

Appendix 1 Tree survey and explanatory notes

Site: Land adj The Moors

Date of Survey: 16/02/2024

Arboricultural Consultant/Surveyor: J Choat

Weather: Overcast, light wind

Estimated

Tree ref	Species	Height in m	Stem diameter in mm	Radial distance required for RPA	Branch spread					Height of crown clearance in m	Age class	Ground condition	NHBC Water demand	Observations	Preliminary management recommendations	Works urgency	Estimated remaining contribution in years	Category grading
					N	E	S	W	W									
T1	Norway maple <i>Acer platanoides</i>	9	350	4.2	4	4	4	4	4	2.5	EM	Grass	Moderate	Good condition.	None	0	20+	B1/3
T2	Walnut <i>Juglans regia</i>	10	290	3.48	4	4	4	4	3		EM	Grass	Moderate	Good condition. Recently reduced.	None	0	20+	B1/3
T3	Norway maple <i>Acer platanoides</i>	14	380	4.56	4	4	4	4	4	4	EM	Grass	Moderate	Previous crown reduction. Tensile fork at 2.5m.	None	0	20+	B1/3
H1	Beech <i>Fagus sylvatica</i>	1.2	75	0.9	0.3	0.3	0.3	0.3	0	0	Y	Grass	Moderate	Good condition. Maintained in a shape and pruned on frequent regime.	Maintain to current dimensions.	0	20+	C1/3
T4	Whitebeam <i>Sorbus aria</i>	13	300	3.6	4	4	4	4	4	4	M	Grass	Moderate	3rd party tree, unable to fully assess.	None	0	20+	B1/3
T5	Oak <i>Quercus robur</i>	15	350	4.2	5	5	5	5	4	4	EM	Grass	High	3rd party tree, unable to fully assess.	None	0	30+	B1/3
T6	Himalayan birch <i>Betula utilis</i>	14	300	3.6	2	2	2	2	4	4	EM	Grass	Low	3rd party tree, unable to fully assess.	None	0	20+	B1/3
T7	Sweet gum <i>Liquidambar</i>	13	290	3.48	4	4	4	4	2.5	EM	Grass	Not provided	Not provided	Good condition.	None	0	30+	B1/3
T8	Maidenhair tree <i>Ginkgo biloba</i>	9	200	2.4	1	1	1	1	3	Y	Grass	Grass	Not provided	Good condition.	None	0	30+	B1/3
T9	Cypress oak <i>Quercus robur fastigiata</i>	17	340	4	1	1	1	1	1.2	EM	Grass	High	High	Good condition.	None	0	30+	B1/3
T10	Beech <i>Fagus sylvatica</i>	9	400	4.84	5	5	5	5	2	EM	Grass	Moderate	Moderate	Good condition.	None	0	30+	B1/3
T11	Red Oak <i>Quercus rubra</i>	13	400	4.84	5	5	5	5	2	EM	Grass	High	High	Good condition.	None	0	30+	B1/3
T12	Lime <i>Tilia sp</i>	17	670	8.04	5	5	5	5	2	M	Raised shrub bed.	Moderate	Moderate	Good condition.	None	0	30+	A1/3
T13	Birch <i>Betula pendula</i>	16	410	4.92	1	1	3	3	3	M	Raised shrub bed.	Low	Low	Good condition. Asymmetric crown.	None	0	30+	B1/3
T14	Ash <i>Fraxinus excelsior</i>	15	400	4.8	2	2	3	3	3	M	Raised shrub bed.	Moderate	Moderate	Good condition.	None	0	30+	B1/3
G1	Himalayan birch <i>Betula utilis</i> Young's birch <i>Betula</i>	15	280	3.36	3	3	3	3	0.5	EM	Raised shrub bed.	Low	Low	Good condition.	None	0	30+	B1/3
T15	Oak <i>Quercus robur</i>	15	400	4.8	4	4	4	4	5	M	Raised shrub bed.	Low	Low	Large wounds on primary laterals.	None	0	30+	C1
T16	Alder <i>Alnus sp.</i>	17	480	5.76	3	3	3	3	5	M	Raised shrub bed.	Low	Low	Slight leaning stem	None	0	30+	B1

## Explanatory Notes

### Referencing

Each tree is given a unique reference number and plotted on the attached plans for clear identity. Individual trees are referenced as T1, T2 etc., Groups G1, G2 etc. Hedgerows H1, H2 etc. and Woodlands W1, W2 etc.

