



Marcus Foster

Arboricultural Design & Consultancy

BA (Hons) | NDArb | Techcert (AA) | MArborA

Arboricultural Survey & Impact Assessment (BS5837:2012)

Site

20 The Downsway
Sutton
SM2 5RN

Client

Navinder Bhogal

Date of Report:

May 2021

Report Reference:

AIA/MF/079/21

Report Prepared by:

Marcus Foster

BA (Hons) NDArb. TechCert (AA) MArborA



Marcus Foster
Arboricultural Design & Consultancy
Tel: + 44 (0) 7812 024 070
mail@marcus-foster.com
www.marcus-foster.com

Contents

1. Introduction
2. Survey methodology
3. Limitations
4. Tree Survey Summary
5. Arboricultural Impact Assessment
6. Arboricultural Method Statement
7. Tree Works Schedule
8. Appendices
 - A: Tree Survey*
 - B: Tree Survey Plans: T001-T003*
 - C: Photographs*
 - D: Tree Protection Notice*
 - E: Tree Protection Fencing Specifications*
 - F: References*

1.0 Introduction

1.1 This report has been commissioned by Navinder Bhogal to survey, assess and provide an Arboricultural Impact Assessment for the 9 x trees (T1-T9) sited at and within close proximity of proposed development works at 20 The Downsway, Sutton, SM2 5RN.

1.2 A site visit was conducted on 10th May 2021 to survey and assess the trees. The weather at the time of inspection was bright with mild temperatures and trees in various stages of bud burst.

1.3 The tree survey, report and recommendations have been compiled for the 9 x trees (T1-T9) surveyed within the site and neighbouring properties as appropriate / where within close proximity of the site.

1.4 The details of the subject trees are set out in the tree survey table in *Appendix A*. The trees were surveyed on the date and time shown above and the tree survey assessment information for the tree describing size, condition and surroundings are found within this appendix.

1.5 The trees located within the site are shown in site plans T001-T003, *Appendix B*, and these correspond to the tree survey results table, *Appendix A*. Photographs of the trees can also be found in *Appendix C*.

1.6 This report and the opinions within it have been produced by Marcus Foster, a qualified arboriculturist and Professional Member of the Arboricultural Association with over 19 years experience and holding a National Diploma in Arboriculture, the Arboricultural Association's Technicians Certificate, Professional Tree Inspection Certificate (LANTRA) as well as a degree in History and Society. Work experience within the industry includes work as a Contracts Manager for an Arboricultural Association Approved Company, a Local Authority Tree Preservation Officer and an independent Arboricultural Consultant. As a consultant many of projects undertaken are in the inner London Boroughs of Islington, Hackney, Westminster, Camden, Southwark and RBKC, making Marcus Foster familiar with the most recent requirements of development and constraints on urban trees.

1.7 No additional documentation has been referred to relating to the trees or the building at this property for the compilation of this report.

2.0 Survey Details and Scope

2.1 The site survey included the 9 x trees (T1-T9) as shown in the survey, *Appendix A*, and also highlighted on the site plans, *Appendix B*.

2.2 The trees were surveyed from ground level from within the site. The diameter of the trunks have been measured using a DBH tape at 1.5m height where within the site and estimated for those off site. The height of the trees have been estimated.

2.3 The following information was recorded for the tree and is shown in the Tree Schedule included in *Appendix A*:

- Number: an identity number which cross-references locations shown on the plan in *Appendix A* with the schedule in *Appendix B*.
- Species: listed by common names
- Tree Height: height in metres (m)
- Tree Spread: spread in metres (m)
- Stem diameter: measured in millimetres (mm) and taken at 1.5m above ground level
- Age Class: Y (young); EM (early-mature); M (mature); OM (over-mature)
- Vigour: G (good); F (fair); P (poor); D (dead)
- Structural Condition: G (good); F (fair); P (poor); D (dead)
- General Condition Specific comments relating to each tree
- Estimated Remaining Contribution (years)
- BS5837 Category Grading
- Protection Distance m2 Area (where applicable – BS5827: 2012)
- Protection Distance Radius (where applicable – BS5827: 2012)

2.4 Information recorded in the tree survey, *Appendix A* is expanded in the report findings and preliminary recommendations have been made in *Section 5*.

2.5 Findings as shown within *Appendix A* and discussed within *Section 4* are also highlighted within *Appendix B* which incorporates the Tree Constraints Plan (TCP) - drawing T002 addressing areas where arboricultural solutions are required. The Tree Protection Plan (TPP) - drawing T003 provides outline tree protection measures.

3.0 Survey Limitations

3.1 No soil excavations have been carried out.

3.2 This report only considers the trees and conditions at the time of inspection. As the inspection was only visual no guarantee can be given concerning the condition of the wood at present in any of the trees inspected and furthermore that no future problems or deficiencies may arise.

3.3 The survey has been undertaken as a survey of the trees without prior influence of the development and implicating factors.

3.4 No invasive tools were used during this site survey.

3.5 It should be noted that vegetation including shrubs within this / the neighbouring sites have not been included in the survey as none were within close or relevant proximity .

4.0 Tree Survey Summary

4.1 The trees have been surveyed in accordance with BS5837: 2012 'Trees in Relation to Design, Demolition and Construction to Construction - Recommendations' (BS5837: 2012) and have been rated as follows:

Category 'A' trees

Trees of high quality with an estimated remaining life expectancy of at least 40 years. Trees have been categorised as 'A' trees for one of the following reasons:

- Mainly arboricultural qualities
- Mainly landscape qualities
- Mainly cultural values including conservation

Within the Site Plan (Appendix B) those trees rated as 'A' category trees have a **green** outline as denoted within the site plan key / survey.

