CAMDEN GOODS YARD, CHALK FARM ROAD, CAMDEN

ARBORICULTURAL IMPACT ASSESSMENT

A Report to: St. George West London Ltd

Report No: RT-MME-152929-02 Rev A

Date: July 2020

Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ
Tel: 01676 525 880
E-mail: admin@middlemarch-environmental.com Web: www.middlemarch-environmental.com

REPORT VERIFICATION

This study has been undertaken in accordance with British Standard 5837:2012 "*Trees in Relation to Design, Demolition and Construction - Recommendations*".

Report Version	Date	Completed by:	Checked by:	Approved by:
Final	09/07/2020	Dean Moore Dip Arb (Senior Arboricultural Consultant) Ben Jones MSc (Arboricultural Consultant)	Duncan Smith BSc (Hons) M.Arbor.A (Arboricultural Manager)	Tom Docker CEcol MCIEEM Managing Director
Revision A	11/07/2020	Dean Moore Dip Arb (Senior Arboricultural Consultant)	Duncan Smith BSc (Hons) M.Arbor.A (Arboricultural Manager)	Tom Docker CEcol MCIEEM Managing Director

DISCLAIMER

The contents of this report are the responsibility of Middlemarch Environmental Ltd. It should be noted that, whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment.

Middlemarch Environmental Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

VALIDITY OF DATA

The findings of this study are based upon the survey data produced as part of the Preliminary Arboricultural Assessment which is valid for a period of 12 months from the date of survey. If a planning application has not been submitted by this date, an updated site visit should be carried out by a suitably qualified and experienced arboriculturist to assess any changes to the trees and hedgerows on site to inform a review of the conclusions and recommendations made.

It should be noted that trees are dynamic living organisms that are subject to natural changes as they age or are influenced by changes in their environment. As such, following any significant meteorological event or changes in the growing environment of the trees they should be re-assessed by a suitably qualified and experienced arboriculturist.

This Arboricultural Impact Assessment has been produced following a review of a proposed development layout for the site based on data provided by the client. Should the development proposals change, this report will need to be updated to assess the impact of the amended development.

CONTENTS

1. INTRODUCTION

1.1 PROJECT BACKGROUND

Middlemarch Environmental Ltd were commissioned by St. George West London Ltd to undertake an Arboricultural Impact Assessment as part of a Detailed planning application for commercial development at Camden Goods Yard in Camden. A survey of the trees on site and within influencing distance of the boundaries was undertaken on the July 2020 as part of a Preliminary Arboricultural Assessment (RT-MME-152929-01) which was produced to identify the existing trees and hedgerows on the site to aid design and avoid unnecessary tree removal.

This Arboricultural Impact Assessment has been carried out in accordance with British Standard 5837:2012 *'Trees in Relation to Design, Demolition and Construction - Recommendations'* (hereafter referred to as BS5837). BS5837 sets out a structured assessment methodology to assist in determining which trees would be consider suitable or unsuitable for retention in the context of the proposed development. This Impact Assessment details the potential impact that the proposed development will have upon the site's existing tree stock and sets out recommendations for the subsequent mitigation or avoidance of impact.

This report has been produced to accompany an S73 application for the proposed development at Camden Goods Yard in Camden. This site has been approved for redevelopment through an earlier planning application in 2018 but has been amended in May 2020 via an earlier S73 application. This report has been updated to reflect the changes to the site and what is being proposed. The revisions within 2A comprise of Buildings A, B, C, & F. Buildings D, E1, E2 and the PFS site, largely remain unchanged from the approved scheme.

1.2 SITE DESCRIPTION

The site under consideration, hereinafter referred to as the study area, is an irregular shaped parcel of land, approximately 3.25 ha in size, which is located adjacent to Juniper Crescent to the north-west and Gilbeys Yard to the south in Camden at Ordnance Survey Grid Reference TQ 2843 8415.

The study area is located within a predominately residential area on the south-western fringes of Camden Town in central London. To the north and south the surrounding area is dominated residential developments.

The northern boundary of the study area is delineated by railway lines beyond which is Chalk Farm Road. To the south-east the study area runs into adjacent residential dwellings beyond which is Gilbeys Yard, whilst to north-west the study area abuts Juniper Crescent. The south-western boundary of the study area is defined by railway lines beyond which are residential developments in the Primrose Hill estate. Regents Canal is located 50 m south of the study area at its nearest point.

The north-western portion of the study area is currently the site of a petrol filling station off Chalk Farm Road and is dominated by the existing building and hardstanding. The southernmost portion of the study area is dominated by an existing double-height Morrisons supermarket and associated hard and soft landscaping. All notable vegetative features are located adjacent to or beyond the boundaries of the study area.

The topography of the study area is generally varied.

The location of the trees surveyed can be found on the Tree Survey Plan (C152929-01-01), attached to this report.

1.3 DEVELOPMENT PROPOSALS

The proposed development of the site includes the redevelopment of the existing Morrisons supermarket, surface car park and Petrol Filling Station (PFS) (ref. 2017/3847/P) – to be referred to as the 'extant scheme'. The approved development would deliver 644 new homes and circa 39,500 sq m GEA of non-residential floorspace, including a replacement supermarket, replacement PFS and new A1, A3, B1, D2 and SG floorspace, together with associated public realm and landscaping.

