

Arboricultural Impact Assessment (AIA)

August 2021

50 Fountain Street
Manchester
M2 2AS

U R B A N
G R E E N

QUALITY MANAGEMENT

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1. Executive Summary

- 1.1.1. Urban Green has been instructed by Chroma Consulting to carry out an Arboricultural Survey to British Standard 5837:2012 guidelines at 50 Fountain Street, Manchester and produce our findings in a report.
- 1.1.2. It is proposed to develop the site by retaining and refurbishing the grade 2 listed 49 spring gardens façade, and to demolish 50 Fountain Street and rebuild a new office complex. Full details of the proposed site layout can be seen on the plans included in Appendix 4.
- 1.1.3. The proposed development necessitates the removal of both trees within the site boundary.
- 1.1.4. An ecological survey of the site has been done by Penny Anderson Associates.

2. Introduction

2.1. Instructions and references

- 2.1.1. We have been instructed by Chroma Consulting to carry out a Arboricultural Impact Assessment (AIA) in accordance with BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations at the site location and produce our findings in a report to be submitted with a detailed planning application.
- 2.1.2. All trees, regardless of their statutory status, are a material consideration in a planning application. BS 5837 recognises the potential conflict between trees and development. The standard sets out to assist those concerned with trees in relation to construction and aid with decision making. This is achieved by providing impartial and balanced information on trees and their potential impacts.
- 2.1.3. The site is located in the area shown in Figure 1.

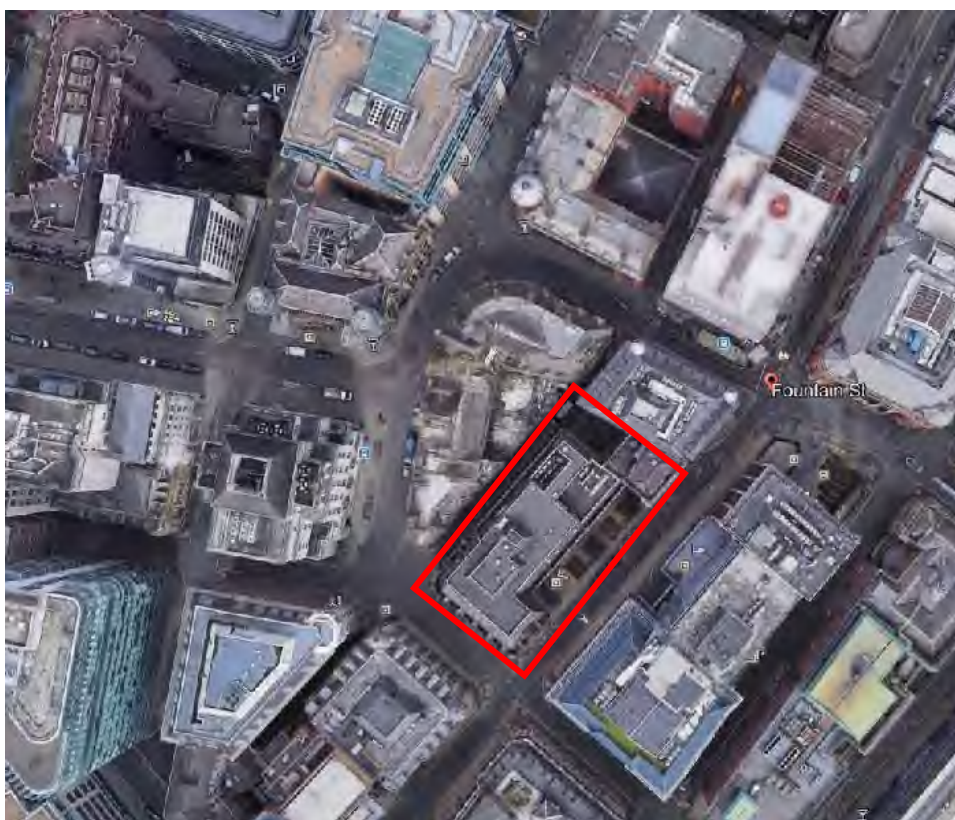


Figure 1 – Site Location Plan

2.2. Scope

- 2.2.1. The AIA takes into account any potential impacts on existing trees including the effect of any tree loss required to implement the design and recommendation for the establishment of new trees.
- 2.2.2. The AIA will also assess any potentially damaging activities proposed in the vicinity of retained trees and the effect that the retained trees may have on the development such as potential nuisance caused by excessive leaf/fruit litter, lighting levels and potential damage to structures.

