HAYDEN'S
Arboricultural Consultants

TREE SURVEY & CONSTRAINTS PLAN
IN ACCORDANCE WITH BS 5837:2012

Proj. No **10673**	**McDonalds, Wombwell Lane, Stairfoot, Barnsley, S70 3NT**
Client:	McDonalds Restaurants Ltd
Date of Report:	07/12/2023

Hayden's Arboricultural Consultants Ltd, Units 3-5 Moseley's Farm Business Centre
Fornham All Saints, Bury St Edmunds Suffolk. IP28 6JY

Telephone: 01284 765391 Email: Info@treesurveys.co.uk
www.treesurveys.co.uk

HAYDEN'S
Arboricultural Consultants

TREE SURVEY & CONSTRAINTS PLAN
IN ACCORDANCE WITH BS 5837:2012

The Tree Constraints Plan (TCP) is an important tool that objectively evaluates, classifies and categorises trees in accordance with BS 5837 (2012). Simultaneously, it also provides the architect and designer with an assessment of the associated constraints they may create. As such, the data presented is aimed at pre-empting the requirements of the Local Planning Authority (LPA) by identifying and quantifying key constraints such as canopy dimensions, root protection areas (RPA), water demand and ground cover. The TCP also provides an assessment of the general condition of the trees.

The benefit of the TCP is that the developable area that is free from physical tree constraints, both above and below ground, is clearly identified. Ideally, all development should take place outside the canopy spread and RPA of the trees considered worthy or appropriate for retention thus allowing a traditional construction process. It is usually technically possible (though not necessarily desirable) to build within a very limited portion of the RPA of trees using specialist engineering techniques that provide for minimal or no root disturbance, but inevitably this is more difficult and expensive than traditional construction methods and may not be acceptable to the LPA. Similarly, and wherever possible, construction should take place a minimum of 2 metres beyond the maximum branch spread of retained trees to allow workspace for scaffolding etc.

Once the final design is settled it will be necessary to complete an 'Arboricultural Impact Assessment and Preliminary Method Statement' (Prelim TS & AIA) which will form part of the planning application submission. The Prelim TS & AIA will also provide more detailed information regarding tree surgery and pests and diseases etc.

NB: This report is for design guidance only and not sufficient to support a planning application

Contents

TREE PROTECTION STATUS

Hayden's sourced TPO & Conservation Area status from the Local Planning Authority's Online Mapping System on 07/12/23 .
We were informed that:

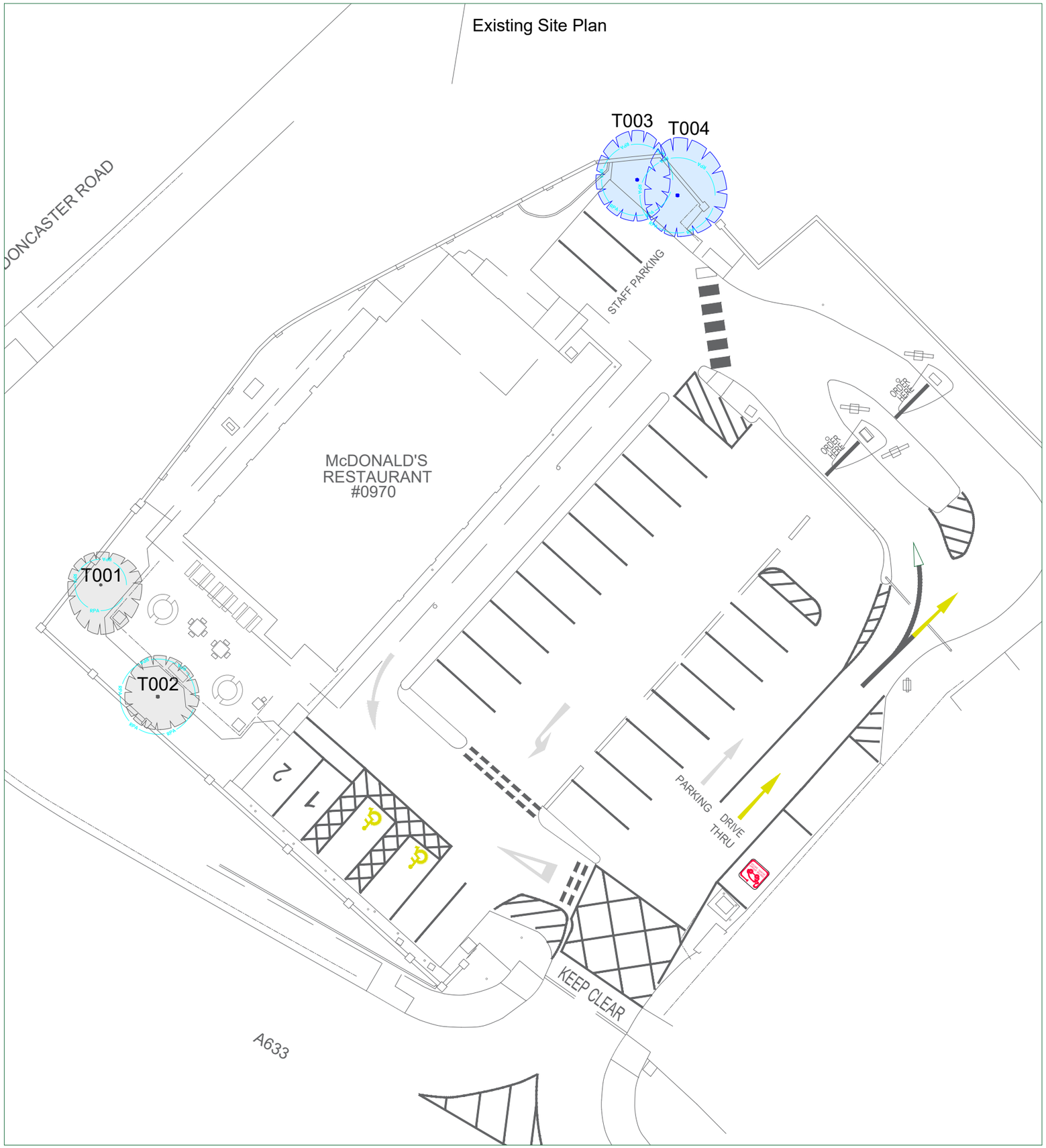
- No TPO's are present on site
- The site is not located within a conservation area