The key changes of the planning application are detailed within the Public Realm and Landscape report, produced by Murdoch Wickham on page 8, under the heading Key Changes from Extant Scheme.

The proposed development has been designed so that safe and healthy existing trees are retained wherever possible and that those trees to be retained are not significantly impacted upon by the development.

1.4 DOCUMENTATION PROVIDED

This assessment is based upon the information provided by the client in addition to information collected by Middlemarch Environmental Ltd during the updated Preliminary Arboricultural Assessment, July 2020. The documents and drawings considered are detailed within Table 1.1.

Author	Document	Drawing Number	Date
Murphy Surveys	Topographic Survey	MSL36467-T-01 MSL36467-T-02 MSL36467-T-03 MSL36467-T-04	04 June 2020
Murdoch Wickham	Landscape General Arrangement	1573/101 Rev B	30 June 2020
Murdoch Wickham	Tree Retention & Removal Strategy	1573/105 Rev C	03 July 2020
Murdoch Wickham Landscape Architects	Public Realm and Landscape	-	-
Murdoch Wickham	Tree Planting Strategy	1573/104 Rev A	03 July 2020
Murdoch Wickham	Landscape Sections 1	1573/200	08 July 2020
Murdoch Wickham	Landscape Sections 2	1573/201	08 July 2020
Murdoch Wickham	Landscape Sections 3	1573/202	08 July 2020
Murdoch Wickham	Landscape Sections 4	1573/203	08 July 2020
Murdoch Wickham	Landscape Hardwicks Plan	1573/102 Rev A	03 July 2020
Murdoch Wickham	Landscape Softworks Plan	1573/103 Rev A	03 July 2002

Table 1.1: Documentation Considered

2. STATUTORY PROTECTION

2.1 TREE PRESERVATION ORDER AND CONSERVATION AREA DESIGNATIONS

It is understood following consultation with the Local Planning Authority, Camden Borough Council, that there are no Tree Preservation Orders. However, the study area is located within a Conservation Area that would apply to any trees present on, or in close proximity to the assessment site and therefore no statutory constraints would apply to the development in respect of trees.

No works to any trees within the Regents Canal Conservation Area (i.e. any trees within the study area) are to be carried out without prior submission of a Section 211 notice to the Local Planning Authority (LPA) giving six weeks' notice of the proposed works unless authorised as part of an approved planning application.

Reference to the Multi Agency Geographical Information for the Countryside (MAGIC) website indicates that Ancient Woodland has not been recorded within 15.0 metres of the survey area.

2.2 PROTECTED SPECIES

Bats
Mature trees often contain cavities, hollows, peeling bark or woodpecker holes which provide potential roosting locations for bats. Bats and the places they use for shelter or protection (i.e. roosts) receive European protection under The Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2017). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. Consequently, causing damage to a bat roost constitutes an offence.

Generally, should the presence of a bat roost be suspected whilst completing works on any trees on site then an appropriately licensed bat worker should be consulted for advice.

Birds
Trees and hedgerows offer potential habitat for nesting birds which are protected under the Wildlife and Countryside Act WCA 1981 (as amended). Some species (listed in Schedule 1 of the WCA) are protected by special penalties. This legislation makes it an offence to intentionally or recklessly damage or destroy an active bird nest or part thereof.

As the trees on, and adjacent, to the site provide potential habitat for nesting birds all tree work should ideally be completed outside the nesting bird season (Generally March to September).

If this is not possible then the vegetation should be subject to a nesting bird inspection by a suitably experienced ecologist prior to commencement of works. If any active nests are identified then the vegetation, and a defined buffer zone, will need to remain in place until the young have naturally fledged.

2.3 PLANNING POLICY IN RELATION TO TREES

National Planning Policy

Paragraph 118 of the National Planning Policy Framework (NPPF) sets out the following condition with respect to trees:

"Planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss"

During the arboricultural survey (April 2016), no veteran trees or areas of ancient woodland were identified. As such, the proposed development does not require consideration with respect to the National Planning Policy Framework.

Regional Planning Policy: The London Plan

Section 7.21, 'Trees and Woodland' of The London Plan policy sets out the following conditions with respect to trees:

Strategic
A Trees and woodlands should be protected, maintained, and enhanced, following the guidance of the London Tree and Woodland Framework (or any successor strategy). In collaboration with the Forestry Commission the Mayor has produced supplementary guidance on Tree Strategies to guide each borough's production of a Tree Strategy covering the audit, protection, planting and management of trees and woodland. This should be linked to a green infrastructure strategy.

Planning decisions
B Existing trees of value should be retained and any loss as the result of development should be replaced following the principle of 'right place, right tree'. Wherever appropriate, the planting of additional trees should be included in new developments, particularly large-canopied species.

LDF preparation
C Boroughs should follow the advice of paragraph 118 of the NPPF to protect 'veteran' trees and ancient woodland where these are not already part of a protected site.
D Boroughs should develop appropriate policies to implement their borough tree strategy.

As per Section 3.2.1, it is noted that the majority of trees identified for removal are lower quality specimens, with the higher value trees to be retained. As such, the conditions of Section 7.2.1 of The London Plan relating to tree retention and loss have also been satisfied.