2.3. Documents provided

- 2.3.1. A scaled plan has been provided with tree positions already plotted. Any extra trees found on site that were not included on the original plan have been plotted according to measurements taken on site and/or using aerial photography.
- 2.3.2. Tree locations which have been estimated are illustrated on the Tree Protection Plan in Appendix 4. The exact locations of these trees must be verified, and any discrepancies discussed with the Arboricultural Consultant before starting works on site.
- 2.3.3. A plan outlining the development proposals has been overlaid with the Tree Constraints Plan in order to assess the potential impacts.

2.4. Limitations

- 2.4.1. The report is based upon a visual inspection. The consultant shall not be responsible for events that happen after the date of the report due to factors that were not apparent at the time, and the acceptance of this report constitutes an agreement with the guidelines and the terms listed in this report.
- 2.4.2. The consultant accepts no liability in respect of the trees unless the recommendations of this report are carried out under his supervision.
- 2.4.3. Assessing the potential influence of trees upon load bearing soils, beneath existing and proposed structures resulting from water abstraction by trees or rehydration of shrinkable soils was not included in the contract brief and is therefore not considered in the report. The consultant cannot be held responsible for damage arising from such action.
- 2.4.4. Trees are living organisms whose health, condition and structure can change over time. The contents of this report are valid for a period of one year from the date of the report.
- 2.4.5. Potentially hazardous trees are highlighted, and appropriate recommendations are made. However, this report is not a substitute for a full tree risk assessment or management plan which are specifically designed to minimise risk and liability associated with responsibility for trees.

3. Legislation

3.1. Tree protection status

- 3.1.1. A Tree Preservation Order (TPO) is an order made by a Local Authority to protect specific trees, groups of trees or woodlands in the interests of amenity. A TPO prohibits the cutting down, topping, lopping, uprooting and wilful damage or destruction of trees without the Local Authority's written consent.
- 3.1.2. Manchester City Council have confirmed that the trees are not covered by any Tree Preservation Orders. The site is however within a Conservation Area.
- 3.1.3. In a Conservation Area, all trees greater than 75mm in diameter at 1.5m above ground level are protected. Where tree work is required in a Conservation Area, a Section 211 notice of intent must be submitted to the Local Planning Authority who have six weeks to decide to either make a TPO or allow the work to proceed.
- 3.1.4. The proposed work can proceed after six weeks as it is presumed that the Local Authority consents if they have not responded in that time.
- 3.1.5. It is recommended that the Local Authority is consulted before any tree works are undertaken, as new TPOs may have been created since the time of enquiry, and heavy fines exist for unauthorised works to protected trees.

3.2. Wildlife

- 3.2.1. Prior to the commencement of any tree works, the trees should be assessed for the presence of species which are subject to protection under the *Wildlife and Countryside Act 1981* (as amended) and the *Conservation of Habitats and Species Regulations 2017*.
- 3.2.2. An ecological survey of the site has been carried out by Penny Anderson Associates.
- 3.2.3. If tree works are carried out during the bird nesting season (March to September inclusive), trees would need to be inspected by a qualified ecologist no more than 48 hours prior to the commencement works.

4. Arboricultural Impact Assessment (AIA)

4.1. Summary of the development

- 4.1.1. It is proposed to demolish the existing building and construct a new building within the footprint. Full details of the proposed site layout can be seen on the plans included in Appendix 4.

4.2. Tree constraints

- 4.2.1. BS 5837:2012 recognises that conflicting requirements of the planning system for development means that trees are only one factor which need to be taken into consideration. Although there may be certain specimens that can pose significant constraints to development due to their importance, it is essential that inappropriate tree retention is avoided.
- 4.2.2. Trees can be adversely affected on development sites if their protection is not factored into the wider project management of onsite operations. We have transposed the tree survey plan over plans detailing current proposals in order to assess the impact on surveyed trees.
- 4.2.3. It is essential that roots are protected from construction works including physical damage from excavation and changes in soil structure from compaction and changes in ground levels.

4.3. Root Protection Areas (RPAs) explained

- 4.3.1. The RPA is an area of ground around the base of a retained tree, which is calculated in relation to the stem diameter, where disturbance should be kept to a minimum and avoided if at all possible.
- 4.3.2. The majority of tree roots grow within the upper 600mm of the soil profile where most nutrients are available as the result of the decomposition of organic matter close to the surface. Rooting conditions become less favourable at depth as the soil density increases, creating anaerobic conditions.

