



Report No: LTM0663.MS.01

Date: 21/10/2022

Project: 27 Mersey Meadows, Manchester, M20 2GB

BS 5837:2012 Method Statement

Inspection Record.

Date of Inspection	Surveyor
20/10/2022	Matthew Lally. FdSc MArborA

Lally Tree Management.

36 Goldsworthy Road, Urmston, Manchester, M41 8US

[T] 07305 740120 [E] matt@lallytreemanagement.co.uk [W] <https://www.lallytreemanagement.co.uk/>

This report is the property of Lally Tree management. This report may only be reproduced or disclosed to third parties with express written consent from Lally Tree Management.

Revision	Date	Prepared by	Status
Final	21/10/2022	M. Lally	Final

Contents

1.0	Discussion	4
2.0	Method Statement	5
2.1	Tree Works.....	5
2.2	Protective Fencing	5
2.3	Additional Precautions Outside Fenced Areas	6
2.4	Boundary Fence Construction adjacent to G4#	6
2.5	Pre-commencement Site meeting.....	6
2.6	Summary of Methodology for the Protection of the Trees	7
2.7	Site Briefing	7
	Appendix One Tree Plan	
	Appendix Two Tree Protection Fencing	

1.0 Discussion

- 1.1 The majority of the root system of a tree is in the surface 600mm of the soil extending radially for distances frequently in excess of the trees height. Beyond the main structural roots (close to the base of the trunk), the root system rapidly sub-divides into smaller diameter roots: off this main system, a mass of fine roots develops.
- 1.2 The shape of the main structural roots develops in response to the need for the tree to have physical stability. Beyond these major roots, root growth and development is influenced by the availability of water and nutrients. Unless conditions are uniform around the tree, which would be unusual, the extent of the root system will be very irregular and difficult to predict. It will not generally show the symmetry seen in the branch system.
- 1.3 The parts of the root system, which are active in water and nutrient uptake, are very fine, typically less than 0.5mm diameter. They are short lived, developing in response to the needs of the tree, with the majority dying each winter. It is *essential* that conditions in the soil remain conducive to the healthy growth of these fine roots so that the water and nutrients necessary for healthy tree growth can be absorbed.
- 1.4 All parts of the root system, but especially the fine roots, are vulnerable to damage. Once they are damaged, water and nutrient uptake will be restricted until new roots have regenerated. Vigorous young trees will be capable of rapid regeneration, but over mature trees will respond slowly, *if at all*.
- 1.5 In order to live and grow, roots need oxygen from the soil. Respiration by the roots and other soil organisms depletes this oxygen and increases carbon dioxide levels in the soil; a correct balance of these gases is normally maintained by diffusion between the soil and the atmosphere. Anything, which disturbs this balance, will affect the condition of the root system.
- 1.6 The factors that most commonly affect this diffusion adversely, and therefore damage roots, are the following: -
 - a) Compaction of the ground, which reduces the space between soil particles. This is particularly important on clay soils. A single passage by heavy equipment on clay soils or storage of heavy materials can cause significant damage.
 - b) Changing soil levels, even for a few weeks.
 - c) Covering the root area with impervious surfaces.
 - d) A rise in the level of the water table. Roots can tolerate submersion for short periods. But a permanent rise will deplete the soil of oxygen.
- 1.7 Serious damage is often caused during preliminary site works by stripping the topsoil. For this reason, such works should be avoided until protective fencing has been erected.
- 1.8 Excavations in the rooting area can sever roots. As the majority of roots are in the surface 600mm, even shallow excavations can cause damage.
- 1.9 Excavations for foundations, landscaping or service trenches are usually sufficiently deep to sever most of the roots, and it should therefore be assumed that all parts of the root system beyond the excavation would no longer serve the tree.

- 1.10 Excavation or soil stripping which sever or damage the roots may impair the stability of the tree and make it dangerous.

2.0 Method Statement

Before any form of development commences on the site the following works should be undertaken: -

2.1 Tree Works

Tree No.	Species	Proposed Works to Facilitate Development.
T1#	Spruce	Remove
T2#	Lawson Cypress	Remove
T3#	Lawson Cypress	Remove
G4#	Cherry x 1. Acer x 1	No Action
T5#	Birch	No Action
T6#	Cypress	No Action
T7#	Palm	Remove
T8#	Pillar crab	No Action

2.2 Protective Fencing

- 2.2.1 The tree protection fencing will be appropriate to the degree and proximity of likely construction works. In this instance, the default BS 5837:2012 tree protection fencing is deemed disproportionate. It is suggested (if acceptable by the LPA) an adequate level of protection for the trees could be provided by 'Heras' type fencing, of welded mesh panels on rubber or concrete feet.
- 2.2.2 Notices should also be erected on the fencing stating, 'Protected Area - No operations within fenced area'.
- 2.2.3 The positioning of the protective fencing is also very important and should be erected in the proposed location identified in appendix one. Once the fence has been erected it should never be crossed and particular care should be taken not to store any materials or soil within the protected area.

