees as part of development is a material planning consideration and will be taken into account in the determination of planning applications. Applicable arboricultural planning policy that relates to the site is set out below at a National and Local level.

## National Planning Policy

A1.2 The National Planning Policy Framework (NPPF) is a material consideration in planning decisions and outlines the Government's planning policies for England, setting out how these are expected to be applied. The consideration for existing trees and woodlands in the context of planning and new development is set out within Section 15 'Conservation and Enhancing the Natural Environment'.

A1.3 Paragraph 170 provides a series of prerequisites to inform how planning policies and decisions should contribute to and enhance the natural and local environment. This includes "*protecting and enhancing valued landscapes*" and "*recognising the intrinsic character and beauty of the countryside*". The value of ecosystem services is also noted, including the "*economic and other benefits of the best and most versatile agricultural land, and of trees and woodland*".

A1.4 Paragraph 170 also recognises the consideration for "*minimising impacts on and providing net gains for biodiversity*". This includes the need to establish cohesive ecological networks that are "*more resilient to current and future pressures*".

A1.5 Paragraph 171 addresses the need to take a "*strategic approach to maintaining and enhancing networks of habitats and green infrastructure*" adding that plans should be made for the "*enhancement of natural capital at the catchment or landscape scale across local authority boundaries*".

A1.6 Paragraph 174 includes ways in which biodiversity should be protected and enhanced, such as plans that "*identify, map and safeguard components of local wildlife-rich habitats*", as well as "*wildlife corridors and stepping stones that connect them*".

A1.7 Paragraph 175 highlights a series of principles that local planning authorities should apply when determining planning applications, stating that "*if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused*".

A1.8 Paragraph 175 also adds that "*development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensatory strategy exists*".

A1.9 At a national level, the consideration for trees is recognised in the context of their contribution green infrastructure and biodiversity networks, and also in terms of their contribution in landscape terms to the local setting and character to a place. Great weight is also applied to the importance of conserving existing aged trees, including ancient woodland and trees and trees considered to be 'veterans'.



## Local Planning Policy

### Local Plan 2018 - 2033 (June 2020)

- A1.10 The Borough of Broxbourne Local Plan explains how land in the Borough of Broxbourne will be used and developed. It contains policies which the Council uses to determine planning applications.
- A1.11 **Policy DSC1 General Design Principles** states that The Council expects a high standard of design for all development. Wherever possible, development proposals must *“enhance local character and distinctiveness, taking into account: existing patterns of development; significant views; urban form; building typology and details; height; roof form; fenestration detail; materials; building lines and other setbacks; trees; landscaping; and features of local and historic significance”*. (TG emphasis).
- A1.12 The policy adds that *“significant natural features on site such as trees, waterbodies, habitats, etc. should be dealt with sensitively and retained where-ever possible.”*
- A1.13 **Policy NEB3 Green Infrastructure** states that *“The Local Plan will create a diverse, linked network of multi-functional green infrastructure. The network will be protected and enhanced for its biodiversity, recreational, accessibility, health benefits and landscape value, and for the contribution it makes towards combating climate change”* adding that development proposals should maximise opportunities for urban greening, including via *“the planting of street trees”*.
- A1.14 **Policy NEB5 Ancient Woodland, Protected Trees and Hedgerows** states that *“Development proposals which would result in the loss or deterioration of ancient woodland; or aged or veteran trees found outside ancient woodland; will not be permitted unless the need for, and benefit of, the development in that location is wholly exceptional”*. The policy adds that *“Replacement planting will be required if permission is granted to fell protected trees or hedgerows. Replacement specimens should, where-ever possible, be of an equivalent size and of similar species, in the same or most suitable location, and in sympathy with local landscape character. The Council will seek replacement with two trees if they are of a lesser species or size than the removed tree”*.
- A1.15 The proposed development does not require works to nor the removal or any Ancient Woodland, hedgerows, Protected Trees nor veteran specimens.





## Appendix 2: Methodology, Constraints, Mapping and Limitations

### Field Work

- A2.1 In accordance BS5837, the tree survey included all trees within / in influence of the site and the site boundaries that were over 75mm diameter at breast height (1.5m).
- A2.2 Measured topographical survey data (supplied by others) was used to inform tree locations their surrounding context. Any trees not identified on the topographical survey are prefixed with (\*) and their locations have been approximated using measurements during the tree survey and further informed by aerial photography where required.
- A2.3 The trees surveyed were visually inspected from ground level only. No invasive investigations or climbing inspections were necessary to confirm visual or audible signs of defect or debility and no tissue or soil samples were undertaken. For further clarification please refer to the tree survey explanatory notes in below.

### Tree Numbers

'T' prefixes have been used to identify individual trees and commence with 'T1'.

'G' prefixes have been used to identify groups of trees.

'H' prefixes have been used to identify hedgerows.

'W' prefixes have been used to identify woodlands.

### Species

- A2.4 Species are listed by their common name, both in the schedule and in the report text.

### Height and Stem Diameter

- A2.5 The stem diameter is measured at 1.5m above ground level and given in millimetres (mm). Tree heights are measured in metres (m) using a clinometer where access and land topography allowed. In instances where access to tree's stem and height measurements were not possible, the dimensions have been estimated by eye.

### Crown Spread and Height of Crown Clearance

- A2.6 Radial crown spread is measured in metres and is listed for each of the four cardinal points where access has been possible to obtain a measurement. Where access was not possible to measure the spread of the canopy, such distances have been estimated by eye or informed by aerial photography.
- A2.7 The measured canopy shapes have been plotted on the **Tree Constraints Plan** at the four cardinal points. For groups of trees, the extent of the canopy has been measured as an average across the group and plotted using the topographical survey mapping. In some instances, Tyler Grange will use aerial photography to inform the canopy spread



of larger tree groups and woodlands where topographical data is limited for such features.