4.4. Impacts of development

- 4.4.1. Two trees (T1 and T2) will require removal to facilitate the new development as they are both within the new footprint of the proposed building.
- 4.4.2. It is recommended that the loss of this tree stock be replaced with suitable native species.

4.5. Tree surgery works

- 4.5.1. Tree works that are recommended within the Tree Works Schedule (Appendix 4) are works required to facilitate development and also include details of remedial works. Tree works stated in the Tree Data Schedule (Appendix 1) are of a general maintenance nature and can be carried out at any time as per recommendations.
- 4.5.2. Tree works required to facilitate the development will be carried out prior to the commencement of any onsite operations. This should allow sufficient space for approved construction to be carried out.

Appendix 1 - Tree Data Schedule

The following pages contain information gathered during the site survey. The reader should refer to Appendices 2 and 3 in order to correctly interpret the tree data.

Reference T = Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	DBH (mm)	Crown Spread (m) N W S E	Notes	Recommendations		Physiological Condition	Life Expectancy (yrs)	RPA Radius
							Priority	Inspect Freq (yrs)	Structural Condition	Retention Category	(m)
T1	Semi-Mature Whitebeam Sorbus aria	11	3	300	3 4 4.5	1: Tree growing in tree guard in pavement. 2: Bifurcates at 2m. 3: Tight union. 4: Stems embedded into metal guard.	Remove tree guard.		Fair	20-40	3.60
							High	3	Good	B	
T2	Semi-Mature Whitebeam Sorbus aria	11	3	200	3.5 4 4	1: Growing in tree guard. 2: Bifurcates at 2m. 3: Small area starting to graze on metal guard.	No action required.		Good	40+	2.40
							n/a	3	Good	B	

Appendix 2 - Tree Schedule Definition of Terms

Tree Referencing	Individual Trees T (+number) Grouped Trees G (+number) Hedgerows H (+number) Woodlands W(+number)
Age Category	Young Usually <15 years Semi-mature Significant growth expected, approximately one third of life expectancy complete Early-Mature Full height achieved with further significant growth possible, up to two thirds of life expectancy complete Mature Full height has been achieved with possible spreading of the canopy, usually past two thirds of overall life expectancy Veteran Usually a tree of significant age with characteristics that give additional cultural, landscape and conservation benefits, Over-mature A tree declining due to age as indicated by deterioration in the health and condition of its crown and trunk.
Species	Botanical Name conforming to the International Code of Nomenclature for algae, fungi, and plants (ICN). For universal plant recognition. Common Name commonly used names usually on a local and national scale.
Tree Height	The vertical distance between the base of the tree (where soil and buttress meet) and the tip of the highest branch on the tree.
Crown Height	Measured from ground level to the height at which the main crown begins.
Stem Diameter (DBH)	Stem diameter is measured at 1.5 m above ground level
Crown	Measurements taken from all four cardinal points in metres.
Notes	Notes are made to inform of any possible defects, peculiarities or points of interest that may relate to the trees position, physiology, safety and possible effects on developments.
Recommendations	Recommendations are made in accordance to good arboricultural practice. Recommendations are made regardless to the end usage of the site.
Priority Scale	Priority is given dependant on the perceived threat and the likelihood of failure given to a possible hazard. The priority of work is given regardless of the end usage of the site. Urgent To be carried out as soon as possible. Very High To be carried out within 1 month. High To be carried out within 3 months. Moderate To be carried out within 1 year. Low To be carried out within 3 years.
Physiological Condition:	Good Usually healthy with no symptoms of poor health or disease. Fair Exhibiting signs of poor health or minor disease infections that are not considered to be hazardous. Poor Disease present in considerable quantities or with very poor physiological vigour. Very Poor Tree is in a moribund state in extremely poor condition, usually with little chance of recovery.
Structural Condition:	Good A tree with no significant structural defects. Fair Minor defects may have been observed but are not considered to be immediately hazardous. Poor Significant defects found. Tree requires monitoring or remedial works. Very Poor Major defects that require immediate remedial work or the removal of the tree.
Life Expectancy:	The estimated number of years before the tree may require removal should no unexpected mechanical or environmental impacts occur to the tree.
Retention Category:	Please refer to Tree retention categorisation table on the next page.