None

Category 'B' trees

Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. Trees have been categorised as 'B' trees for one of the following reasons

- Mainly arboricultural qualities
- Mainly landscape qualities
- Mainly cultural values including conservation

Within the Site Plan (Appendix B) those trees rated as 'B' category trees have a **blue** outline as denoted within the site plan key.

T8

Category 'C' trees

Trees of low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150mm. Trees have been categorised as 'C' trees for one of the following reasons

- Arboricultural qualities - unremarkable trees of very limited merit
- Mainly landscape qualities
- Trees with no material conservation or cultural value

Within the Site Plan (Appendix B) those trees rated as 'C' category trees have a **grey** outline as denoted within the site plan key.

T1, T2, T3, T5, T6, T7, T9

Category 'U' trees

Trees 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.

Within the Site Plan (Appendix B) those trees rated as 'U' category trees have a **red** outline as denoted within the site plan key.

T4

4.2 The trees have been surveyed taking into account condition, general health and form without the development process influencing the survey. In addition they have also been surveyed taking account of amenity value that is offered in relation to both the landscape and surrounding buildings and streetscape. This report outlines the impact that the proposed development will have on the overall treescape and landscape; it provides recommendations to ensure that long-term amenity value for the area is retained.

4.3 The report has been written with close reference to the British Standard Guidance, British Standard 5837: 2012 'Recommendations for trees in relation to construction' (BS5837: 2012), which addresses the juxtaposition between trees and structures. The Arboricultural Impact Assessment highlights areas where the trees will require protection which should be addressed within the Arboricultural Method Statement (AMS) and/or Tree Protection Plan (TPP) specific to the site and proposed scheme, and corroborating with all construction and landscape method statements as relevant.

5.0 Findings and Discussion:

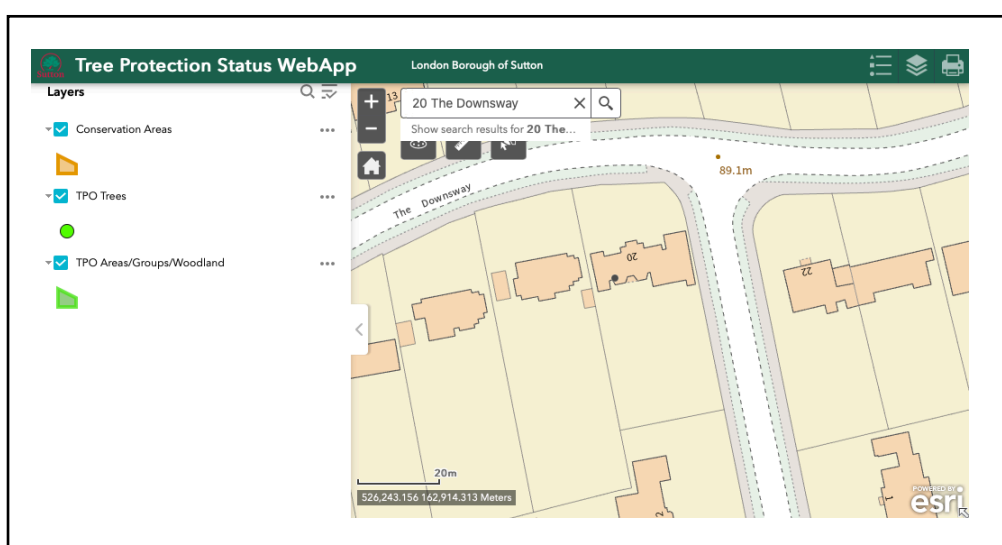
Site Overview

5.1 The 9 x trees (T1-T9) located within close proximity of the proposed development works. The trees surveyed are located within the London Borough of Sutton The following statutory checks have been made in relation to the trees:

CONSERVATION AREA STATUS: N/A

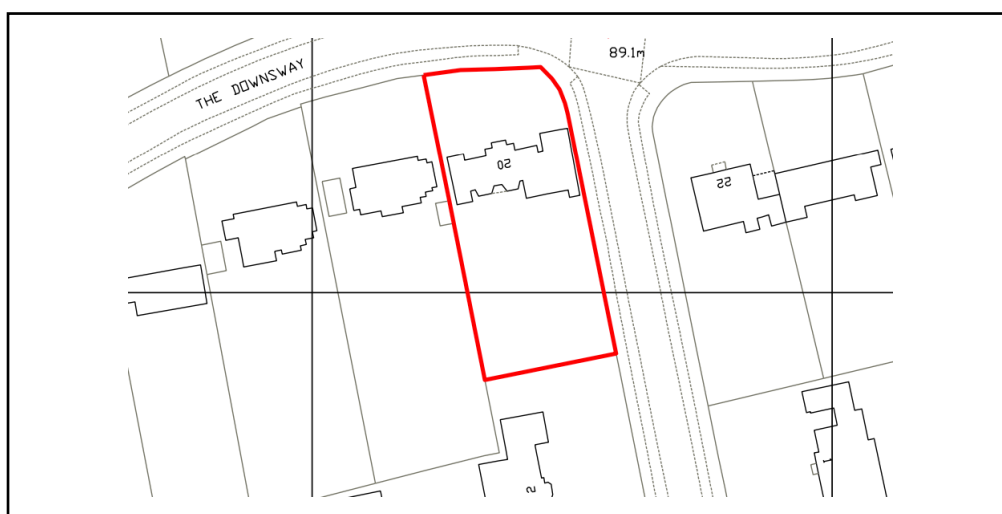
TREE PRESERVATION ORDER (TPO) STATUS: N/A

5.2 The findings are confirmed below within the online mapping:

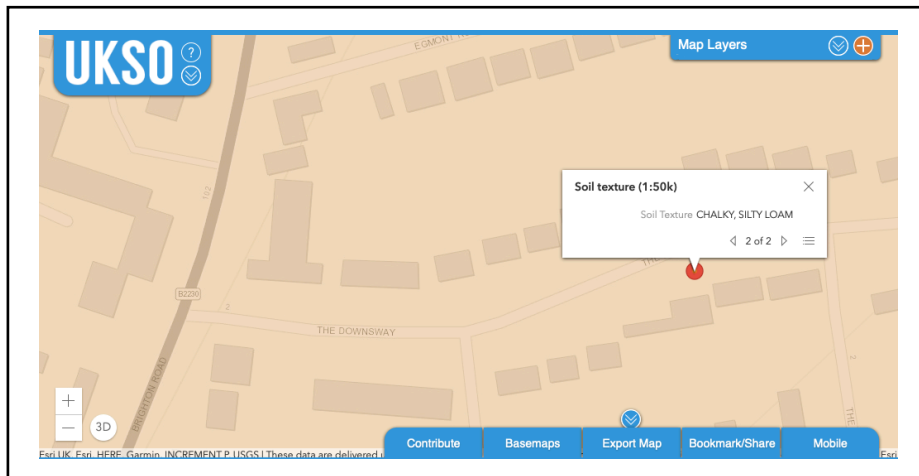


EXTRACT FROM
<https://bos.maps.arcgis.com/apps/webappviewer/index.html?id=8c683f4246ee46b9b3d975495a6daa3b>

5.3 The property is located as follows:



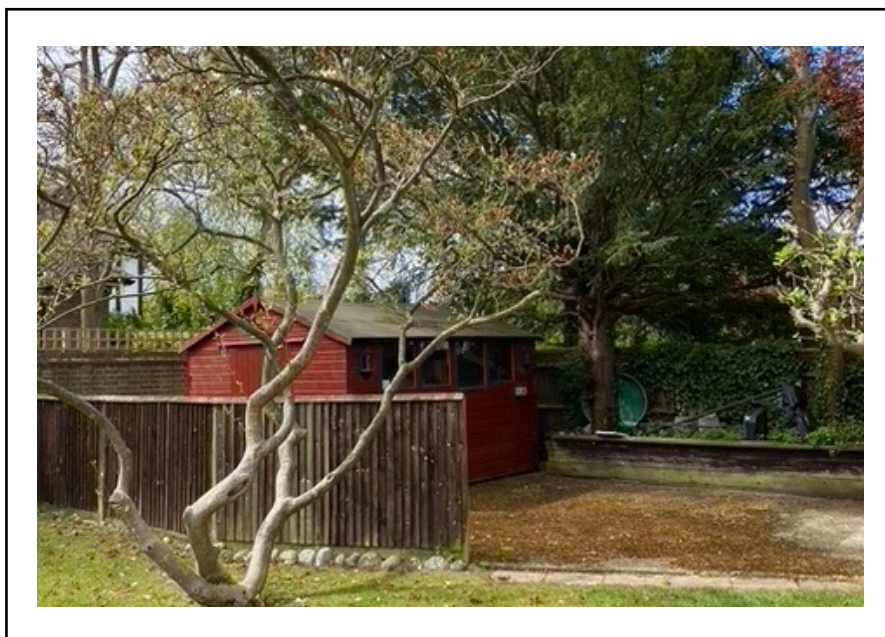
5.4 The underlying soil to this area is classified as 'chalky silty loam' within the UK Soil Observatory (www.ukso.org) - a light to medium soil mix:



Extract from Soil Observatory -April 21 - www.ukso.org

5.5 The limited presence of a clay element within the soil is significant in terms of both tree protection and foundation design. Whilst clay soils can experience substantial volume changes when vegetation extracts moisture from the ground and they are also prone to compaction when wet; the soil is deemed as being of medium texture with limited presence of clay. Any foundations should also be designed in accordance with the recommendations contained within NHBC Chapter 4.2 (National House Building Council, 2010) and should account for the possibility of both subsidence and heave.

5.6 The site comprises a rear of property garden area currently laid to hard landscapes with timber shed structure sited within the subject area. An overview of the area is shown below as photographed 10/05/21:



5.7 The trees have been surveyed within the properties as follows:

20 The Downsway:
Trees T1, T2, T3, T4, T5, T6

18 The Downsway:
Trees T7 & T8

2 The Causeway
Tree T9

5.8 For the purposes of this report, reference has been made to the following plans for the proposed development:

KJC Architects
2088-PA-01-2000-ZXX_Location Plan Block Plan_Gym

5.9 The proposed development comprises installation of a garden building to the rear south western garden area. The development has the potential to affect the trees in the following ways:

- Loss of 2 x trees comprising:
 - 1 x 'C' category tree
 - 1 x 'U' category tree
- Potential impact to the root plates of retained off site trees surrounding the trees during development and landscape process
- The use of and storage of materials and chemicals on site within close proximity of the trees has the potential to cause damage
- The long-term impact of associated works of the proposed development

5.10 The trees and the impact from the proposed development are evaluated within this section to determine overall arboricultural impact from the proposed development. Where trees are retained the Root Protection Area (RPA) for each tree is evaluated in relation to proposed development works and where trees within the site are proposed for removal mitigation measures are assessed.