We would advise it prudent that before any tree work commences, this is checked directly with the Local Planning Authority to confirm that their online mapping system is definitive.

CONSTRAINTS PLAN

The Tree Constraints Plan (TCP) is an important tool that objectively evaluates, classifies and categorises trees in accordance with BS 5837 (2012). Simultaneously, it also provides the architect and designer with an assessment of the associated constraints they may create. As such, the data presented is aimed at pre-empting the requirements of the Local Planning Authority (LPA) by identifying and quantifying key constraints such as canopy dimensions, root protection areas (RPA), water demand and ground cover. The TCP also provides an assessment of the general condition of the trees.
The benefit of the TCP is that the developable area that is free from physical tree constraints, both above and below ground, is clearly identified. Ideally, all development should take place outside the canopy spread and RPA of the trees considered worthy or appropriate for retention thus allowing a traditional construction process. It is usually technically possible (though not necessarily desirable) to build within a very limited portion of the RPA of trees using specialist engineering techniques that provide for minimal or no root disturbance, but inevitably this is more difficult and expensive than traditional construction methods and may not be acceptable to the LPA. Similarly, and wherever possible, construction should take place a minimum of 2 metres beyond the maximum branch spread of retained trees to allow workspace for scaffolding etc.
Once the final design is settled it will be necessary to complete an "Arboricultural Impact Assessment and Preliminary Method Statement" which will form part of the planning application submission.

Existing Site Plan



CATEGORY AND DEFINTION

Trees unsuitable for retention	
Category U	Those in such condition that they cannot realistically be retained as living trees in the current land use for longer than 10 years
Trees to be considered for retention	
Category A	**Trees of high quality** with an estimated remaining life expectancy of at least 40 years
Category B	**Trees of moderate quality** with an estimated remaining life expectancy of at least 20 years
Category C	**Trees of low quality** with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm

NOTE:

Hayden's Arboricultural Consultants were provided with a Topographical Survey but these do not always show the positions of all the trees/features on site. The locations of any additional features have been fixed using GPS. As such the position of the trees/landscape features should not be taken as exact but gives a fair distribution of their locations on site.

North (Indicative)

LEGEND

- Existing Tree/Feature BS 5837:2012 Category B
- Existing Tree/Feature BS 5837:2012 Category C
- Line of Root Protection Area (RPA) - calculated following guidelines set in BS 5837:2012

Rev:	Date:	By:	Revision:
-	05/12/23	CM	Based on topographical survey

The position, condition, and dimensions of the trees are based on a site survey undertaken on 01/12/2023

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

Scale 1:250

0m 2.5m 5m 7.5m 10m 12.5m

HAYDEN'S Arboricultural Consultants

5 Moseleys Farm Business Centre,
Fornham All Saints,
Bury St Edmunds,
Suffolk, IP28 6JY.

Head Office: 01284 765391
Southern Office: 01722 657423
Email: info@treesurveys.co.uk

www.treesurveys.co.uk

Client:	McDonalds Restaurants Limited
Drawing Title:	Constraints Plan
Site:	Stairfoot McDonalds, Wombwell Lane, Stairfoot, Barnsley