Appendix 3 - Tree Retention Category

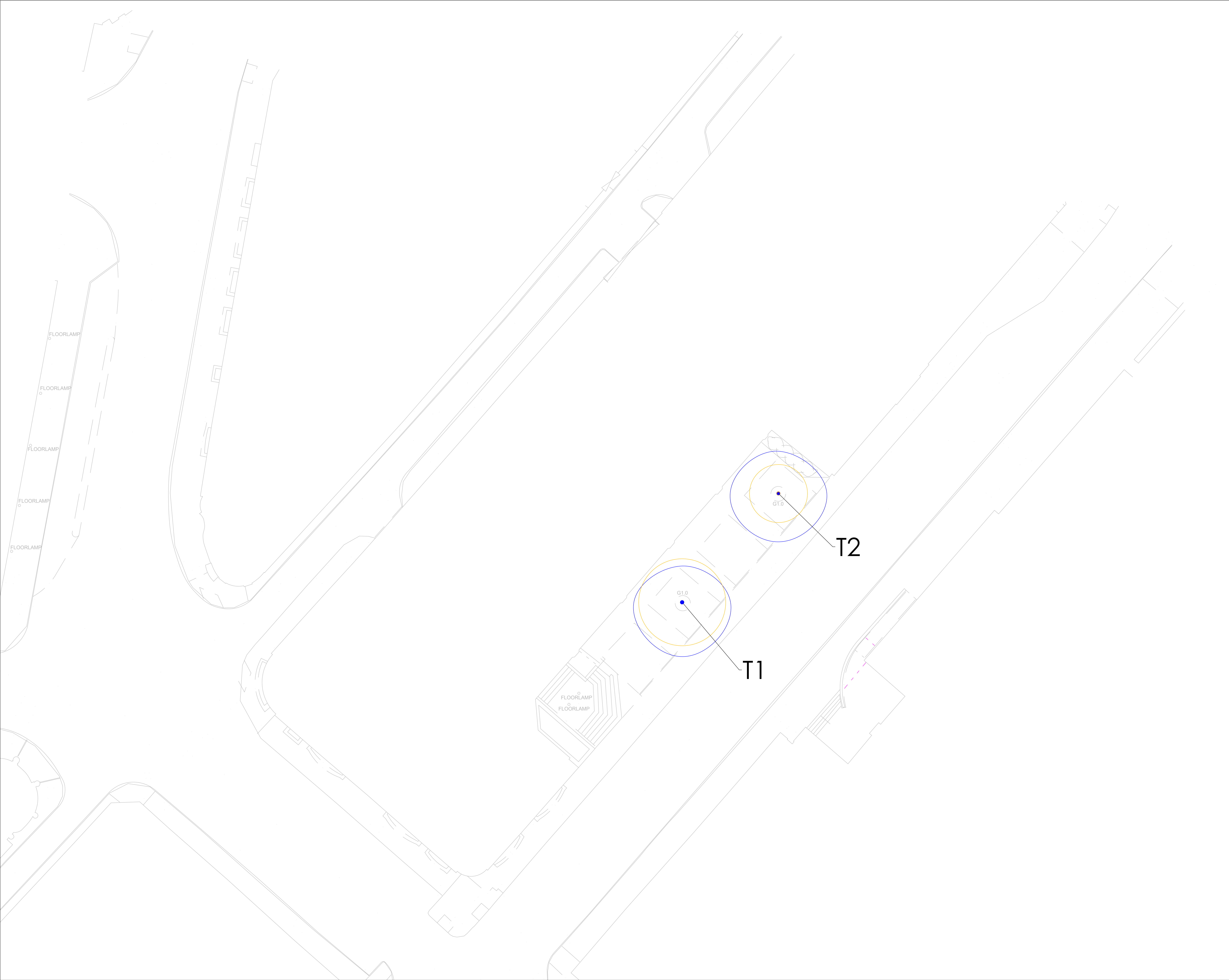
The following table provides an explanation of retention categories used.		
Trees to be removed		Colour on Plan
Category U Includes trees of very low quality that offer little or no amenity value.	Trees that are in such a condition that they should be removed as a matter of good arboricultural practice regardless of given proposals.	RED
Trees to be considered for retention		
Category A Trees of a high quality, with an estimated life of expectancy of at least 40 years	Trees that are excellent examples of their species, usually mature, especially if rare or unusual including veteran trees. Category A trees are likely to enhance a development and should be retained wherever possible.	GREEN
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	Trees that are good examples of their species. B category trees are usually mature or younger trees with the potential to reach A category in the future. Although the retention of these trees is desirable, some losses may be acceptable.	BLUE
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 150 mm.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	GREY
NOTE: Trees that are viewed as borderline and do not fit neatly into either of the categories are given a plus or minus rating (+/-) in the tree data schedule. Therefore, C+ would denote a tree being borderline C/B although C is deemed to be the most appropriate category. Similarly, B- would denote a tree being borderline B/C with B seen as the most appropriate category.		