Arboricultural Impact Assessment

Trees T1, T2, T3 & T6

5.11 Tree T1 comprises a Eucalyptus to the north of the development area. The tree has the following key attributes:

- 'C' category due to structural defects
- Decay to east at 0-2m height with limited reaction wood
- Large fully developed crown with limited management history

Due to significant location from development area no tree protection measures are specified for this tree.

5.12 Trees T2, T3 & T6 comprise a Purple plum, Apple and Magnolia to the north and east of the development area. The tree has the following key attributes:

- 'C' category due to ornamental form
- Managed form
- Limited amenity value with ornamental value

5.13 The trees shall remain unaffected by the proposed development with tree protection measures applied as follows:

TREE PROTECTION FENCING

Basel shuttering tree protection fencing is recommended to enclose the areas surrounding the trees as outlined within the AMS (Section 6) and TPP

Trees T4 & T5

5.14 Trees T4 & T5 comprise an Ash (T4) and Yew (T5) with the following key characteristics:

- Tree T4, rated as 'U' category, sited within limited raised planter - 400mm height; tree has Ash dieback and decline with approximately 30% crown dead due to limited rooting environment / constrained location
- Tree T5, rated as 'C' category, sited within limited raised planter - 400mm height; fair form with compact habit; low vigour relative to species due to limited rooting environment / constrained location

5.15 The 'C' and 'U' category ratings demonstrate limited form with limited lifespan and neither tree within poor location should constrain development.

5.16 Any replacement tree planting should adhere to the 'right tree right place' mantra as outlined within Section 5.24 - 5.26 of this report to ensure that canopy cover replacement is successful for the long term.

Trees T7-T9

5.17 Trees T7-T9 - off site to the west and south comprise 1 x Beech and 1 x Silver birch (18 The Downsway) and 1 x False acacia (2 The Causeway), growing close to the boundary line with 20 The Downsway and with the following key characteristics:

- 'C' and 'B' category trees
- Tree T8 notably with good form being a 'B' category tree
- All RPA's retained within properties which they are sited, outside of development footprint

No tree protection measures are required for these trees due to their locations off site.

Tree Removal

5.18 The impact of the development with proposed tree removal has been assessed and the loss is limited:

- Limited loss of amenity value from removal of 2 x trees - 1 x 'C' category and 1 x 'U' category
- Large rear garden with opportunity of replacement tree planting within which shall provide sustained amenity value and biodiversity value to replace the current poorly sited specimens

5.19 Replacement tree planting should provide an integral element of the green infrastructure of the site and all species selection and planting proposals within finalised planting schemes must ensure that the following is accounted for:

- Climate change resilience
- Pest and disease resilience
- Future occupancy consideration for rear gardens on Woodland Way
- Implementation scheme to BS8545 (Trees: From Nursery to Independence in the Landscape, 2014)
- Aftercare and establishment programme

5.20 The adoption of the 'right tree right place' mantra shall ensure that a successful tree planting scheme is implemented for the long term for the site.

Summary

5.21 The proposed development requires tree protection measures and mitigation for the implementation of development as follows:

Tree Protection applicable to the following trees:

T2, T3, T6

Mitigation applicable for the removal of the following trees:

T4, T5

The tree protection and mitigation measures shall ensure that the development does not detrimentally impact the amenity value and canopy cover of the site.

5.22 In summary the arboricultural impact as outlined within drawing T003 - Tree Protection Plan (TPP): require the following tree protection measures

TREE PROTECTION FENCING *applicable for tree T2, T3, T6*

TREE REMOVAL WORKS *applicable for trees T4 & T5*

6.0 Arboricultural Method Statement

6.1 The following tree protection measures require close adherence AT ALL TIMES with full supervision from the consulting arboriculturist as outlined within this report. The measures are outlined within Tree Protection Plan (TPP) - drawing T003.

6.2 Tree Works

6.2.1 Tree works are included within *Section 7* and must be carried out a pre-commencement stage.

6.3 Tree Protection Fencing

6.3.1 Protection of the trees highlighted for retention must be implemented as explained below and as specified within the TPP - drawing T003.

6.3.2 These measures must remain for the entire construction process in order to provide a comprehensive barrier from the trees

- The areas surrounding the trees must be surrounded by protective fencing as outlined in TPP - T003
- The protective fencing used must be suitable for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained trees.
- This barrier must remain rigid and complete during the entire construction process.
- Once this Exclusion Zone has been protected by fencing all weather notices as included in *Appendix C* must be put onto the barrier warning that the area is a construction exclusion zone.
- No heavy plant should come into contact with any part of the canopies of the trees.
- No building materials or chemicals are stored within the tree protection zone as indicated on the TPP

6.4 Storage of Construction site related materials, plant and spoil

6.4.1 A designated storage area must be confirmed at pre-commencement stage which is located outside of the RPA of retained trees. Strict adherence to this area must be made to this area and any amendment would require written consent from the Local Authority.

6.5 Site Welfare & Site Office

6.5.1 Site welfare and the site office shall be within an area which is located outside of the RPA of retained tree - no provision within the site is therefore required in relation to trees.

6.6 Location of drainage associated with proposed development

6.6.1 The location of a rear garden soakaway / associated drainage features must not be within the RPA of retained trees.

6.7 Location of Utility Services to garden building

6.7.1 The location and distribution of utility services must not be within the RPA of retained trees.

6.8 Fires

6.8.1 There must UNDER NO CIRCUMSTANCES be fires within this site.

6.9 Communication, Monitoring and Compliance

6.9.1 In ensuring that all Tree Protections Specifications as highlighted within this AMS are closely adhered to at all times, it is important to set out for the long term of the development, communication details for key individuals and tasks that require monitoring.