A2.8 The distance between the ground level and the first significant branch or radial tree crown, whichever is the lower, has been measured in metres.

### **Age Class**

A2.9 The age of each tree is defined as follows:

**Young** - within the first third of reaching full maturity;

**Semi-Mature** - within the second third of reaching full maturity;

**Early-Mature** - within the last third of reaching full maturity;

**Mature** - specimen at full maturity; and

**Veteran** - tree that, by recognised criteria, shows features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.

### **Physiological and Structural Condition**

A2.10 The physiological or structural condition of each tree is defined as either; good, fair, poor or dead. For each tree, where appropriate, notes on the structural integrity are provided on form, taper, forking habit, storm damage, decay, fungi, pests, etc.

A2.11 An assessment of a tree's physiological condition is defined as:

**Good** - fully functioning biological system showing expectant vitality for the species i.e. normal bud growth, leaf size, crown density and wound closure.

**Fair** - fully functioning biological system showing below average vitality i.e. reduced bud growth, smaller leaf size, lower crown density and reduced wound closure.

**Poor** - a biological system with limited functionality showing clear physiological decline, disease or significantly below average vitality i.e. limited bud growth, small and chlorotic leaves, low crown density and limited wound closure.

**Dead** - tree observed to fully dead with no living parts.

A2.12 An assessment of a tree's structural condition is defined as:

**Good** - no significant structural defects.

**Fair** - structural defects which could be alleviated through remedial tree surgery or arboricultural management practices

**Poor** - structural defects which cannot be alleviated through tree surgery or arboricultural management practices.



## Tree Quality Gradings

A2.13 The value of trees have been assessed in accordance with the BS5837 Cascade Chart for Tree Quality Assessment (See **Appendix 3**). Grading subcategories (1, 2 and 3) reflect arboricultural, landscape and cultural values, respectively.

## Root Protection Areas

A2.14 The **Tree Constraints Plan** shows the approximate extent of Root Protection Areas (RPAs). The RPAs have been plotted and calculated in accordance with the methodology set out in Appendices C and D of BS5837, using the tree stem diameter dimensions obtained during the site visit.

A2.15 Plotted RPAs serve as a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.

A2.16 Where pre-existing site conditions or other factors indicate that rooting may occur asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution observed on-site. Any deviation in the RPA from the original circular plot should take account of the following factors whilst still providing adequate protection for the root system:

- a) the morphology and disposition of the roots, when influenced by past or existing site conditions (e.g. the presence of roads, structures and underground apparatus);
- b) topography and drainage;
- c) the soil type and structure; and
- d) the likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.

A2.17 The plotted RPAs have therefore informed the design of the proposed development where possible. While developing within RPAs should be avoided, special working methods can be adopted to alleviate the RPA disturbance for cases where the development is considered necessary and unavoidable.

## Tree Canopies and Shading

A2.18 The distribution of tree canopy cover on and within influence of the site is illustrated on the **TCP**. Canopies have been plotted at cardinal points for individual and groups of trees. The Tree Survey Schedule included at **Appendix 4** to the rear of this report lists the vertical clearance from site ground level to significant tree branching of individual trees. This measurement informs the impacts of accessibility and development beneath tree canopies.



- A2.19 The principal tree shadow constraints are shown on the **TCP** and have been plotted in accordance with BS5837 using the current height of surveyed trees. The indicative shade cast by existing surveyed trees signifies the area within which the amenity interests of shading, available daylight and the proximity of trees to any future site uses may be impacted upon should a tree be retained as part of development.
- A2.20 Where shading is unavoidable, the potential adverse impact of shadowing should also be reviewed on balance with the positive aspects of retaining a degree of canopy shade. BS5837:2012 (para. 5.3.4, a) NOTE 1) states that "shading can be desirable to reduce glare or excessive solar heating, or to provide comfort during hot weather. The combination of shading, wind speed/turbulence reduction and evapotranspiration effects of trees can be utilised in conjunction with the design of buildings and spaces to provide local microclimatic benefits".

### **Limitations**

- A2.21 The comments made are based on observable factors present at the time of inspection. Although the health and stability of trees in their current context is an integral part of their suitability for retention, it must be understood that this report is not a tree risk assessment and should not be construed as such. While every attempt has been made to provide a realistic and accurate assessment of the trees' condition at the time of inspection, it may have not been appropriate, or possible, to view all parts or all sides of every tree to fulfil the assessment criteria of a risk assessment.
- A2.22 No tree can be considered entirely safe, given the possibility that exceptionally strong winds could damage or uproot even a mechanically 'perfect' specimen. It is therefore usually accepted that hazards are only recognisable from distinct defects or from other failure-prone characteristics of the tree or the site. An assessment of the potential influence of trees upon existing buildings or other structures resulting from the effects of trees upon shrinkable load-bearing soils or the effects of incremental root or branch growth, are specifically excluded from this report.