Local Planning Policy: Camden Core Strategy 2010-2025

Sub-Section CS 13.13 of the Camden Core Strategy states:

"…We will also continue to protect the borough's trees and encourage the creation of green and brown roofs and green walls, which help to keep local air temperatures lower…"

Sub-Section CS 15.22, "Trees", of the Camden Core Strategy states:

"The Council has a Tree Strategy which deals with tree management on its land. This aims to retain trees and provide new trees on Council land. We have a tree planting programme which is increasing the number of trees in the borough, in streets, parks, housing estates and schools. We will resist the loss of trees and groups of trees wherever possible and, where this is not possible, require their replacement on development sites or nearby streets and open spaces. The choice of species should consider historic context, availability of space, soil conditions, potential improvements to air and soil quality and reducing the effects of and adapting to climate change."

The proposed development will require the removal of a large number of trees within the site. However, given the extent of replacement tree planting within the proposed landscaping scheme, it is considered that tree loss from the site has been suitably mitigated and that the conditions set out within the Local Planning Policy relating to trees have been met.

3. PRELIMINARY ARBORICULTURAL ASSESSMENT RESULTS SUMMARY

Ninety-three individual trees and one group were surveyed as part of the Preliminary Arboricultural Assessment. Trees assessed during the survey are listed as individual trees and groups of trees in the Tree Schedule (Appendix A) in accordance with BS5837:2012 recommendations. Table 3.1 below provides a summary of the survey results in terms of categorisation.

BS5837:2012 Category	Tree Number
U	14, 18, 19, 22, 47, 50, 52, 55, 56, 57, 62, 63, 71, 74, 90, 91, 92, 93.
A	1, 7, 9, 15, 16, 17, 20, 23, 24, 25, 29, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 48, 49, 51, 54, 59, 67, 68, 69, 70.
B	2, 3, 4, 5, 6, 8, 11, 21, 26, 27, 28, 30, 43, 44, 45, 46, 53, 58, 60, 61, 64, 66, 76, 77, 78, 79, 80, 82, 83, 84, 85, 86, 94, 95, 96, 97, 98, 99, 100, 101, G1.
C	10, 12, 65, 81.

Table 3.1: Summary of Trees and Groups in BS5837:2012 Categories

The most significant trees recorded during the survey were a number of London plane (*Platanus x acerifolia*) trees located along the southern boundary, as well as within the centre and in the north-west corner of the study area. All these specimens were considered to be of a high, Category A, retention value.

In addition to these specimens, a number of London plane, Elm and Hornbeam trees deemed to be of a low, Category C, retention value were noted within the study area. These specimens were less significant in the local landscape and many exhibited a number of structural and physiological defects. These defects, including strimmer damage to main stems, non-occluding wounds, presence of dieback in crowns, presence of deadwood and other general signs of decline, have limited the likely future potential of these specimens.

Since the last arboricultural survey, which was undertaken in April 2016, Tree numbers T13, T75, T87, T88 and T89 have been removed from the site.

4. ARBORICULTURAL IMPACT ASSESSMENT

4.1 INTRODUCTION

This section of the report details the potential impacts that the proposed development may have upon the site's tree stock. The assessment has been based upon the documents detailed in Table 1.1 with reference to the results of the Preliminary Arboricultural Assessment (RT-MME-152929-01).

The location of the trees can be found on the Tree Survey Plan (152929-01-01) and a schedule of the trees (Appendix A) attached to this report.

4.2 IMPACTS FROM DEVELOPMENT LAYOUT

4.2.1 Tree Retention and Removal

To accommodate the proposed development, it will be necessary to remove a number of trees within the site. The trees to be removed are detailed within Table 4.1 and are identified on the Tree Retention Plan, Drawing Number C152929-02-01, attached to this report. All trees not featured within Table 4.1 are to be retained within the proposed development.

Tree/ Group/ Reference	Species	Retention Category	Reason for Removal
T1	Elm	B1	Over encroachment from the proposed building.
T2	Elm	C1	Landscape improvement.
T3	Elm	C1	Landscape improvement.
T4	Elm	C1	Landscape improvement.
T5	Hornbeam	C1	Landscape improvement.
T6	Ash	C1	Landscape improvement.
T7	Hornbeam	B1	Over encroachment from the proposed building.
T8	Hornbeam	C1	Over encroachment from the proposed building.
T9	Apple	B1	Landscape improvement.
T10	Hornbeam	U	Not suitable for retention.
T11	Hornbeam	C1	Over encroachment from the proposed building.
T12	London plane	U	Not suitable for retention.
T14	London plane	A1	Located within the footprint of as proposed building.
T15	London plane	B1	Located within the footprint of as proposed building.
T20	London plane	B1	Located within the footprint of as proposed building.
T24	London plane	B1	Due to landscape design.
T25	London plane	B1	Due to landscape design.
T26	London plane	C1	Due to landscape design.
T27	London plane	C1	Due to landscape design.
T28	London plane	C1	Due to landscape design.
T29	Norway maple	B1	Located within the footprint of as proposed building.
T30	Norway maple	C1	Located within the footprint of as proposed building.
T31	Norway maple	B1	Located within the footprint of as proposed building.
T32	London plane	B1	Located within the footprint of as proposed building.
T33	London plane	B1	Located within the footprint of as proposed building.
T34	London plane	B1	Due to footpaths.