7.0 Tree Works Schedule

7.1 Any tree work should be carried out to BS 3998; 2010 Recommendations for Tree Work.

TREE WORKS SCHEDULE 20 The Downsway, Sutton, SM2 5RN				
Tree No.	Common Name	Category Rating	Tree Works	Reason for works
T4	Ash	U	Fell to ground level and grind out stump	To implement development
T5	Yew	C	Fell to ground level and grind out stump	To implement development

NOTE: Wildlife & Habitat Protection Guidelines

The tree work specifications included within this report do not provide an exemption from the requirements to comply with the Wildlife and Countryside Act 1981, the Habitats Regulations 1994 and the Countryside and Rights of Way Act 2000, or any acts offering protection to wildlife. Of particular note is the protection offered to bats, birds and their nests, whilst being built or in use. It must be noted that failure to comply with the Acts may result in a criminal prosecution.

8. Appendices

Appendix A

Tree Survey Schedule
(BS5837:2012)

20 The Downsway
Sutton
SM2 5RN

Colour Key: BS5837: 2012 (see Section 2.6)

-  Category A
-  Category B
-  Category C
-  Category U

BS5837:2012 TREE SURVEY
20 The Downsway, Sutton, SM2 5RN
BS5837 Tree Schedule (BS5837:2012) - 10.05.21

Tree No	Species	Height (m)	DBH (mm)	Spread (m)	Age	Structural Condition	Vitality	BS5837 (2012) Rating	Remaining Contribution (years)	Comments / Structural Condition	Root Protection Area (RPA) m ²	Root Protection Area (RPA) Radius (m)
T1	Eucalyptus	18	800	N: 7 E: 5 S: 7 W: 6	M	F	G	C1	10 years +	Decay to east at 0-2m height; limited reaction wood. Significant buttress roots. Large fully developed crown. Limited management history	289.57	9.6
T2	Purple plum	7	390	N: 3 E: 4 S: 3 W: 4	EM	G	G	C1	10 years +	Boundary location; tree leans to east with ornamental form. Compact habit	68.82	4.7
T3	Apple	3	160	N: 3 E: 2 S: 1 W: 1	SM	G	G	C1	10 years +	Compact form; ornamental. Reduced within the past growing season	11.58	1.9
T4	Ash	9	240	N: 3 E: 3 S: 3 W: 3	SM	F	P	U	Less than 10 years	Sited within limited raised planter - 400mm height; Ash dieback and decline with approximately 30% crown dead	/	/
T5	Yew	8	360	N: 4 E: 4 S: 3 W: 3	SM	F	F	C1	10 years +	Sited within limited raised planter - 400mm height; fair form with compact habit; low vigour relative to species	58.64	5.3
T6	Magnolia	6	m/s 100	N: 3 E: 3 S: 3 W: 2	EM	F	F	C1	10 years +	Multi-stem habit with ornamental form. Flowers frost damaged. Limited vigour	3.14	1.0
T7	Birch	9	240	N: 3 E: 2 S: 1 W: 3	M	F	P	C1	10 years +	Off site; dieback within upper crown - leaning to north west	26.06	2.9
T8	Beech	13	200	N: 3 E: 3 S: 3 W: 3	SM	G	G	B1	20 years +	Developing form with columnar habit. Good specimen	18.1	2.4
T9	False acacia	10	180	N: 2 E: 2 S: 2 W: 3	SM	F	F	C1	10 years +	Off site beyond brick built boundary treatment (1.8m height). Decay to north and north west of main stem	14.66	2.2