2.3 Additional Precautions Outside Fenced Areas

- 2.3.1 Oil, bitumen, cement or other material likely to cause damage to the tree will not be stacked or discharged within 10m of the trees stem or within the protective area. Also, materials in general will not be stacked or discharged within the exclusion zone.
- 2.3.2 Concrete mixing and washing will not be carried out within 10m of any retained trees.
- 2.3.3 Fires will not be lit beneath the foliage or in a position where the flames could extend to within 5m of the foliage, branches or trunk. If the fire is large, then this may necessitate a distance of at least 20m.
- 2.3.4 Trees that are to be retained will not be used as anchorage for equipment.
- 2.3.5 Notice boards, telephone cables, or other services will not be attached to any part of the retained tree.
- 2.3.6 Care should be taken when using cranes or other equipment near the canopy of the retained trees. Also, any trees to be felled in proximity to the retained trees should be done so with particular care.

2.4 Boundary Fence Construction adjacent to G4#

- 2.4.1 To mitigate any adverse effects of the installation of this fence the following precautions and guidelines WILL be adhered to:
 - A fence design that allows for varying distances between fence posts will be selected
 - Each fence post will have trial holes dug by hand to ensure that no major roots are severed.
 - If major roots are found during the digging of the trial holes, then the fence post will not be placed in this hole and the trial hole will be backfilled.
 - Posts will be placed at least 0.5 metres from any stems
 - Panels will be no closer than 300mm to a stem to allow for yearly incremental growth

2.5 Pre-commencement Site meeting

- 2.5.1 Prior to commencement of site works, a meeting onsite must take place including the site manager and an arboricultural consultant. This meeting will allow further discussion of the programme of works, tree protective measures, locations of areas for storage/site organisation and the agreement of any changes to the method statement that may be required which will be formally updated and approved as required.

2.6 Summary of Methodology for the Protection of the Trees

- 1) Pre commencement site meeting
- 2) Tree removal
- 3) Site briefing for personnel
- 4) Installation of protective fencing
- 5) Implementation of development and installation of new boundary fencing
- 6) Completion of development works
- 7) Completion signed off
- 8) Removal of protective fencing
- 9) Soft landscaping works

2.7 Site Briefing

- 2.7.1 The site manager is responsible for ensuring that all personnel are made fully aware of the constraints posed by the retained trees on site and that there are measures in place to protect these trees, this includes having full access to the Arboricultural Method Statement and Tree Protection Plan (TPP).

Appendix One

Tree Plan



Do not scale this drawing (printed or electronic version).
Contractors must check all dimensions from site
This drawing is for use on this site only and should be used in conjunction with all relevant consultants drawings..