Tree/ Group/ Reference	Species	Retention Category	Reason for Removal
T35	London plane	B1	Due to footpaths.
T36	London plane	B1	Due to footpaths.
T43	Common lime	C1	Located within the footprint of as proposed building.
T44	Common lime	C1	Located within the footprint of as proposed building.
T45	Norway maple	C1	Located within the footprint of as proposed building.
T46	Norway maple	C1	Due to footpaths.
T47	London plane	A1	Due to landscape design.
T48	London plane	B1	Due to landscape design and footpaths.
T49	London plane	B1	Due to landscape design and footpaths.
T50	London plane	A1	Due to landscape design and footpaths.
T51	London plane	B1	Due to landscape design and footpaths.
T52	London plane	B1	Due to landscape design and footpaths.
T53	London plane	C1	Due to landscape design.
T54	Norway maple	C1	Located within the footprint of as proposed building.
T55	London plane	A1	Located within the footprint of as proposed building.
T56	London plane	A1	Located within the footprint of as proposed building.
T57	London plane	A1	Close
T58	London plane	C1	Over encroachment from the proposed building.
T59	London plane	B1	Landscape improvement.
T60	London plane	C1	Landscape improvement.
T61	London plane	C1	Landscape improvement.
T62	London plane	A1	Located within the footprint of as proposed building.
T63	London plane	A1	Located within the footprint of as proposed building.
T64	London plane	C1	Landscape improvement.
T65	London plane	U	Not suitable for retention.
T66	London plane	C1	Landscape improvement.
T67	London plane	B1	Due to landscape design and footpaths.
T68	London plane	B1	Due to landscape design and footpaths.
T69	London plane	C1	Due to landscape design and footpaths.
T70	London plane	C1	Due to landscape design and footpaths.
T71	London plane	A1	Due to landscape design and footpaths.
T74	Norway maple	A1	Due to landscape design and footpaths.
T76	London plane	C1	Due to landscape design and footpaths.
T77	London plane	C1	Due to landscape design and footpaths.
T78	London plane	C1	Due to landscape design and footpaths.
T79	Ash	C1	Due to landscape design and footpaths.
T80	Hornbeam	C1	Located within the footprint of as proposed building.
T81	Whitebeam	U	Not suitable for retention.
T82	Hornbeam	C1	Located within the footprint of as proposed building.
T83	London plane	C1	Located within the footprint of as proposed building.

Tree/ Group/ Reference	Species	Retention Category	Reason for Removal
T84	Elm	C1	Located within the footprint of as proposed building.
T85	Elm	C1	Close proximity to proposed building.
T86	London plane	C1	Close proximity to proposed building.
T94	Callery pear	C1	Landscape improvement
T95	Red oak Fastigiate	C1	Landscape improvement
T96	Callery pear	C1	Landscape improvement
T97	Tibetan cherry	C1	To facilitate to construction of a new bus stop.
T98	Tibetan cherry	C1	To facilitate to construction of a new bus stop.
T99	Tibetan cherry	C1	To facilitate to construction of a new bus stop.
T100	Tibetan cherry	C1	To facilitate to construction of a new bus stop.
G1	*Rhus typhina*	C2	Due to footpaths.

Table 4.1: Tree Removal

The proposed development will require the removal of seventy-six trees and one group of trees. Four trees identified for removal were considered to be unsuitable for retention during the Preliminary Arboricultural Assessment and therefore the removal of these trees would be required, irrespective of the proposed development, due to their poor condition. Certain retention category U trees may however possess existing or potential conservation value which make them desirable to preserve in the context of wildlife habitat (e.g. areas with limited public access).

Twenty one trees identified for removal (T1, T7, T9, T15, T20, T24, T25, T29, T31, T32, T33, T34, T35, T36, T48, T49, T51, T52, T59, T67 & T68) were of moderate retention value and ten trees also identified for removal (T14, T47, T50, T55, T56, T57, T62, T63, T71 &T74) were of high retention value and therefore suitable new tree planting will be required to offer an adequate level of mitigation for this loss.

The remaining trees and groups that are to be removed or partially removed were considered to be of a low retention value during the Preliminary Arboricultural Assessment. The proposed removal of these trees should be considered acceptable as new tree planting of higher quality trees more suited to the new development will make a lasting contribution to the landscape character of the site.

4.2.2 Tree Pruning

All tree pruning works should be detailed as part of an Arboricultural Method Statement and completed in accordance with the current best practice guidance set out within BS3998:2010 *"Tree Work – Recommendations"* by suitably competent, qualified and insured arboricultural contractors. It is recommended that the extent of pruning required is then identified to contractors in a pre-commencement site meeting as part of the enabling works.

4.3 IMPACTS FROM DEMOLITION AND RELATED OPERATIONS

4.3.1 Building Demolition

There are no areas on site where the demolition of existing buildings is required within close proximity to trees. As such no impact from this aspect of the development is considered likely.

4.3.2 Removal of Hard Surfaces

The removal of existing hardstanding within the RPAs of T16, T17, T18, T19, T21, T22, T23, T37, T38, T39, T40, T41 and T42 will require a precautionary approach to the works and should be detailed as part of an Arboricultural Method Statement prior to site occupation.

4.4 DIRECT IMPACTS FROM CONSTRUCTION

4.4.1 Works within RPAs

Some aspects of the proposed development will require works within the RPAs of retained trees as detailed within Table 4.2.