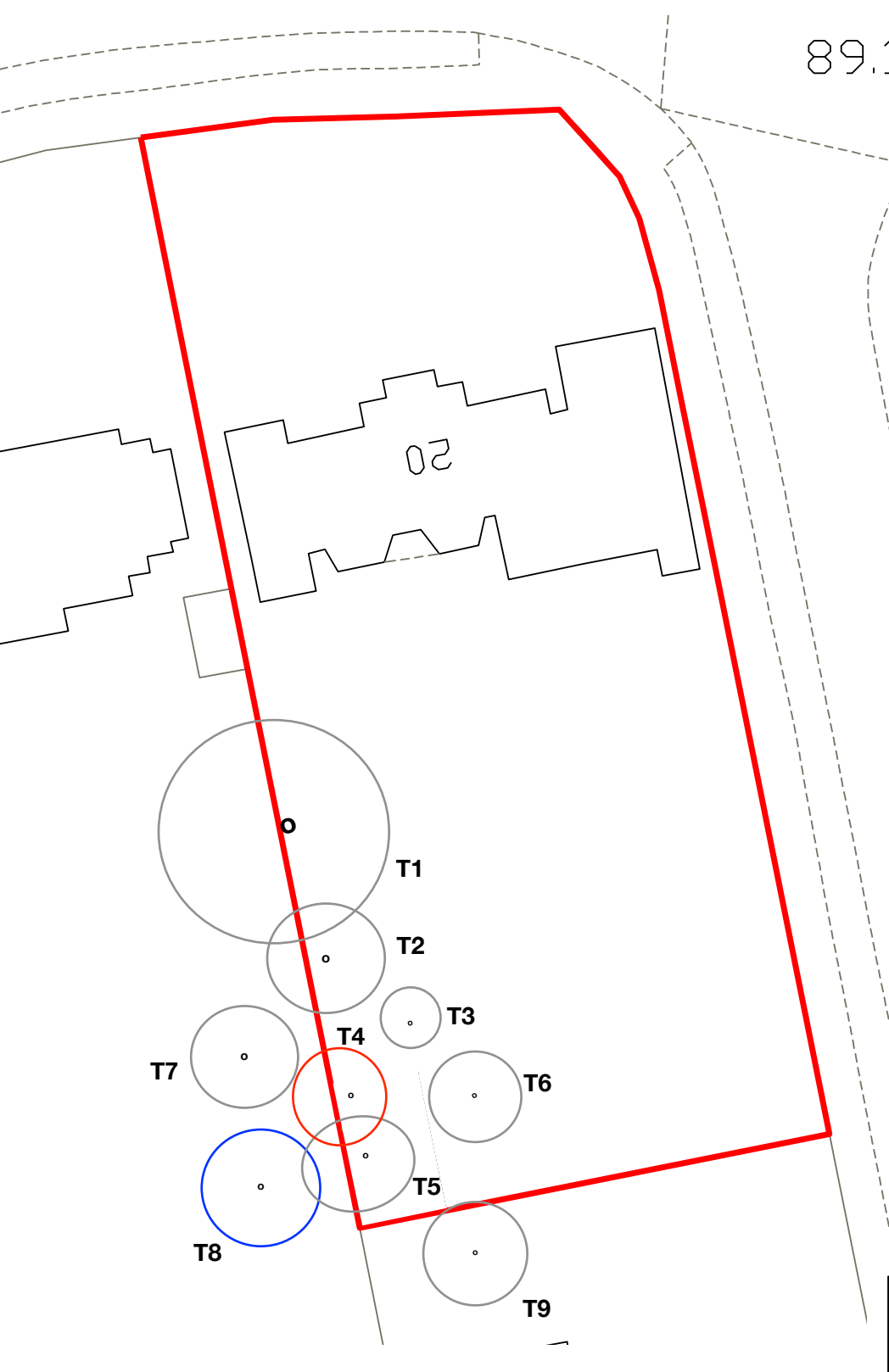
Appendix B

Existing Plan (T001)
Tree Constraints Plan (T002)
Tree Protection Plan (T003)

20 The Downsway
Sutton
SM2 5RN

Colour Key: BS5837: 2012 (see Section 2.6)

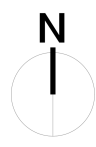
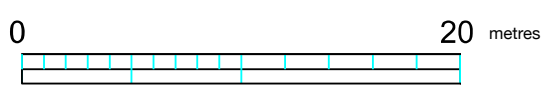
-  Category A
-  Category B
-  Category C
-  Category U



KEY

	CATEGORY A
	CATEGORY B
	CATEGORY C
	CATEGORY U
	RPA RADIUS

BS5837 (2012) TREE SURVEY NOTES
 1. In accordance with BS5837(2012) this drawing is a colour coded schedule and should not be read in black and white
 2. If received electronically it is the recipients responsibility to print this drawing to correct scale. Only written dimensions should be used where not printed to scale.
 3. This drawing should be read in conjunction with all other relevant drawings and specifications
 4. Marcus Foster Arboricultural Design & Consultancy accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided



Revisions

Rev.	Date	Revisions	Checked
/	14.05.2021	ISSUED FOR INFORMATION	MF

JOB TITLE	20 The Downsway		
CLIENT	Navinder Bhogal		
DWG TITLE	EXISTING TREE SURVEY		
SCALE	1:250@A3	DATE	May 21
JOB NO	AIA/MF/079/21	DWG NO.	T001