### **Un-assessable Risks**

- A2.23 Any alteration to the application site or development proposals could change the current circumstances and may invalidate this report and any recommendations made.
- A2.24 The Wildlife and Countryside Act (WCA) 1981 (as amended) makes it an offence to disturb nesting birds or recklessly endanger a bat or its roost. Bats are also a European protected species and are additionally protected under the Conservation (Habitats & c) Regulations 1994 and 2010 (as amended). The survey findings, constraints, opportunities and design or mitigation recommendations included within that report must be read alongside this document.
- A2.25 A lack of recommended work does not imply that a tree does not pose an unacceptable level of risk and likewise, it should not be implied that a tree will present an acceptable level of risk following the completion of any recommended work



# Appendix 3: BS 5837:2012 Cascade Chart for Tree Quality Assessment





TREES FOR REMOVAL				
Category and Definition	Criteria		Identification on Plan	
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 (i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning).		<b>DARK RED</b>	
	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.  ( <b>NOTE:</b> 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			Identification on Plan
	1. Mainly Arboricultural Values	2. Mainly Landscape Values	3. Mainly Cultural Values, including Conservation	
Category A  <b>Trees of high quality</b> 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)	<b>LIGHT GREEN</b>



## TREES TO BE CONSIDERED FOR RETENTION

<p>Category B</p> <p><b>Trees of moderate quality</b> <i>with an estimated remaining life expectancy of at least 20 years</i></p>	<p>Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remedial 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.</p>	<p>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</p>	<p>Trees with material conservation or other cultural benefits.</p>	<p><b>MID BLUE</b></p>
<p>Category C</p> <p><b>Trees of low quality</b> <i>with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm</i></p>	<p>Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.</p>	<p>Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or temporary/transient landscape benefit.</p>	<p>Trees with no material conservation or other cultural value.</p>	<p><b>GREY</b></p>



# Appendix 4: Tree Survey Schedule



Tree Number	Common Species Name	Height (m)	Trunk Diameter (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	BS5837 Category	Comments/Preliminary Management Recommendations	RPA Radius	Root Protection Area (m <sup>2</sup> )
				N	S	E	W								
T1	Italian Alder	11	480	4	3	4	4	1.8	Mature	Fair - Good	Fair - Poor	C.1	Offsite within damaged brick planter adjacent to north eastern boundary. Notable north eastward lean with hanging deadwood present. Crown lifted over pedestrian walkway / grassland understorey. Amenity value reduced by structural condition and urban pressures / root barriers to site side with containing wall.	5.76m	104
T2	Apple	5	150,120, 90	2.5	2.5	3	2	1.5	Early Mature	Fair - Good	Fair	C.1	Eastern boundary car park edge Apple within G1 shrub belt. Trifurcated / contorted form. Component of eastern boundary ornamental planting creating low level roadside screening.	2.2m	15
G1	Sycamore, Elder, Honeysuckle, Barberry	1 - 1.5	av. 50	Mixed				0	Young	Fair	Fair	C.2	Ornamental structure planting aligning eastern site boundary. Car park edge planting, typically blocky / shrubby low cut form bound by hard standing to site-side.	0.6m	-
G2	Leyland Cypress, Lime	14 - 16	250 - 300	Mixed				6	Mature	Fair - Good	Fair - Good	C.2 / B.2	Southern boundary screening belt lifted over site-side. Hardstanding to site side / service yard and access. Lower canopy dieback in sections.	3.6m	-
G3	Cypress, Ash, Hawthorn, Lime	to 9	Mixed	Mixed				2.5 (site side)	Young to Early Mature	Fair - Good	Fair - Good	C.2 / B.2	Mixed tree planting to western site boundary. Ornamental garden trees and naturalised boundary hedgerow with scattered taller trees. Stems inaccessible to verify dimensions and species present. Hardstanding / fencing to site side occupying the rooting environment.	Refer to TCP	-