Appendix 4 - Site Plans

The site plans referred to in the report follow this page which include the following:

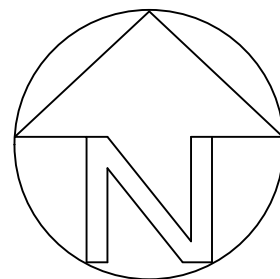
- Tree Constraints Plan
- Tree Removal Plan
- Tree Works Schedule

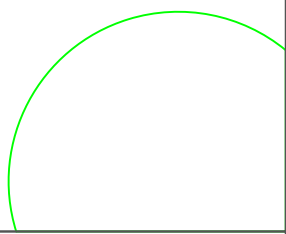
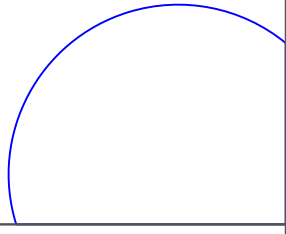
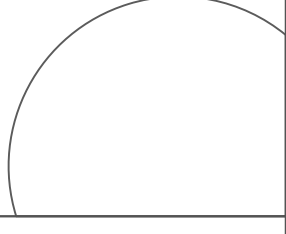
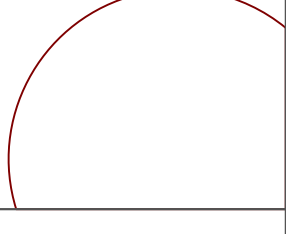
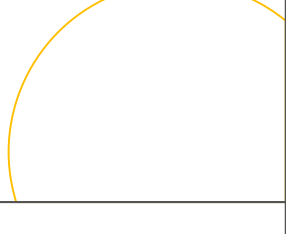
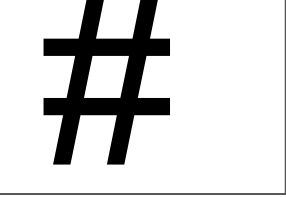
Although included plans are usually to scale, they are only intended to indicate positions of surveyed trees and dimensions should not be taken from these drawings.



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Notes:-



-  Category A tree, group or hedge
-  Category B tree, group or hedge
-  Category C tree, group or hedge
-  Category U tree, group or hedge
-  Root Protection Area (RPA)
-  Position estimated on site