Tree/ Group/ Hedgerow Reference	Species	Retention Category	Affected RPA (%)	Proposed Works
T16	London plane	B	40	Garden path (paving) and boundary fence.
T17	London plane	B	7	Garden path (paving) and boundary fence.
T18	London plane	A	25	Garden path (paving) and boundary fence.
T19	London plane	A	50	Garden path (paving) and boundary fence.
T21	London plane	C	-	Tree planting.
T22	London plane	A	-	Tree planting.
T23	London plane	B	56	Hardstanding (Paving).
T37	London plane	B	-	Tree planting.
T38	London plane	B	1	Footpath and security fence, with gate.
T39	London plane	B	-	Landscaping and removal of hardstanding.
T40	London plane	B	-	Landscaping and removal of hardstanding.
T41	London plane	B	-	Landscaping and removal of hardstanding.
T42	London plane	B	-	Landscaping and removal of hardstanding.
T90	London plane	A	7	Petrol Filling Station.
T91	London plane	A	8	Petrol Filling Station.
T92	London plane	A	8	Petrol Filling Station.
T93	London plane	A	11	Petrol Filling Station.

Table 4.2: Works in RPAs and Canopy Spreads

It should be noted that the RPAs affected by works to construct the Garden paths, boundary fencing and areas of landscaping are already hard surfaced and root development from the surrounding trees in the affected areas may have been restricted. The potential for significant impact upon the trees as a result of the proposed works is therefore unlikely, however, further investigation through the use of root radar may be required to inform decision-making.

Trees T90, T91, T92 and T93 already have hardstanding present within their RPAs and therefore these works are unlikely to impact these specimens.

The installation of the garden path, boundary fences, landscaping will require works to be undertaken beneath the canopies of retained trees and will require a suitable methodology to undertake these works.

The paving around T23 does encroach into the initial Root Protection Area by 56%, it should be noted that hardstanding is located within this area and as such the impact shouldn't be as detrimental as the initial findings suggest. If the existing hardstanding area is utilised and the proposed paving is laid upon the existing subbase then the proposed works are unlikely to adversely impact this tree.

All works within the Root Protection Areas or beneath the canopy spreads of retained trees should be detailed as part of an Arboricultural Method Statement to ensure the method of construction is suitably considered.

4.4.2 Underground and Overhead Utilities

Wherever possible, common service trenches should be specified to minimise land take associated with underground service provision and facilitation access for future maintenance.

4.4.3 Working Space

Sufficient working space around new buildings and utility installation at a distance of approximately 2.5 m will be required across the site and will enter the RPAs of retained trees T16, T17, T18, T20, T90, T91, T92 and T93. Suitable canopy, stem and ground protection measures will therefore be required to ensure any potential impact upon retained trees is mitigated. These mitigation measures should be included in an Arboricultural Method Statement following approval of the current planning application.

4.5 IMPACTS FROM CONSTRUCTION RELATED OPERATIONS

4.5.1 Site Access

It is understood that construction access to the site will be provided through the existing access off Chalk Farm Road and utilising Tottenham Rise Street and it may therefore be necessary to undertake access facilitation pruning works to low-hanging branches to minimise the potential for vehicular impact.

It will be necessary to ensure retained trees adjacent to the access route are protected from vehicular impact through the installation of tree protection barriers, prior to the commencement of the development.

4.5.2 Site Compound, Contractors Car Parking, Delivery and Storage of Materials

Material deliveries to the site will utilise the existing access off Chalk Farm Road. Retained trees will be protected from harm by the prior installation of tree protection barriers and the completion of access facilitation pruning works (if required).

The site compound, contractor's parking, and areas for materials storage within the site should be confirmed as part of an Arboricultural Method Statement following approval of the current planning application.

4.6 POST-DEVELOPMENT IMPACTS

4.6.1 Shading

The shade from trees can be considered both a constraint and opportunity and therefore its effect upon the new development should be fully considered to ensure a harmonious and sustainable relationship can be achieved. When considering the position and orientation of new buildings in relation to existing trees, primary living areas should receive the largest proportion of natural sunlight. BRE guidelines recommends *"at least half of the garden or open space should receive at least two hours sunlight on March 21 (Spring Equinox)"*.

It is considered unlikely that shading will cause significant conflict with the proposed development of the site as orientation of the site is such that the largest retained trees are located adjacent to the northern boundary with some smaller trees present along the southern boundary.

4.6.2 Future Pressure for Removal

The layout of the proposed development is such that future pressure for tree removal is generally unlikely.

4.6.3 Seasonal Nuisance

It is unlikely that a significant degree of seasonal nuisance will occur due to the lack of retained tree cover across the site.

However where it does occur, the sweeping up of leaves and cleaning of gutters, which may become blocked by falling leaves, is considered to be routine seasonal maintenance and as such no notable conflict with the proposed development is considered to occur. Nonetheless it may prove appropriate in certain areas to use gutter guards, or otherwise enclosed gutters, to minimise the potential for leaf fall to cause blockage and an ongoing nuisance.

5. SUMMARY OF IMPACTS

The proposed development of the site and the removal of trees is unlikely to significantly impact the local landscape due to the isolated location and position in relation to Stables Market. The proposed tree loss through implementation of this project is 82% percent, however, 61% percentage of the trees proposed for removal were either considered as low retention value or unsuitable to retain. Although this level of tree loss is unfortunate and would ideally be avoided, the landscaping proposals will provide sufficient mitigation in terms of new tree planting to suitably offset the losses identified.

Whilst some works are to be undertaken within the RPAs of retained trees, the nature of those works are such that they can be completed without impacting significantly upon the trees subject to the adoption of appropriate working practices as detailed in a future Arboricultural Method Statement following approval of the current planning application.