# Appendix 5: Proposed Site Plan (2924-COR-111C)





WINSTON CHURCHILL WAY A121



SUBJECT TO SITE SURVEY, CONFIRMATION OF LEGAL BOUNDARIES, SITE CONSTRAINTS & HIGHWAYS

THE HARRIS GROUP LTD DOES NOT ACCEPT LIABILITY FOR ANY DEVIATION FROM OUR DRAWINGS OR SPECIFICATION

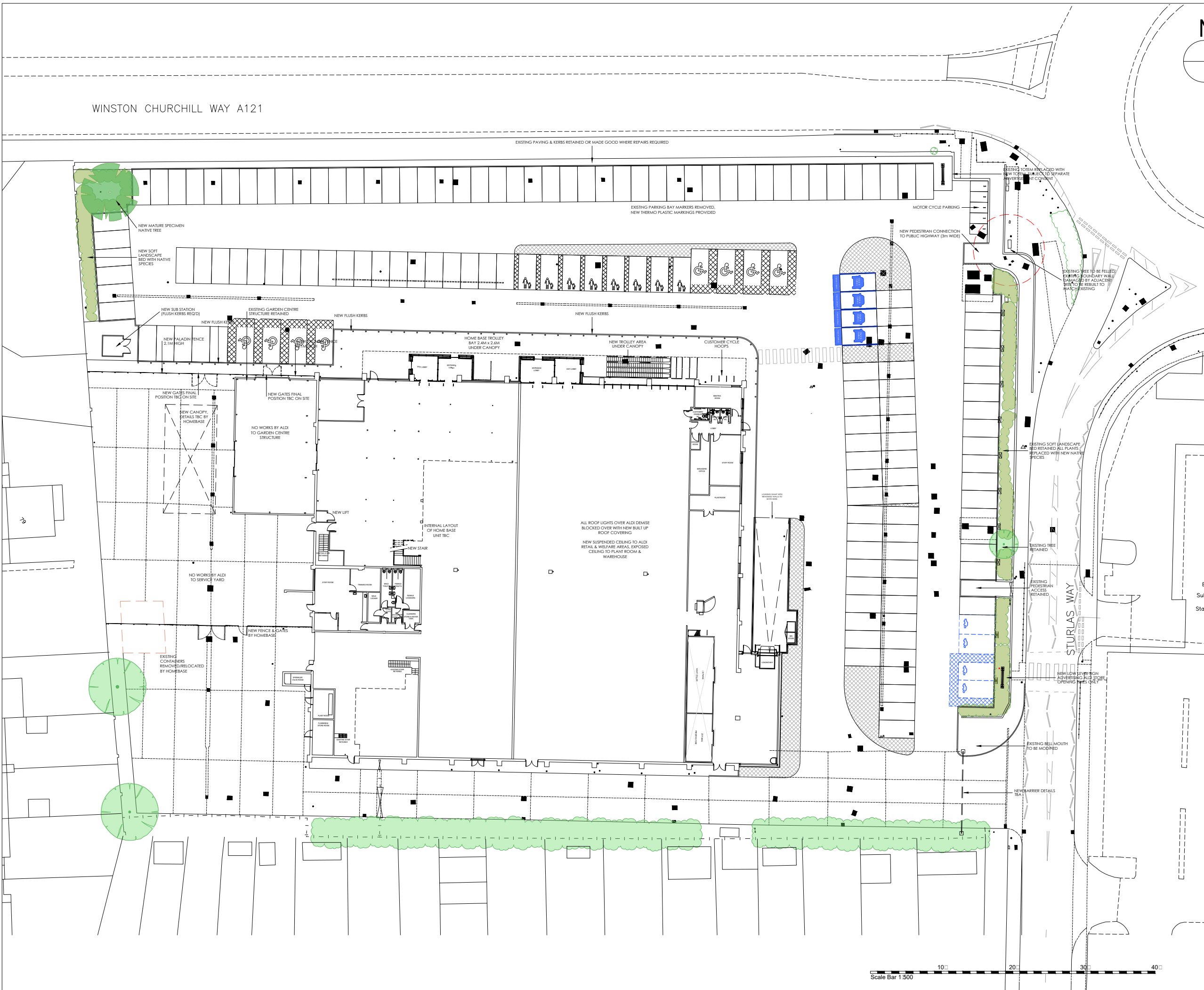
**EXTERNALS:**  
SITE AREA (RED LINE) 12,159 SQ.M; 3.005 ACRES; 1.217 HECTARES

157 SHARED CUSTOMER SPACES INC 8 DDA, 8 PC & 4 C+C; 4 ACTIVE EVCP & 16 PASSIVE EVCP; 5 MOTOR CYCLE SPACES; 8 CYCLE SPACES

EXISTING 3,520 SQ.M (GEA)  
PROPOSED 3,596 SQ.M (GEA)  
PARKING BAYS 2.5M X 5.0M  
PARKING AISLES VARIES MIN 6M

**ALDI FOOD STORE:**  
PROPOSED 1,756 SQ.M (GIA)  
RETAIL AREA 1,262 SQ.M (GIA)  
WAREHOUSE 337 SQ.M (GIA)  
WELFARE 120 SQ.M (GIA)  
EXTERNAL LOBBY 29 SQ.M (GIA)  
INTERNAL WALLS 8 SQ.M (GIA)  
RETAIL AREA 23.9M X 52.7M  
WAREHOUSE 7M

**HOME BASE:**  
PROPOSED 2,371 SQ.M (GIA)  
GROUND INC GARDEN CENTRE STRUCTURE 1,706 SQ.M (GIA)  
EXTERNAL LOBBY 29 SQ.M (GIA)  
MEZZ 636 SQ.M (GIA)



Rev	Date	Description	Rev By	Chk'd By
C	01.04.21	EMPLOYEE SHOWER RMS ADDED	JPG	---
B	19.03.21	EXTENDED TOPG ADDED	JPG	---
A	26.02.21	LAYOUT UPDATED TO AFL DRAWINGS & TO INCLUDE MEASURES IN RESPONSE TO HIGHWAY AUTHORITY COMMENTS	JPG	---



Project Title	PROPOSED ALDI FOOD STORE AND HOMEBASE UNIT EXISTING HOME BASE UNIT STURLAS WAY WATHAM CROSS EN8 7BF			
Client	ALDI STORES LIMITED - CORPORATE			
Status	PLANNING			
Scale	1:500	Drawing Size	A3	
Date	14.09.20	Drawn By	JPG	Checked ---
Drawing Title	PROPOSED SITE PLAN			
Job-Dwg No	2924-COR-111	Rev	C	

- 2 St. Johns North, Wakefield, WF1 3QA t. 01924 291800
- Carvers Warehouse, 77 Dale Street, Manchester, M1 2HG t. 0161 2388555
- The Old Rectory, 79 High Street, Newport Pagnell, MK16 8AB t. 01908 21157
- 101 London Road, Reading, RG1 5BY t. 0118 9507700
- 10 Gees Court, St Christophers Place, London, W1U 1JJ t. 0207 4091215

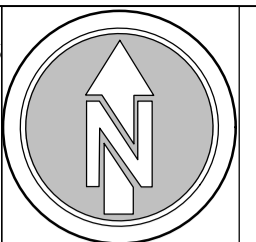


# Appendix 6: Landscape Plan (2924-VL\_L01A )





NOTE:  
SURROUNDING CONTEXTUAL BUILDINGS  
AND INFORMATION ARE  
BASED ON RECEIVED ORDINANCE  
SURVEY DRAWINGS AND ARE SHOWN  
FOR ILLUSTRATIVE PURPOSES ONLY.  
ASSUMED SITE BOUNDARY IS  
SUBJECT TO CONFIRMATION



**General Notes:**

All proposed tree locations are subject to co-ordination with drainage layout and subject to modification depending on the location of underground services and utilities.  
Drainage engineer to co-ordinate services layout in conjunction with the landscape plan to avoid conflict as much as possible. Allowance to be made at tender stage for the possible requirement for root barriers once the drainage layout is confirmed. CA to be informed immediately once this is available.