### Species

All species are recorded using common names. Identification is made using experience and knowledge.

### Tree dimensions

Tree height is measured and recorded in meters and taken from the base of the stem to the tip of the crown. Height is estimated using experience and knowledge.

Diameter at Breast Height (DBH) is measured at approximately 1.5m from the ground up the stem and is measured and recorded in millimeters. DBH is measured accurately using a diameter tape.

Crown spread is measured in meters from the stem to the extent of the crown spread to each compass point (NESW). Crown spread is estimated using experience and knowledge.

Crown clearance is the height from ground level to the lowest branch and is measured in meters. Crown clearance is estimated using experience and knowledge.

### Age class

Age class falls in to 4 categories:

Y	Young
EM	Early Mature
M	Mature
OM	Over Mature

### Observations

The biological condition of the tree is assessed and noted. Notable defects are recorded; fruiting bodies, cankers, die back, exudates, etc. are recorded.

The mechanics of the tree are assessed and noted. Notable defects are recorded; buckling, rib formation, stresses, bulges, soil cracks, large cavities or wounds, tight branch junctions, etc. are recorded.

### Preliminary management recommendations

Tree management is recommended following the assessment of physiological and structural condition. Recommended works may include, no work required, crown reduction, crown lift, fell, crown thin, monitor etc.

### Estimated remaining contribution in years

An estimate of remaining life expectancy recorded in years. Estimated remaining contribution is made using experience considering the structural and physiological condition of the tree, nuisance, previous management, etc.

### Category grading and colour coding on plan

A (Green square) high quality and value

B (Blue square) moderate quality and value

C (Grey square) low quality and value

U (Red Square) those that cannot be retained as living trees

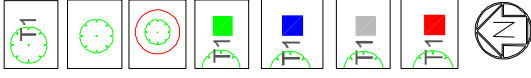
## Sub categories

- 1 arboricultural values
- 2 landscape values
- 3 cultural values, including conservation

## Works priority

- 1 Works required immediately to make the tree safe
- 2 Works required within 60 days
- 3 Works required as part of routine operations
- 0 no works required

Legend:



Tree reference

Tree and crown spread

Root protection areas

BS 5837 Retention Category A

BS 5837 Retention Category B

BS 5837 Retention Category C

BS 5837 Retention Category U

Notes:

This drawing was produced in colour; a monochrome copy should not be relied upon.

Project:

Land adj The Moors, Gt Bentley

Drawing Title:

Tree Survey and Constraints Plan

TPS

Arboricultural Consultancy

Date: 18th February 2024

Scale: 1:250 @ A1

Drawing Number: TPSQM0001 SCP



Appendix 2 Tree survey and constraints plan

## Appendix 3 Barrier construction profile

Permission to reproduce extracts from BS 5837:2012 is granted by the British Standards Institution (BSI). No other use of this material is permitted. The complete British Standard can be purchased from the BSI online shop: <http://shop.bsigroup.com/en/ProductDetail/?pid=00000000030213642>