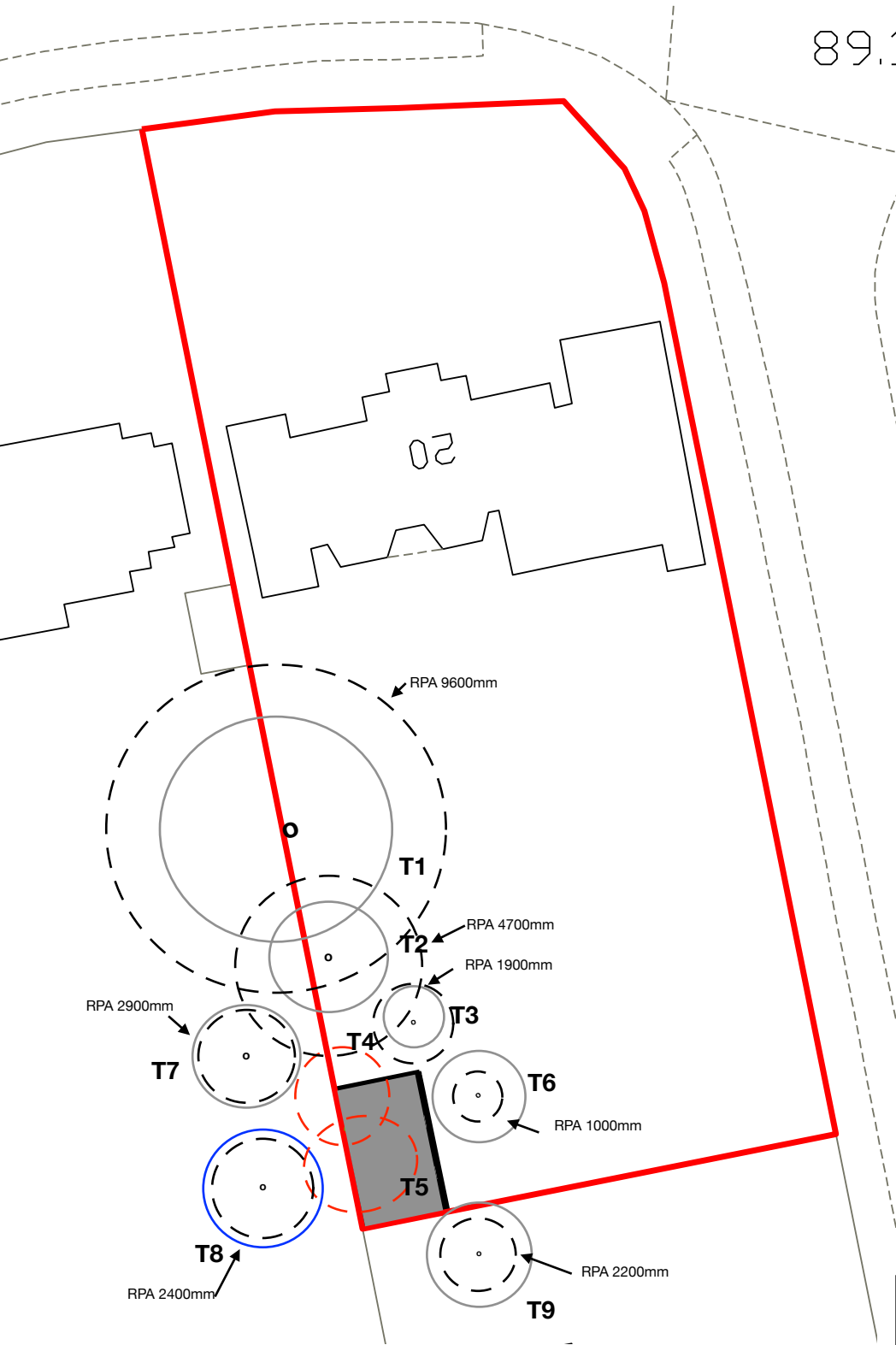


T: 0781 2024070
 mail@marcus-foster.com
 www.marcus-foster.com
Marcus Foster
 TREE CONSULTANCY

89.1

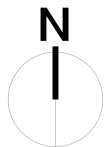
KEY

	CATEGORY A
	CATEGORY B
	CATEGORY C
	CATEGORY U
	RPA RADIUS



BS5837 (2012) TREE SURVEY NOTES

1. In accordance with BS5837(2012) this drawing is a colour coded schedule and should not be read in black and white
2. If received electronically it is the recipients responsibility to print this drawing to correct scale. Only written dimensions should be used where not printed to scale.
3. This drawing should be read in conjunction with all other relevant drawings and specifications
4. Marcus Foster Arboricultural Design & Consultancy accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided



Revisions

Rev.	Date	Checked
/	14.05.2021	MF

JOB TITLE	20 The Downsway
CLIENT	Navinder Bhogal
DWG TITLE	TREE CONSTRAINTS PLAN (TCP)
SCALE	1:250@A3
DATE	May 21
JOB NO	AIA/MF/079/21
DWG NO.	T002



T: 0781 2024070
 mail@marcus-foster.com
 www.marcus-foster.com
Marcus Foster
 TREE CONSULTANCY

89.1

KEY

	CATEGORY A
	CATEGORY B
	CATEGORY C
	CATEGORY U
	RPA RADIUS

TREE PROTECTION KEY

TREE PROTECTION FENCING

BASAL SHUTTERING

Specification of Basal Shuttering Tree Protection
The fencing must fully enclose the main stem and initial buttress roots of the tree by being constructed as a self supporting structure to the following specifications:

Minimum height: 2.4m
Plywood Specification: 25mm thickness, external grade
Supporting Structure: 4" x 2" softwood timbers to form structure within shuttering
NOTE - No ground supports permitted
Structural integrity of structure to be determined by building contractor and approved by supervising arboriculturist
Tree Protection Fencing Notices: 5 x Notices