6. MITIGATION AND PROTECTION

6.1 INTRODUCTION

This section of the report details the mitigation for the proposed tree loss, initial protection and avoidance measures suggested to prevent harm to the retained trees.

6.2 NEW TREE PLANTING

New tree planting will form an integral part of the proposed development, however, proposals for new tree planting should be appropriate for the future use of the site and not just aim to mitigate the proposed tree loss.

As part of the development proposals, an adequate quantity of tree planting has been demonstrated on the Landscape General Arrangement, produced by Murdoch Wickham. The purpose and function of the new tree planting should be carefully considered so that key objectives from a wildlife habitat and landscape perspective can also be achieved.

The landscaping scheme should consider the use of both native tree species (for their low maintenance requirements and nature conservation value) and ornamental species (for their contribution to urban design and amenity value). Species choices should be selected on the basis of their suitability for the final site use. Careful consideration should be given to the following: ultimate height and canopy spread, form, habit, density of crown, potential shading effect, colour, water demand, soil type and maintenance requirements in relation to both the built form of the new development and existing properties.

Through careful species selection, the landscape scheme shall reduce the risk of trees being removed in the future on the grounds of nuisance. Nuisance can be perceived in a number of ways and vary from person to person however most commonly, within the context of trees, low overhanging branches, excessive shading, seasonal leaf fall and the misinformed perception that trees close to buildings cause damage.

Tree planting should be avoided where they may obstruct overhead power lines or cables. Any underground apparatus should be ducted or otherwise protected at the time of construction to enable trees to be planted without resulting in future conflicts.

All new tree planting should conform to British Standards 8545:2014 *Trees: from nursery to independence in the landscape – Recommendations*.

6.3 GENERAL TREE PROTECTION

6.3.1 Construction Exclusion Zone

To minimise the potential for harm to the root systems and canopies of retained trees during development construction exclusion zones will be required throughout the site. These are areas surrounding the trees' RPAs and canopies in which construction works, or related activities, will be avoided.

It is recommended that the exclusion zones are afforded protection at all times through the use of tree protection barriers and/or ground protection (specified in accordance with BS5837:2012). No works that cause compaction of the soil or severance of tree roots, except where undertaken in accordance with the guidance provided within this document or detailed within a subsequent AMS, will be undertaken within any exclusion zone.

6.3.2 Tree Protection Barriers

The protective barriers should be erected following any tree removal or tree surgery works and prior to the commencement of any construction site works e.g. before any construction materials or machinery are brought on site or the stripping of soil commences.

The protective barriers are to be constructed in accordance with the specification detailed in BS5837:2012. Any variation to the specification of the protective barrier should be agreed with the Local Planning Authority Arboricultural Officer or included as part of an Arboricultural Method Statement following approval of the current planning application.

6.3.3 Ground Protection

There are no areas on site where ground protection measures will require installation on this site.

7. ARBORICULTURAL METHOD STATEMENT

An Arboricultural Method Statement will be required for the site as various aspects of the proposed development will need to be fully considered due to the presence of retained trees.

The purpose of a Method Statement is to ensure that all site operations can occur with minimal risk of adverse impact upon trees that are to be retained. The document will identify all areas where specific working methods will be required to ensure protection to trees. The document will also specify the location and extent of tree protection barriers and ground protection.

In relation to this development the Method Statement should address the following:

- Tree Surgery
- Site setup and logistics
- Works within Root Protection Areas
- Working space to construct new buildings
- Suitable site access, material storage contractor's car parking and site compound locations.
- Final protective barrier and specifications.
- Phased approach to development works to ensure retained trees are not impacted through demolition and new access construction works.
- Extent of access facilitation pruning works to be undertaken.
- Pre-commencement site meeting.

8. REFERENCES AND BIBLIOGRAPHY

British Standards Institution. (2010). *British Standard 3998:2010, Tree Work - Recommendations.* British Standards Institution, London.

British Standards Institution. (2012). *British Standard 5837:2012, Trees in Relation to Design, Demolition and Construction – Recommendations.* British Standards Institution, London.