Diagram 1 Weldmesh panels with block supports pegged to brace light impact

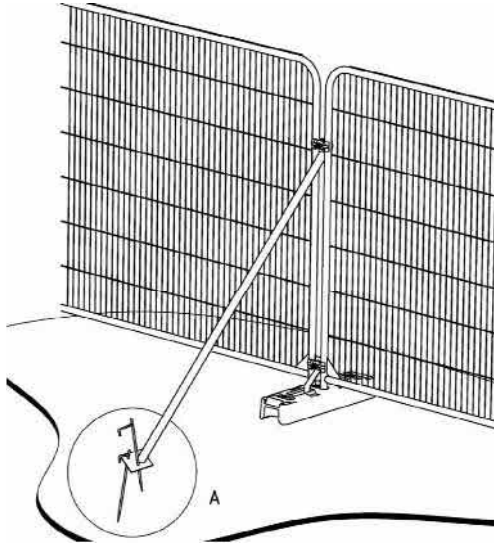
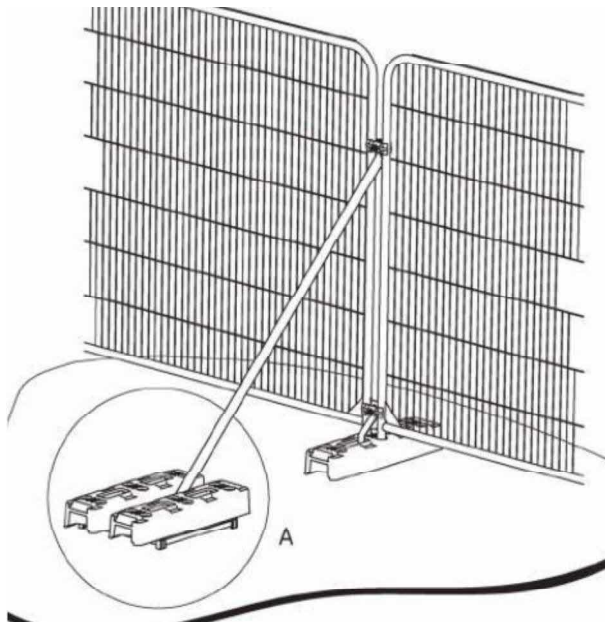
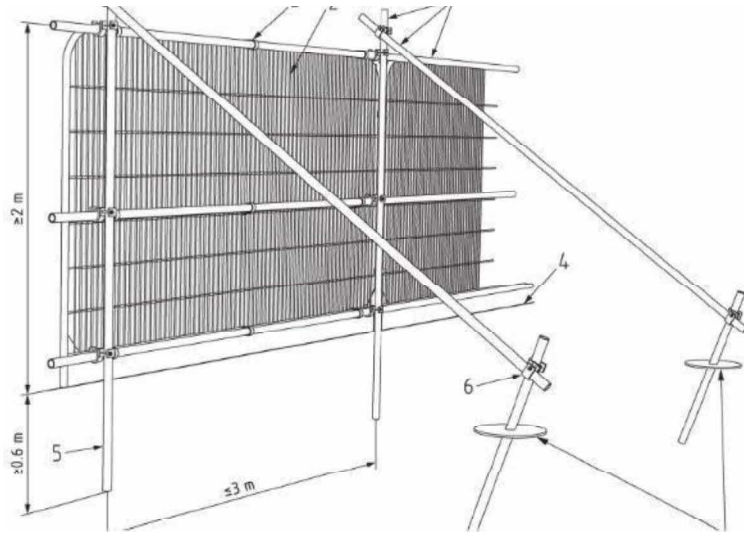


Diagram 2 Weldmesh panels with block supports and further block supports to brace intermediate impacts



# TPS

Diagram 3 Weldmesh panels with scaffold frame posts driven into the ground to brace heavy impacts