Example of Basal Shuttering Tree Protection



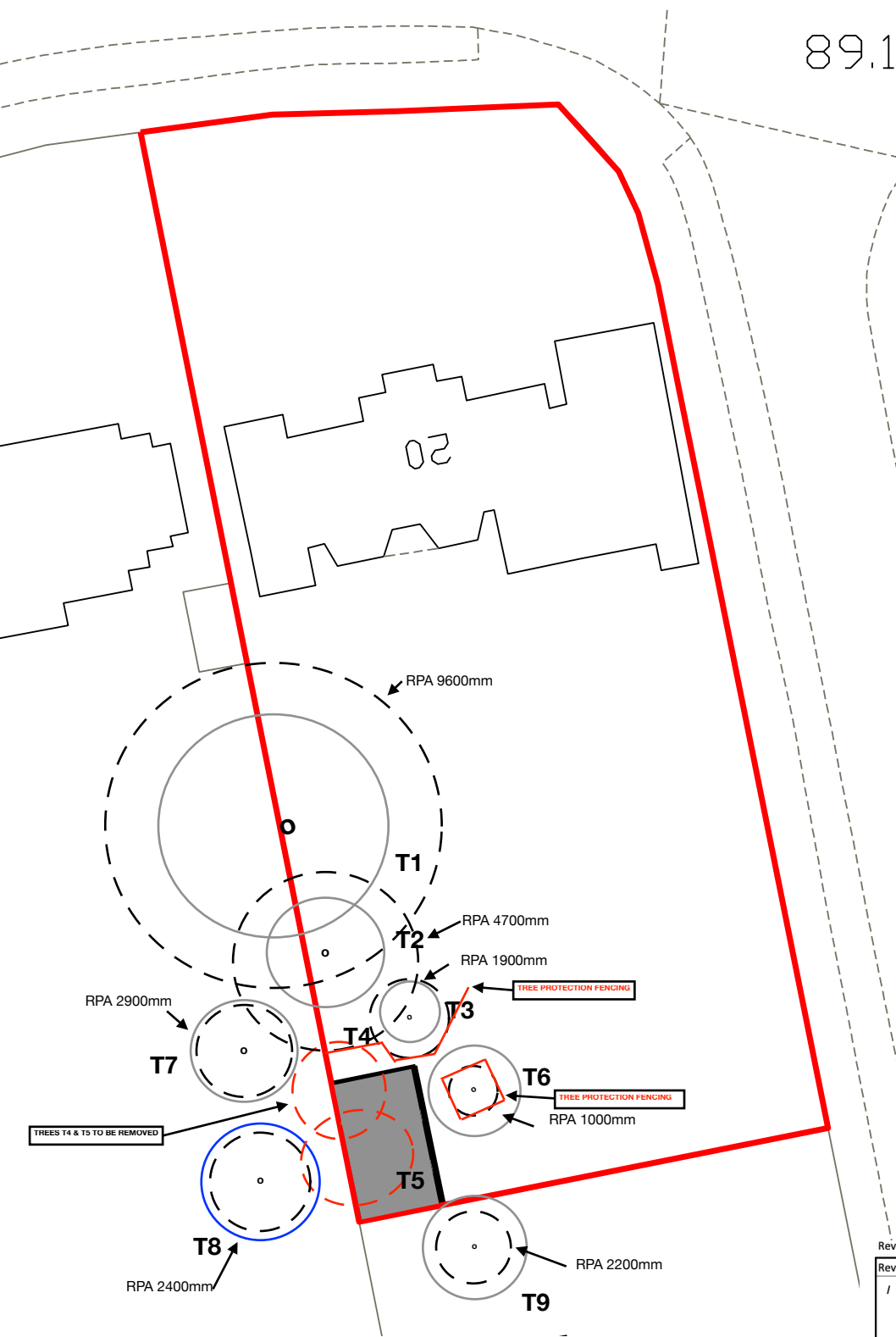
Revisions

Rev.	Date	Issued For	Checked
1	14.05.2021	ISSUED FOR INFORMATION	MF

JOB TITLE	20 The Downsway		
CLIENT	Navinder Bhogal		
DWG TITLE	TREE PROTECTION PLAN (TCP)		
SCALE	1:250@A3	DATE	May 21
JOB NO	AIA/MF/079/21	DWG NO.	T003

T: 0781 2024070
mail@marcus-foster.com
www.marcus-foster.com

Marcus Foster
TREE CONSULTANCY



TREES T4 & T5 TO BE REMOVED

TREE PROTECTION FENCING

TREE PROTECTION FENCING

BS5837 (2012) TREE SURVEY NOTES

- In accordance with BS5837(2012) this drawing is a colour coded schedule and should not be read in black and white
- If received electronically it is the recipients responsibility to print this drawing to correct scale. Only written dimensions should be used where not printed to scale.
- This drawing should be read in conjunction with all other relevant drawings and specifications
- Marcus Foster Arboricultural Design & Consultancy accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided



Appendix C: Site Photographs

Site: 20 The Downsway, Sutton, SM2 5RN



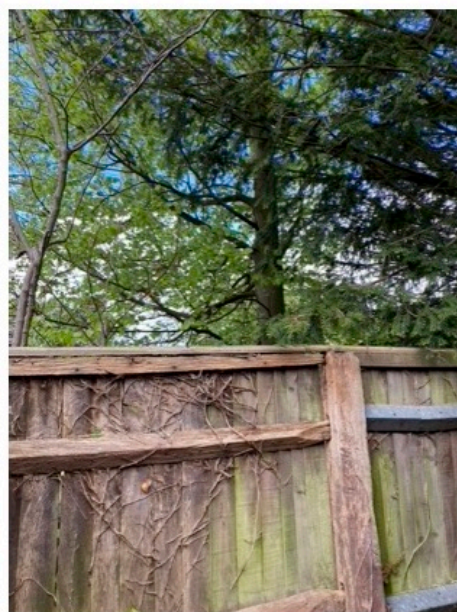
Overview of rear garden area for garden building showing trees T4-T9 as viewed in a westerly direction



Tree T1 as viewed in a north westerly direction



Tree T5 adjacent to tree T4 as viewed in a westerly direction from within raised retainer



Off site tree T8, a developing Beech tree as viewed in a westerly direction

Taken May 2021_MFoster

Appendix D: **Tree Protection Notice**

Generic Tree Protection Notice (BS5837: 2012)



Appendix E

Tree Protection Fencing Specifications

Tree Protection Fencing Specifications

BASAL SHUTTERING

Specification of Basal Shuttering Tree Protection

The fencing must fully enclose the main stem and initial buttress roots of the tree by being constructed as a self supporting structure to the following specifications:

Minimum height: 2.4m

Plywood Specification: 25mm thickness, external grade
Supporting Structure: 4" x 2" softwood timbers to form structure within shuttering

NOTE: - No ground supports permitted

Structural integrity of structure to be determined by building contractor and approved by supervising arboriculturist

Tree Protection Fencing Notices: 5 x Notices

Example of Basal Shuttering Tree Protection



Appendix F: References

1. BS5837: British Standard: Trees in Relation to Design, Demolition and Construction to Construction - Recommendations (2012)
2. Principles of Tree Hazard Assessment and Management, Lonsdale, D. (Department for Transport, Local Government and the Regions, 1999)
3. The Body Language of Trees, Mattheck, C. and Breloer, H. (HMSO, 1994)
4. Trees in Britain, Philips, R. (Pan Books, 1978).
5. Diagnosis of Ill Health in Trees, Strouts, R. and Winter, (TSO, 1994)
6. NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Issue 2), (November 2007)

End of Report_Page 26/26