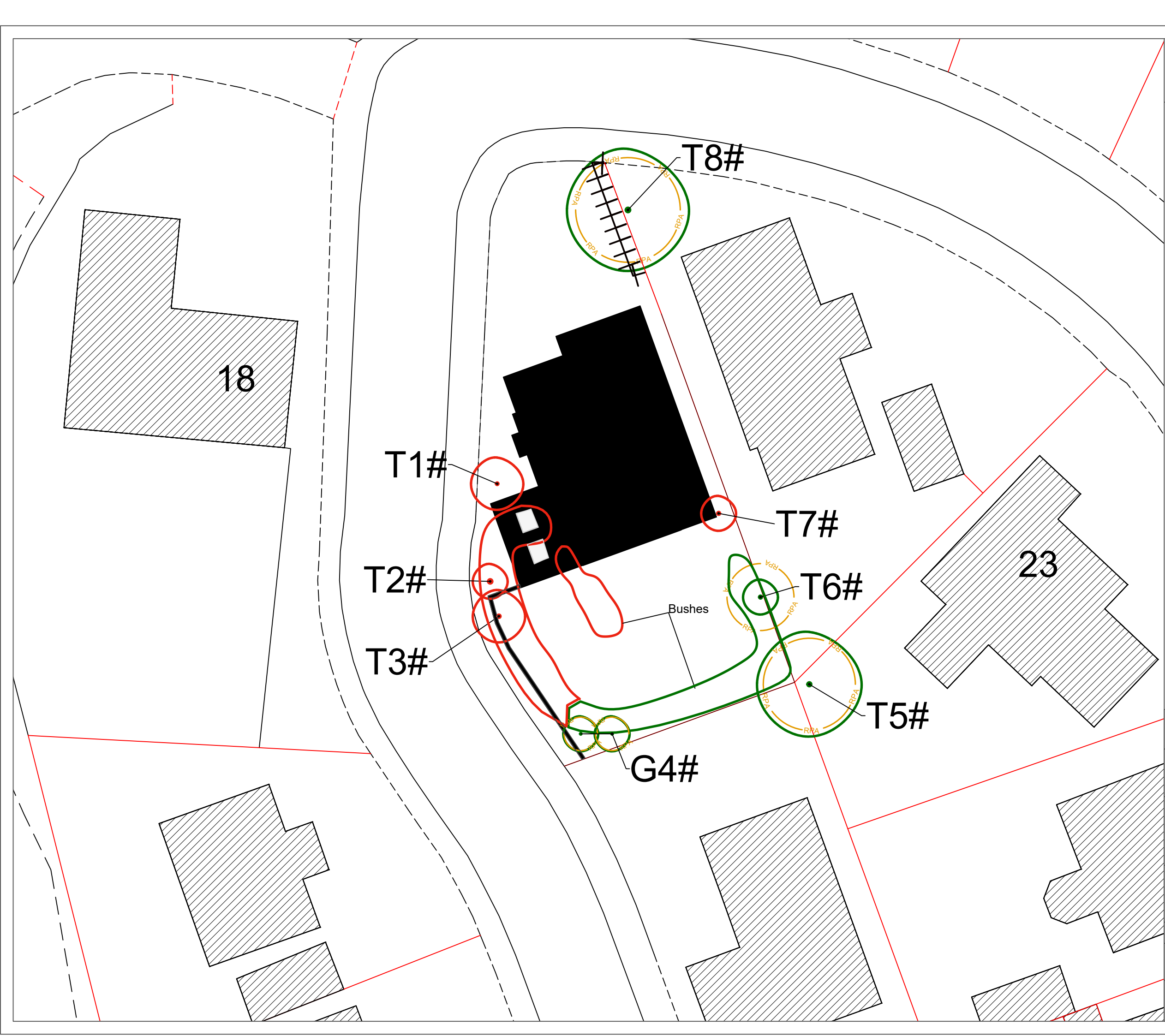
LEGEND



- Retained Trees
- Removed Trees
- Root Protection Areas
- Protective Fencing (Metal)
- Position estimated on site



Scale:	1:200@A3	Date:	21/10/2022
Job:	LTM0663.AIA.01		
Address	27 Mersey Meadows. Didsbury. M20 2GU		
Client:	27 Mersey Meadows		
Drawing Number:	LTM0663.TPP.01		
Drawn by:	Matthew Lally		
TREE PROTECTION PLAN			

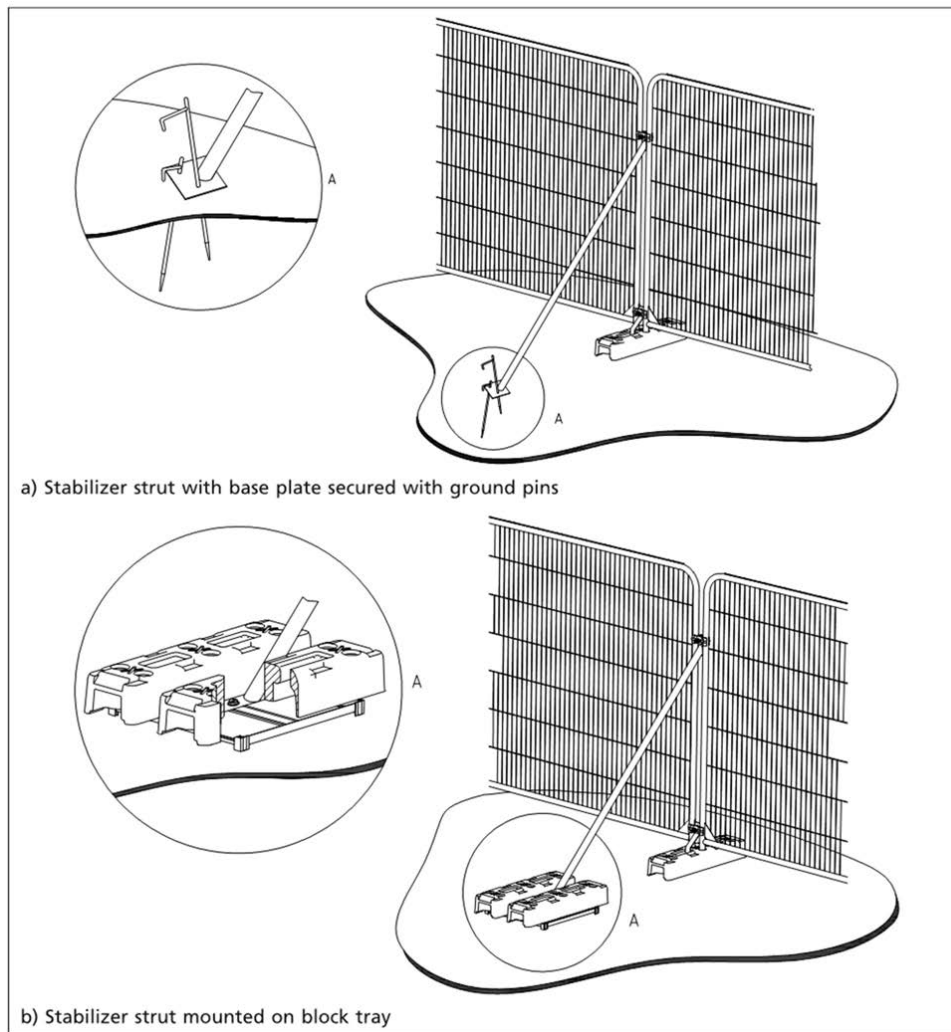


Appendix Two

Tree Protection Fencing



Tree Protection Fencing (Heras)



Protective fencing Notice to attached to fencing