**SOFT LANDSCAPE KEY:**

- Existing trees and vegetation to be retained  
Retained and protected during construction and landscaping works in accordance with BS5837:2012 guidance.
- Proposed Tree in soft landscape  
Refer to planting schedule for species & specification
- Proposed native shrub planting  
Refer to planting schedule for species & specification
- Proposed single species native hedge planting  
Refer to plant schedule for species & specification
- Proposed native hedge mix planting  
Refer to planting schedule for species & specification
- Proposed 500mm gravel overrun surface finish  
To be laid over permeable geotextile membrane

**GENERAL WATERING**

All soft landscaping to be subject to a watering regime which is absolutely essential to ensure the continued success of the scheme, particularly during the initial 12 month establishment period. The watering frequency should be as necessary to ensure the continued thriving of all grass, hedges, trees and ornamental planting. During dry periods minimum weekly visits should be made to the site to ensure the soil has not dried out and to action watering if necessary. The soil should be checked for dryness using either a soil moisture sensor or by inserting a spade into the ground to a depth of 300mm to observe the appearance of the soil. If the soil is moist there is no need to water but if it is bone dry then watering procedure should be carried out immediately. Water supply should be from potable mains water or an approved alternative. The full depth of topsoil should be wet without loosening or damaging plants. Any compacted soil should be broken up sufficiently to allow water to reach the rootzone.

**WATERING TREES**

Trees to be watered in accordance with BS 8545:2014 Tree - From Nursery to Independence.  
Trees should be watered via the installed irrigation / aeration pipes around the base of the trees stem in accordance with the manufacturer's instructions to ensure the water reaches the roots of the tree. Below is a suggested watering regime but this should be used as a guide only and may require modification in times of drought or flood, dependant on the ground conditions at the time, which should be monitored as above:

- March - October: 20 litres to be poured into irrigation pipe twice a week (40 litres in total)

**SOFT LANDSCAPE SPECIFICATION NOTES**

NOTE: All soft landscape works to be carried out in accordance with BS4428:1989.

**SUBSOIL**

Subsoil should be broken up to relieve compaction and aid drainage prior to topsoiling to the following depths:  
- For light and non cohesive subsols: 300mm  
- For stiff clay and cohesive subsols: 450mm  
Immediately before spreading topsoil, remove stones larger than 50mm.

**TOPSOIL**

Existing site won topsoil to be reused for soft landscape areas if sufficient quantities are available and the topsoil meets the criteria for multipurpose topsoil as defined in table 1 of BS3882:2015 specification for Topsoil.

If imported topsoil is required it is to be supplied and spread by the main contractor to the approval of the Landscape contractor, in accordance with BS 3882 :2015. To be a natural sandy loam, of medium texture, with a pH between 5.5 and 7.8, not more than slightly stony and free of pernicious weeds. Subsoil to be well broken up prior to top-soiling to relieve compaction. Topsoil depths should be:  
Areas for Ornamental Shrub Planting: minimum 400mm  
Areas for cultivated turf: minimum 150mm

**CULTIVATION**

Weeds to be prevented from seeding or becoming established by applying a suitable herbicide and allowing the correct time to elapse, as directed by the manufacturer. Compacted soil to be broken up to a depth of 100mm, with any stones, grass tufts or rubbish larger than 50mm in any direction to be removed, leaving a regular and even surface. Suitable slow release fertiliser to be supplied and spread @ 50g/m2 to all planted areas.

**CLIMATIC CONDITIONS**

Topsoiling should be carried out in the driest conditions possible - cultivation to be carried out when the soil is moist, friable and not waterlogged or frozen. Topsoil should not be handled during or after heavy rainfall or when it is wetter than the plastic limit as defined by BS 3882. Planting should not take place in waterlogged conditions or when the ground is frozen.

**SOIL AMELIORANT**

Peat-free compost to be spread over ornamental shrub beds @ minimum 50mm depth prior to cultivation.

**TREES**

All trees within shrub beds to be planted in separate pits in accordance with tree planting detail. All plant material to comply with BS 3936 Part 1 :1992, be obtained from a nursery certified by the HTA and transported to site in accordance with the HTA Plant Handling Guide: 1996. All trees to be planted to the original root collar and secured in place with underground guying system in accordance with tree planting detail. All trees to be fitted with aeration and irrigation system in accordance with tree planting detail.

If the trees are to be planted outside of the planting season (late October - Late March) then containerised stock to be used in lieu of root ball to the same specification- allowance to be made for this at tender stage if required once construction timetable is known and CA informed immediately.

**NATIVE HEDGE PLANTING**

Areas to receive whip planting be cleared of all vegetation and cultivated as described above. Rotavate areas to a minimum depth of 300mm to form an open textured free draining growing medium. Remove all stones and other debris larger than 50mm in any one direction and remove all litter and vegetation matter prior to planting. Each transplant to be fitted with an appropriate rabbit guard for the size and species and 500 x 500mm biodegradable GT Ecomat by Green-tech or similar approved. To be pruned / maintained as a hedge at a maximum height of 1.4 metres.

**SUBSTITUTIONS:**

Upon submission of evidence that certain materials, including plant materials, are not available at the time of the landscape contract, the Landscape Contractor may be permitted to substitute other materials and plants in exceptional circumstances during the contract with an agreed adjustment of prices. All substitutions shall be of nearest equivalent species and variety to the original specified but shall be subject to approval by the Landscape Architect before any change is made.

**TIMES OF YEAR FOR PLANTING:**

- Landscape works to be carried out during the final possible planting periods prior to practical completion of the building and associated engineering works / car park areas in accordance with the following:
- Native and ornamental trees: During dormant winter period - Late October to late March (only if planted in the planting season otherwise containerised stock to be used).
  - Bare root native transplants: During dormant winter period - Late October to April.
  - Container grown ornamental and specimen shrubs: At any time if ground and weather conditions are favourable.