Date:	Drawn By:	Cad File Ref:
05/12/23	CM	Cli\Pro\10673-D-CP.dwg

Scale:	Checked By:	Drawing No:	Rev:
1:250 (A3)	NH	10673-D-CP	-

SCHEDULE OF TREES

Stairfoot McDonalds, Wombwell Lane, Stairfoot, Barnsley,

Surveyed By: Nick Hayden Date: 01/12/2023
Managed By: Nick Hayden

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover				
T001	Rowan	130	4		High	N2, E2.5, S3, W2	Retaining wall circa. 1m to west. Slight stem lean to south. Occluding pruning wound north aspect at circa. 1.7m above ground level (agl). Multi-stemmed from circa. 1.8m agl, unions appear stable. Minor deadwood lower crown south east aspect. Small but prominent as on raised elevation adjacent to highway.	C1	No work required	4
		1.56	2.1-4m		Y	Moderate				
Yes		7.6			10+ years	Grass				
T002	Cherry	190	7		High	N2.5, E2.5, S2, W2	Retaining wall circa. 1.5m to south. Roots present adjacent to wall. Slight stem lean to north. Large, exposed roots. Notable wound and decay in structural root extending east. Multi-stemmed from circa. 2m agl, unions appear stable. Previously topped at 5.5m agl. Crown displays reasonable vigour. Prominent as on raised elevation adjacent to highway.	C1	No work required	4
		2.28	2.1-4m		SM	Moderate				
Yes		16.3			10+ years	Grass, Block paving				
T003	Norway Maple	180	8		Moderate	N3, E2, S2.5, W2.5	Boundary wall circa. 1m to north. Parking circa. 1m to south. Mechanical damage to surface roots. Occluded stem wounds. Reasonable vigour.	B2	No work required	4
		2.16	2.1-4m		SM	High				
Yes		14.7			20+ years	Grass				
T004	Norway Maple	190	8.5		Moderate	N3.5, E3, S2.5, W2	Boundary wall circa. 1m to north. Parking circa. 2m to south. Mechanical damage to surface roots. Occluded stem wounds. Reasonable vigour.	B1	No work required	4
		2.28	2.1-4m		SM	High				
Yes		16.3			20+ years	Grass, Tarmac				

Explanatory Notes for Tree Constraints Plans

DBH (mm) Diameter of main stem in millimetres at 1.5 metres from ground level. Where the tree is a multi-stem, the diameter is calculated in accordance with item 4.6.1 of BS 5837:2012.

RPA This is the Root Protection Area, measured in square metres and defined in BS5837:2012 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". The RPA is shown on the drawing. Ideally this is an area around the tree that must be kept clear of construction, level changes of construction operations.

Crown Base Recorded in metres, the distance from ground and aspect of the lowest branch material.

Crown Spread Indicates the radius of the crown from the base of the tree in each of the northern, eastern, southern and western aspects.

Age Recorded as one of the following categories:

Y Young. Recently planted or establishing tree that could be transplanted without specialist equipment, i.e. less than 150 mm DBH.

S/M Semi-mature. An established tree, but one which has not reached its prospective ultimate height.

E/M Early-mature. A tree that is reaching its ultimate potential height, whose growth rate is slowing down but if healthy, will still increase in stem diameter and crown spread.

M Mature. A mature specimen with limited potential for any significant increase in size, even if healthy.

O/M Over-mature. A senescent or moribund specimen with a limited safe useful life expectancy. Possibly also containing sufficient structural defects with attendant safety and/or duty of care implications.

V Veteran. Although there is no exact definition this is usually a tree that is of interest biologically, culturally or aesthetically because of its age, size or condition.

D Dead.

Safe Useful Life Expectancy Relates to the prospective life expectancy of the tree and is given as one of 4 categories:

40 years+;

20 years+;

10 years+;

Less than 10 years.

Water Demand

This gives the water demand of the species of tree when mature, as given in the NHBC Standards Chapter 4.2 “Building Near Trees”.

BS 5837 Main Category

Using this assessment (BS 5837:2012, Table 1), trees can be divided into one of the following simplified categories, and are differentiated by cross-hatching and by colour on the attached drawing:

Category A - Those of high quality with an estimated remaining life expectancy of at least 40 years;

Category B - Those of moderate quality with an estimated remaining life expectancy of at least 40 years;

Category C - Those of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm;

Category U - Those trees in such condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.

BS 5837 Sub Category

Table 1 of BS 5837:2012 also requires a sub-category to be applied to the A, B, C, and U assessments. This allows for a further understanding of the determining classification as follows:

Sub-Category 1 - Mainly arboricultural qualities

Sub-Category 2 - Mainly landscape qualities

Sub-Category 3 - Mainly cultural values, including conservation

Please note that a specimen or landscape feature may fulfil the requirements of more than one Sub-Category.

Recommended Works

Identifies the necessary tree work to mitigate anticipated problems and deal with existing problems in the setting at the time of the inspection.

Priority

This gives a priority rating to each tree allowing the client to prioritise necessary tree works identified within the Tree Survey.

1 Urgent – works required immediately;

2 Works required within 6 months;

3 Works required within 1 year;

4 Re-inspect in 12 months,

Tree Preservation Order and Conservation Area Search Results (Online Mapping)