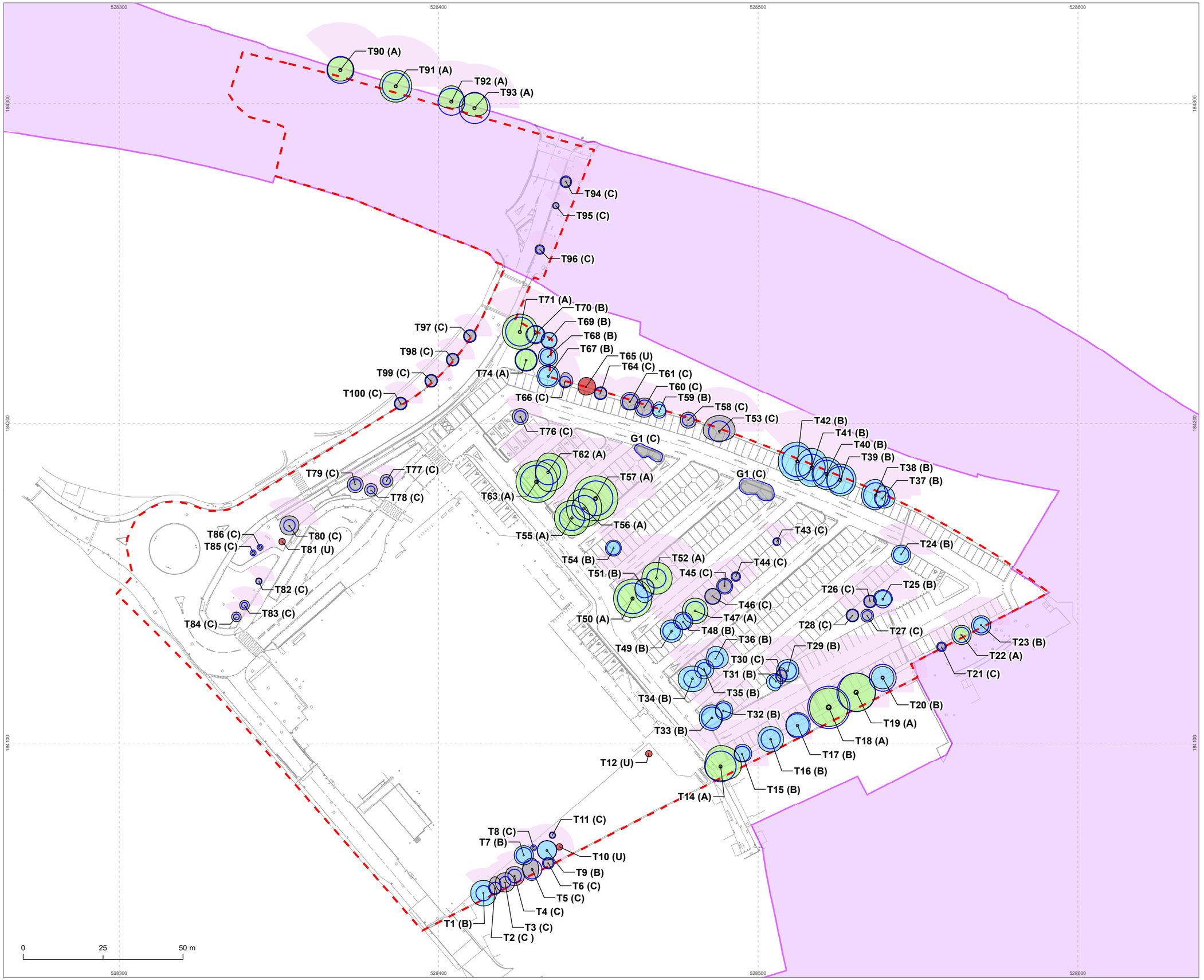
Middlemarch Environmental Ltd. (2020). *Report Number RT-MME-152929-01*. Preliminary Arboricultural Assessment.

Littlefair P. (2011). *Site layout planning for daylight and sunlight: a guide to good practice* (BR 209). British Research Establishment, Watford.

9. DRAWINGS

Drawing Number C152929-01-01 – Tree Survey Plan

Drawing Number C152929-02-01 – Tree Retention Plan



C152929-01-01

Legend

- Tree location and stem diameter
- Category A
- Category B
- Category C
- Category U
- Current canopy extent
- Root Protection Area
- Indicative tree shadow
- Site boundary
- Regent's Canal Conservation Area

T - Tree
G - Tree group

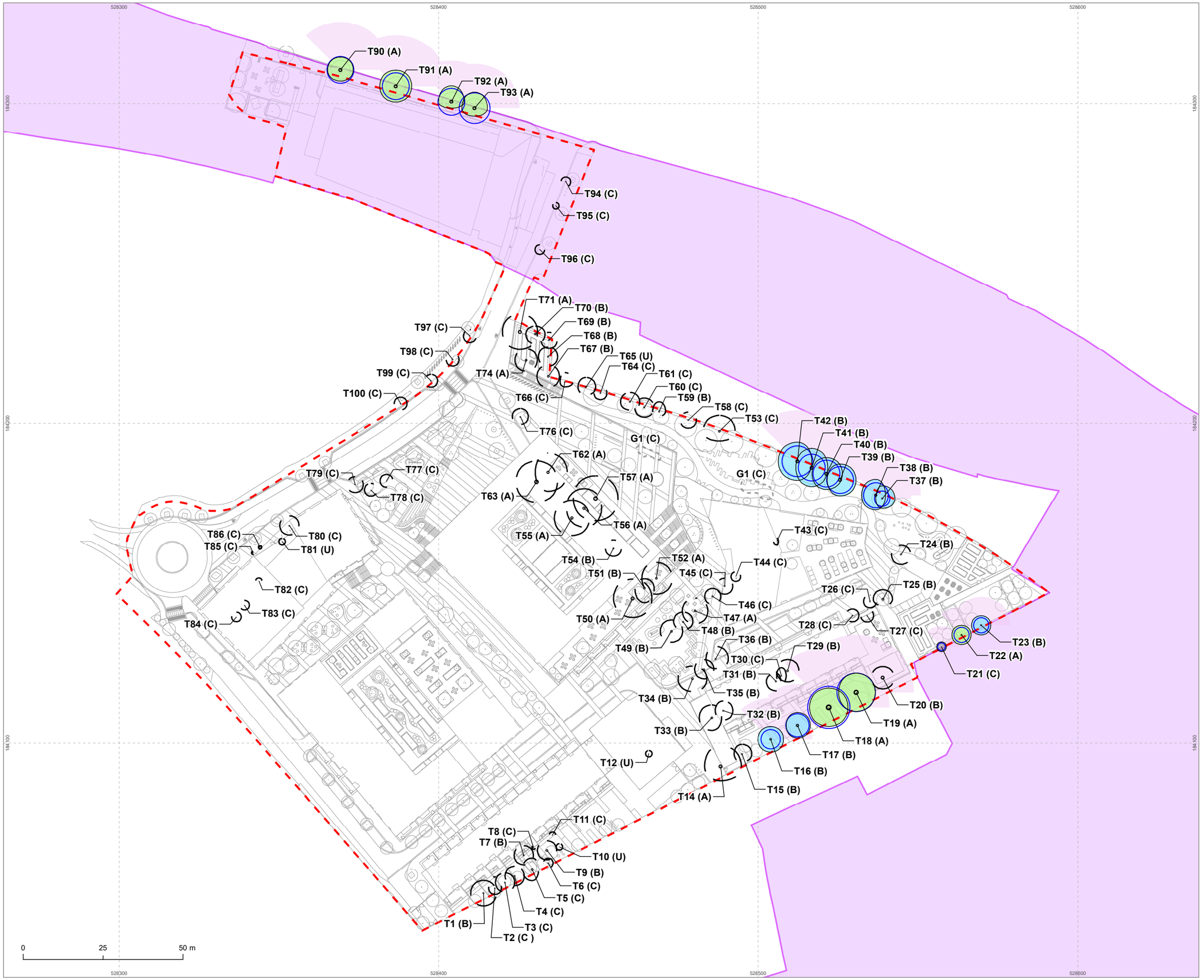
The original of this drawing was produced in colour - a monochrome copy should not be relied upon