**MULCH**

75mm depth of 8-35mm ornamental bark mulch (peat-free) to be supplied and spread to all planting areas. Finished mulch level to be installed and maintained at 25mm below any adjacent kerbs or paving surfaces.

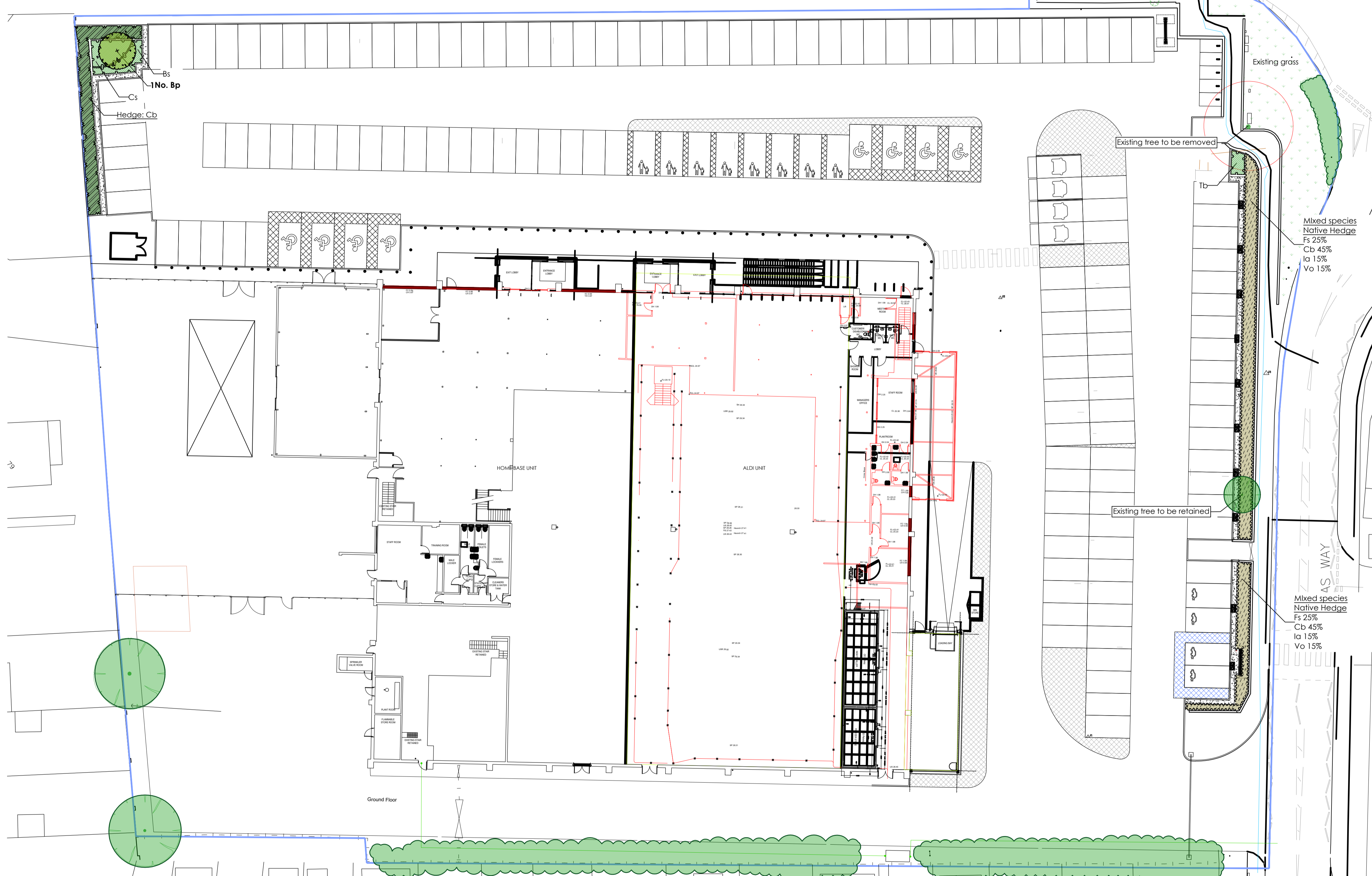
**MAINTENANCE**

All planting areas to be maintained to a high standard by the contractor for 12 months after practical completion, to ensure the landscape scheme is successful, and discourage decline of the area. Minimum frequency of maintenance visits:  
December / January / February & March - 1no. visit each month  
April to November - 2No. visits each month.

Generally, during the first 12months:

- All planting beds to be re-firmed and kept weed free through hand weeding and application of an approved herbicide where appropriate.
- All litter to be picked and removed from landscape areas.
- Mulch to be topped up as required to maintain the specified thickness.
- The condition of all trees is to be regularly checked, with ties and stakes adjusted or replaced as necessary.
- Shrubs to be pruned at appropriate times of year for each species to promote healthy growth and desirable ornamental features.
- All arisings to be removed from site.
- Any defects or plant losses occurring during the first 12 months defects period to be replaced at the contractors expense.

Following the initial 12 month establishment period the ongoing landscape management will be the responsibility of a commercial landscape maintenance contractor under a landscape maintenance contract.