REV.	DATE	DESCRIPTION	DRAWN	CHK'D

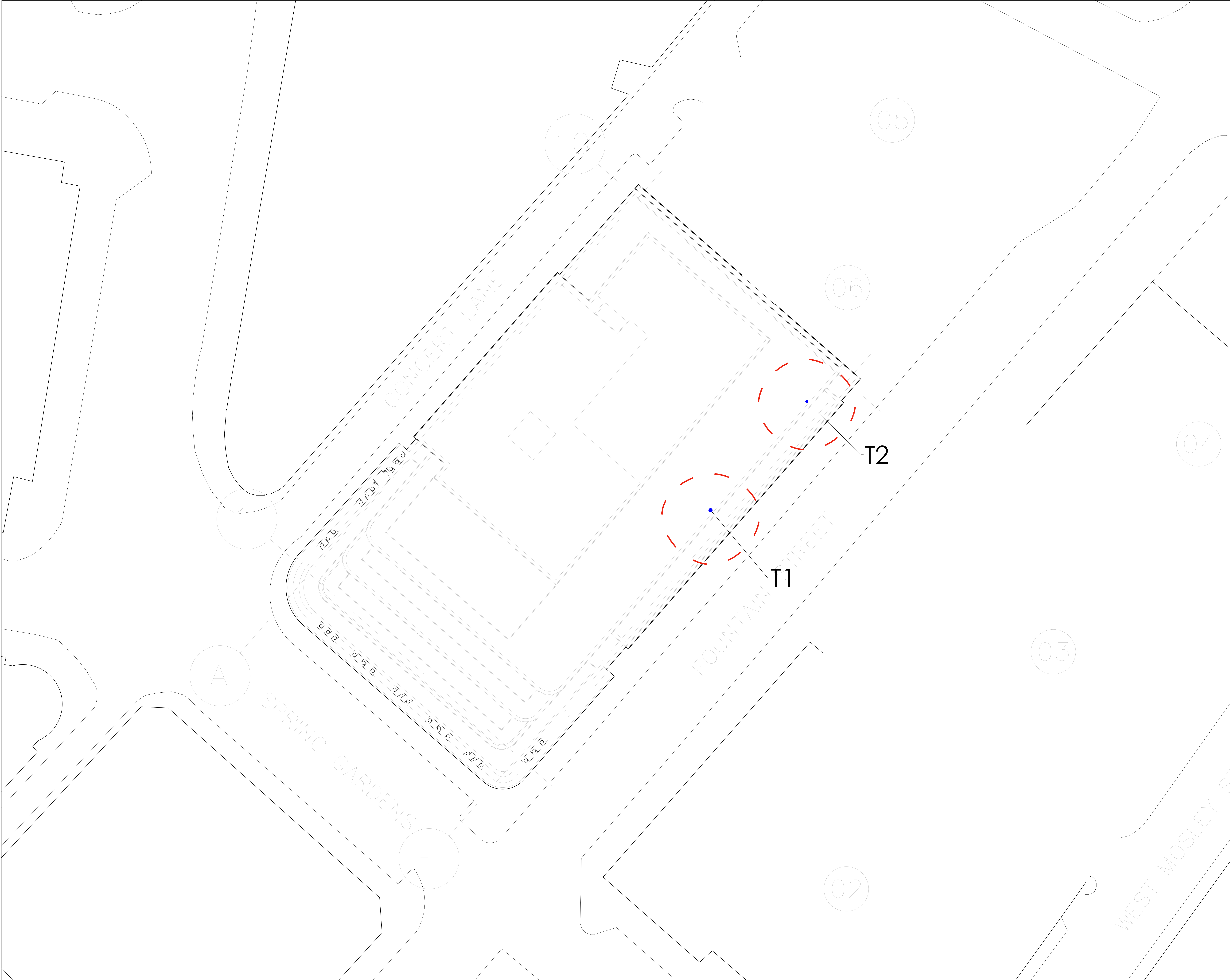


A: Ground Floor, The Tower,
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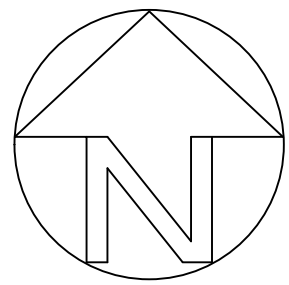
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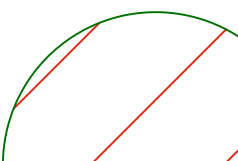
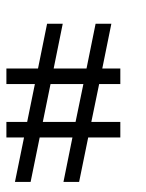
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Project: 50 FOUNTAINS STREET, MANCHESTER		
Title: TREE CONSTRAINTS PLAN		
Issue: PLANNING		
Drawn: EA	Checked: AB	Approved: KO
Project: UG928	Scale @ A0: 1:100	Date: 11/03/21
Dwg No: UG_928_ARB_TCP_01		Revision: 00



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Notes:-



-  Category A tree, group or hedge
-  Category B tree, group or hedge
-  Category C tree, group or hedge
-  Category U tree, group or hedge
-  Retained tree
-  Removed tree
-  Extents of pruning
-  Position estimated on site

01	21/05/21	PROPOSAL UPDATE	EA	KO
REV.	DATE	DESCRIPTION	DRAWN	CHK'D



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Client: CHROMA CONSULTING			
Project: 50 FOUNTAINS STREET, MANCHESTER			
Title: TREE REMOVAL PLAN			
Issue: PLANNING			
Drawn: EA		Checked: AB	Approved: KO
Project: UG928		Scale @ A0: 1:100	Date: 11/03/21
Dwg No: UG_928_ARB_TRP_01			Revision: 01

Tree Works Schedule			
Tree Number	Species	Works Required	Reason
T1	Whitebeam	Fell	To facilitate the development
T2	Whitebeam		

REV.	DATE	DESCRIPTION	DRAWN	CHK'D
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Client:

CHROMA CONSULTING

Project:

**50 FOUNTAINS STREET,
MANCHESTER**

Title:

TREE WORKS SCHEDULE

Issue:

PLANNING

Drawn:	EA	Checked:	AB	Approved:	KO
Project:	UG928	Scale @ A0:	NTS	Date:	11/03/21
Dwg No:	UG_928_ARB_TWS_01			Revision:	00