NOTES
All dimensions to be verified on site. Do not scale this drawing, use figured dimensions only. All discrepancies to be clarified with Project Arboriculturalist. Drawing to be read in conjunction with Preliminary Arboricultural Assessment and Tree Schedule. Drawing has been produced in colour and is based on digital informaton in .dwg format, aerial images and/or GPS location where appropriate. A monochrome copy should not be relied upon. The exact position of individual trees or species included as part of a tree group, woodland or hedgerow should be checked and verified on site prior to any decisions for foundation design, tree operations or construction activity being undertaken. Further survey work would be required for calculating foundation depths.
Trees are living organisms that change over time, the condition of all trees illustrated herein, are to be checked by the Project Arboriculturalist should works commence 12 months after the date of this survey.
SOME TREES MAY BE SUBJECT TO STATUTORY CONSTRAINTS. IT IS THEREFORE ADVISED THAT NO WORKS SHOULD BE UNDERTAKEN TO ANY TREES ILLUSTRATED HEREIN WITHOUT FIRST OBTAINING THE RELEVANT AUTHORISATION TO DO SO UNLESS AGREED AS PER THE APPROVED PLANS THROUGH PLANNING CONSENT.

N

Project	Camden Goods Yard, Camden
Drawing	Tree Survey Plan
Client	St. George PLC
Drawing Number: C152929-01-01	Revision: 00
Scale @ A3: 1:1,100	Date: June 2020
Approved By: DM	Drawn By: GT

MIDDLEMARCH ENVIRONMENTAL
Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ
T:01676 525880 F:01676 521400
E:admin@middlemarch-environmental.com



C152929-02-01

Legend

- Tree location and stem diameter
- Category A
- Category B
- Category C to be removed
- Category C
- Category U
- Current canopy - tree to be removed
- Current canopy - tree to be retained
- Root Protection Area
- Indicative tree shadow
- Site boundary
- Regent's Canal Conservation Area
- Proposed plan

T - Tree
G - Tree group

The original of this drawing was produced in colour - a monochrome copy should not be relied upon

NOTES
All dimensions to be verified on site. Do not scale this drawing, use figured dimensions only. All discrepancies to be clarified with Project Arboriculturalist. Drawing to be read in conjunction with Preliminary Arboricultural Assessment and Tree Schedule. Drawing has been produced in colour and is based on digital informaton in .dwg format, aerial images and/or GPS location where appropriate. A monochrome copy should not be relied upon. The exact position of individual trees or species included as part of a tree group, woodland or hedgerow should be checked and verified on site prior to any decisions for foundation design, tree operations or construction activity being undertaken. Further survey work would be required for calculating foundation depths.
Trees are living organisms that change over time, the condition of all trees illustrated herein, are to be checked by the Project Arboriculturalist should works commence 12 months after the date of this survey. SOME TREES MAY BE SUBJECT TO STATUTORY CONSTRAINTS. IT IS THEREFORE ADVISED THAT NO WORKS SHOULD BE UNDERTAKEN TO ANY TREES ILLUSTRATED HEREIN WITHOUT FIRST OBTAINING THE RELEVANT AUTHORISATION TO DO SO UNLESS AGREED AS PER THE APPROVED PLANS THROUGH PLANNING CONSENT.

N

Project
Camden Goods Yard, Camden

Drawing
Tree Retention Plan

Client
St. George PLC

Drawing Number	Revision
C152929-02-01	00
Scale @ A3	Date
1:1,100	July 2020
Approved By	Drawn By
DM	GT

MIDDLEMARCH ENVIRONMENTAL
Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ
T:01676 525880 F:01676 521400
E:admin@middlemarch-environmental.com