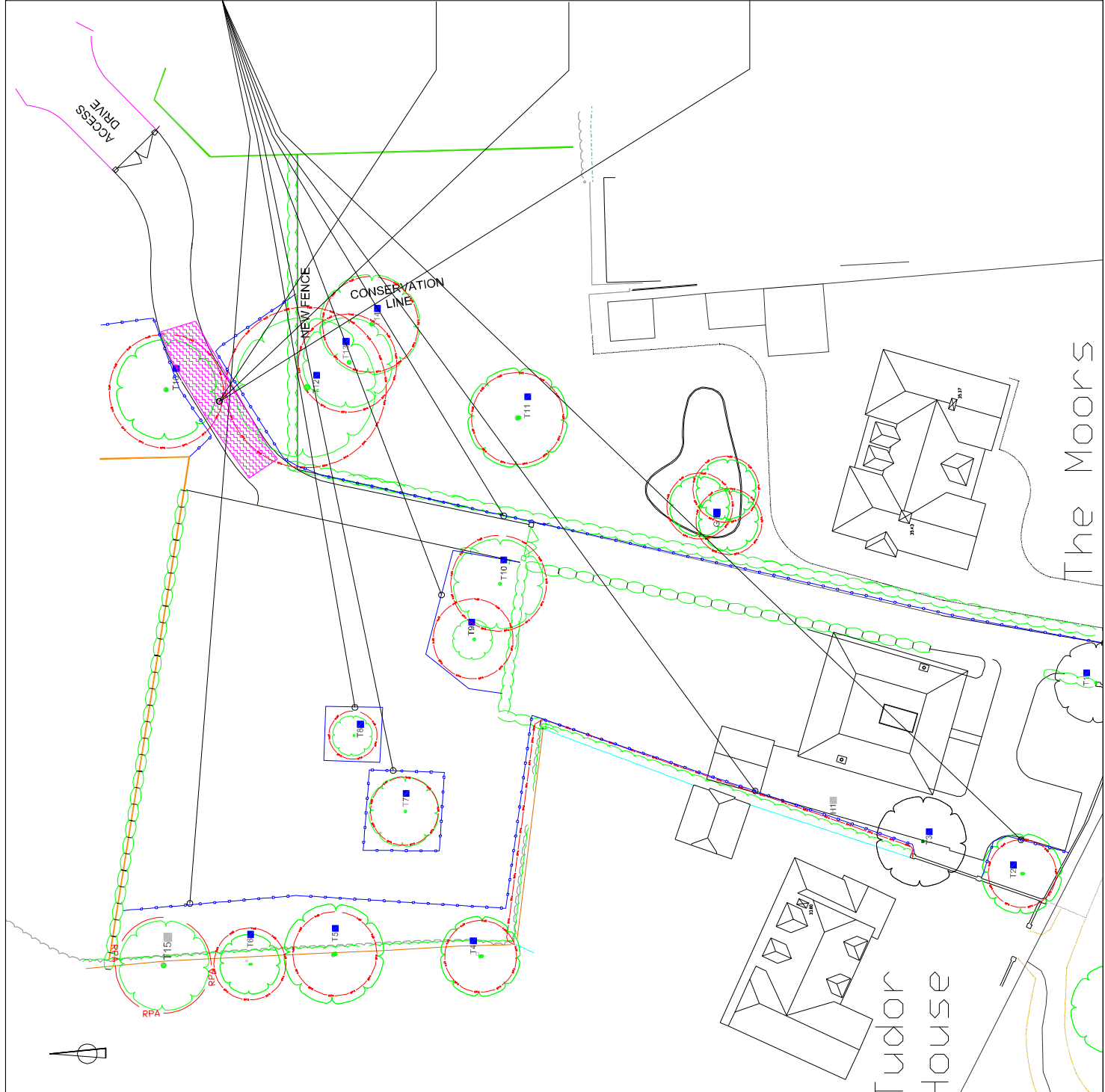




# **Construction Exclusion Zone**

**These trees have been retained and protected as part of the planning permission for this site.**

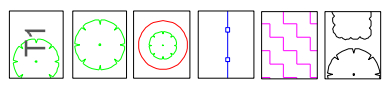
**Any breach of the protection will result in enforcement action from the Local Authority.**



**Methodology**  
 The methodology for this project involves a series of steps to ensure the protection and preservation of trees during construction. This includes site assessment, tree identification, and the implementation of various protection measures as detailed in the legend and notes.

**Construction Evaluation Zone**  
 No access permitted  
 The proposed construction area is located within the tree protection zone. Any access to this area must be controlled and monitored to ensure the safety of the trees.

**Notes:**  
 This drawing was produced in colour. A monochrome copy should not be relied upon.



**Legend:**

- Tree reference
- Tree and crown spread
- Root protection area
- Temporary barrier protection
- Needle construction and hand excavation
- Trees / Hedgias to be removed



**Notes:**  
 This drawing was produced in colour. A monochrome copy should not be relied upon.

**Project:** Land adj The Moors, Gt Bentley

**Drawing Title:** Tree Protection Plan

**TPS**  
 Arboricultural Consultancy

Date: 10th February 2024  
 Scale: 1:200 @ A1  
 Drawing Number: TFSQ/0026 TFP