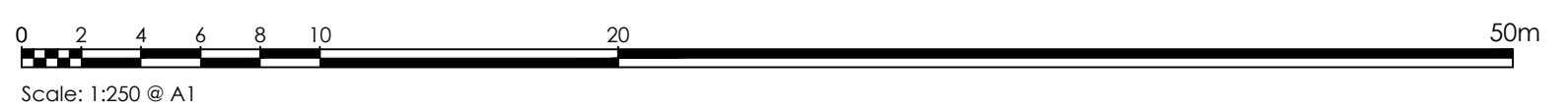
**PLANTING SCHEDULES:**

Trees	Species	Abb.	Form	Girth	Height (cm)	Clear stem (cm)	Root	Quantity
	Betula pendula	Bp	Standard (semi mature)	25-30	Min 450	Min 220	RB	1

Ornamental Shrub Planting:	Name	Abb	Height(cm)	Root	Container	Habit	Density
	Buxus sempervirens	Bs	40-60	C	3L	Branched	4/m²
	Cornus sanguinea	Cs	60-80	C	3L	Branched	3/m²
	Taxus baccata	Tb	30-40	C	3L	Bushy	4/m²

Hedge Planting	Name	Abb	Height(cm)	Root	Specification	Centre Spacing
	Carpinus betulus	Cb	80-100	B	Bushy, Clipped sides	50cm centres, 40cm between rows

**Note:**  
\* Hedge plants to be planted in doubled staggered rows at centres noted above.  
Maintained at 1.2m high/0.6m high



Mixed Species Native Hedge Mix Planting	Name	Abb	Height	Root	Container	Habit	% in Mix
	Fagus sylvatica	Fs	40-60	C (UK grown)	2L	Branched	25%
	Carpinus betulus	Cb	40-60	UK Cell grown	/	Branched	45%
	Ilex aquifolium	Ia	40-60	C (UK grown)	2L	Leader & Laterals	15%
	Viburnum opulus	Vo	40-60	UK Cell grown	/	Branched	15%

\*Hedge species to be planted in double staggered rows @ 450mm centres in groups of 5, 7, 9, 11, 13, 15 or 17 of a single species.  
\*\*All whips and transplants to have rabbit guards / shrub shelter appropriate to the species.  
\*\*Shrubs to be sourced as local to the site as possible and "UK-Grown" in accordance with current bio-security best practice.

25.03.2021 - A Updated to coordinate with Architect's site plan  
Revisions Description Drawn Check

Project Title	PROPOSED ALDI FOOD STORE AND HOMEBASE UNIT
Client	ALDI STORES LIMITED - CORPORATE
Status	PLANNING
Scale	1:250
Drawing Size	A1
Drawn By	FW
Checked By	AS
Date	09/2020

Drawing Title: LANDSCAPE PLAN  
Job-Dwg No: 2924-VL L01 rev A

LANDSCAPE DESIGNERS  
4 ST JOHNS NORTH, WAKEFIELD, WF1 3QA. TEL 01924 332056  
web:www.vectordc.com







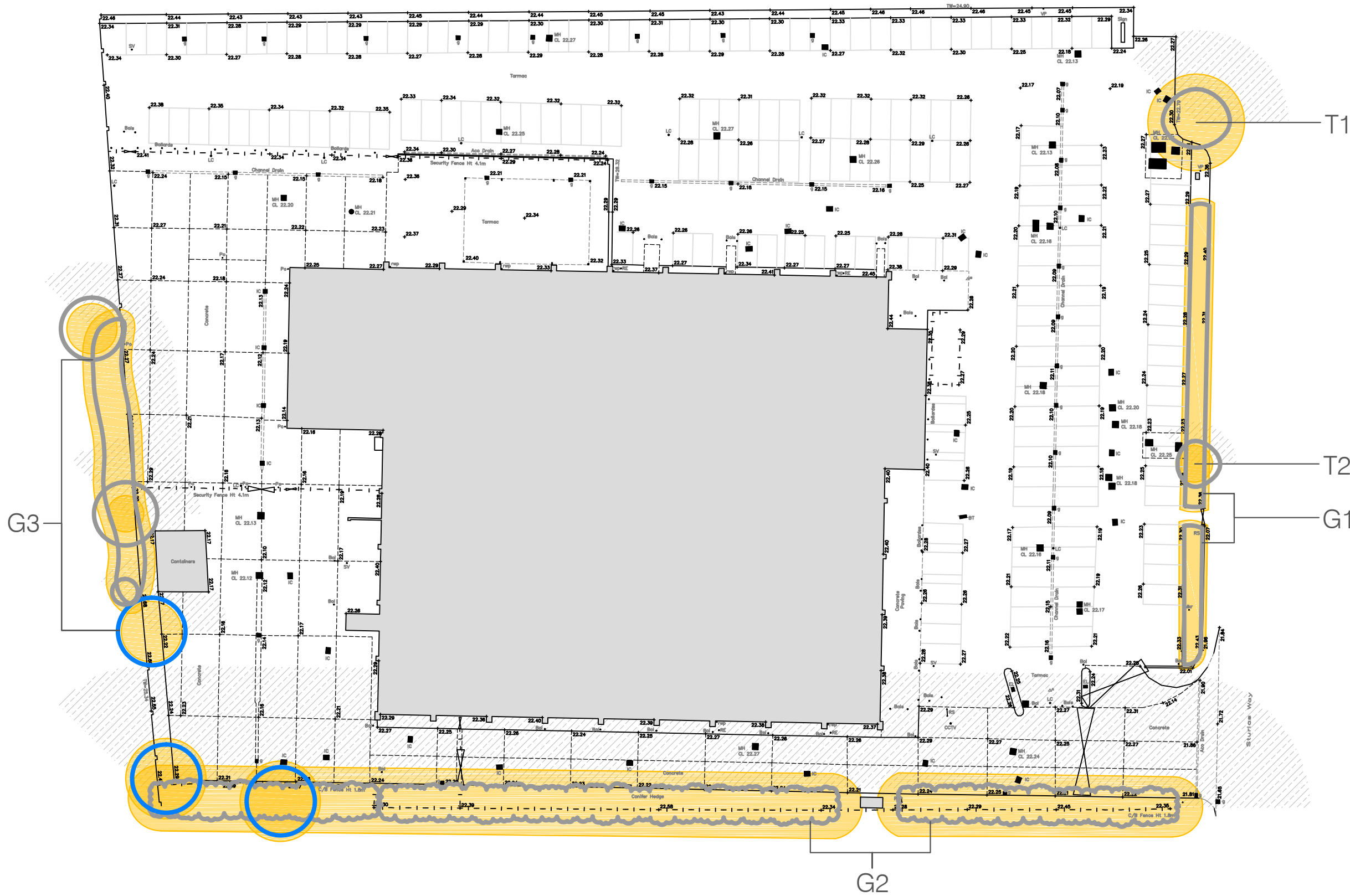
## Plans:

**13452/P01a: Tree Constraints Plan**

**13452/P02a: Tree Retention Plan**



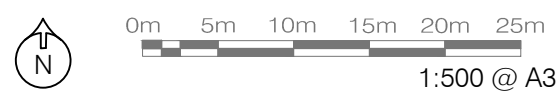
-  Category B - Trees of moderate quality and value
-  Category C - Trees of low quality and value
-  BS5837 Canopy Shading Extents
-  Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)








3 Jordan Street, Manchester, M15 4PY  
 t: 0161 236 8367  
 www.tylergrange.co.uk

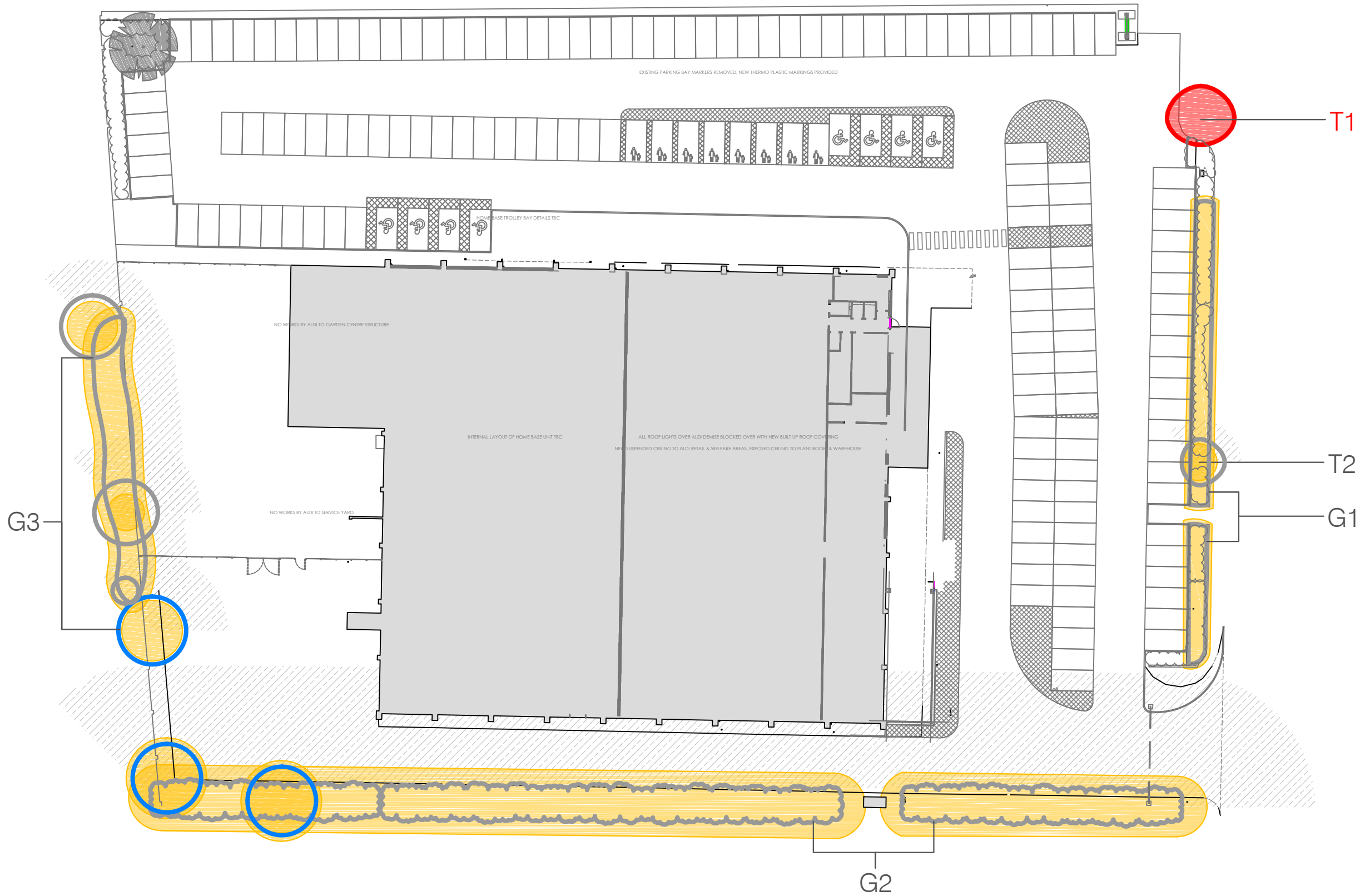
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Tree Constraints Plan Project Homebase, Waltham Cross



Drawing No 13452/P01a  
 Date April 2021

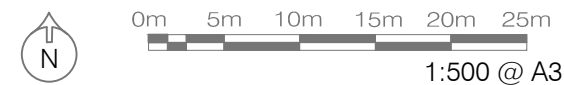
-  T1 - Proposed for Removal
-  Category B - Trees of moderate quality and value
-  Category C - Trees of low quality and value
-  BS5837 Canopy Shading Extents
-  Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)



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Tree Retention Plan

Project Homebase, Waltham Cross

Drawing No 13452/P02a  
 Date April 2021



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