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ARBORICULTURAL REPORT

Client:	Lotus Soft Ltd.
Site:	1 South Walk, Hayes, UB3 2RE
Date of Survey:	August 25th 2026
Date of Report:	August 26th 2026
Surveyor:	Jon Harper cert. Arb (RFS)
Report Reference:	2026057 v1.0

BS5837:2012 (Trees in Relation to Design, Demolition & Construction)

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1. INTRODUCTION

1.1. Standard & Framework

The current British Standard for trees in relation to design, demolition, and construction is BS5837:2012. This framework became current in May 2012, superseding the previous 2005 standard.

1.2. Terms and Definitions

1.2.1. Access Facilitation Pruning: One-off tree pruning operation, the nature and effects of which are without significant adverse impact on tree physiology or amenity value, which is directly necessary to provide access for operations on site.

1.2.2. Arboricultural Method Statement (AMS): Methodology for the implementation of any aspect of development that is within the root protection area, or has the potential to result in the loss of, or damage to a tree to be retained.

1.2.3. Arboriculturist: Person who has through relevant education training and experience, gained expertise in the field of trees in relation to design, demolition, and construction.

1.2.4. Competent Person: Person who has training and experience relevant to the matter being addressed and an understanding of the requirements of the particular task which is being approached.

1.2.5. Construction: Site-based operations with the potential to affect existing trees.

1.2.6. Construction Exclusion Zone (CEZ): Area based on the root protection area (1.2.7) from which access is prohibited for the duration of the project.

1.2.7. Root Protection Area (RPA): Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain a tree's viability, and where the protection of roots and soil structure is treated as a priority.

1.2.8. Services: Any above or below-ground structure or apparatus required for utility provision.

1.2.9. Stem: Principal above-ground structural component(s) of a tree that supports its branches.

1.2.10. Structure: Manufactured object, such as a building, carriageway, path, wall, service run, and built or excavated earthwork.

1.2.11. Tree Protection Plan: Scale drawing, informed by descriptive text where necessary, based on the finalised proposals, showing trees for retention, and illustrating the tree and landscape protection measures.

1.2.12. Veteran Tree: Tree that, by recognised criteria, shows features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.

1.3. The Proposal & Relevant History

The proposal, in this instance, is to construct a new two storey dwelling, as illustrated using the purple coloration on the Tree Constraints Plan appended to this report.

1.4. Brief and Purpose

This report has been commissioned by Lotus Soft Ltd. to fulfill the following objectives:

- Survey the trees on site in accordance with the specifications of BS5837:2012.
- Detail the specific arboricultural implications and impact assessments of the proposed project.
- Present an effective, actionable tree protection strategy for the entire duration of development operations.
- Provide the necessary formal arboricultural documentation to accompany a planning application to London Borough of Hillingdon Council.

1.5. Scope

The trees have been fully surveyed in accordance with British Standards. Trees situated directly on or immediately adjacent to the site boundaries with a stem diameter exceeding 75mm have been included. A comprehensive hazard assessment of the trees (including the structural assessment of internal decay or defects and their dynamic implications) has not been undertaken, as this is considered beyond the scope of this baseline report. Any obvious, high-risk hazards and defects have, however, been explicitly identified within the Tree Survey Schedule and appropriate immediate remedial works recommended.

1.6. Documents Supplied and Utilised

The following design and planning layout documents were utilised during the preparation of this report:

Document Description	Supplied By	Format / Reference
Existing and proposed site plans	Circle Z Architects Ltd	25102-01-Existing Drawings.dwg

1.7. Executive Summary

The application site is a fairly elongated plot of land with a semi-detached dwelling in it as seen on the tree constraints plan appended to this report. The garden areas wrap around the existing dwelling to the eastern side. There is an entrance via a pedestrian path, which is South Walk.

The current proposal involves constructing a new two storey dwelling onto the side of the existing one as shown using the purple colour on the tree constraints plan. This will mean the removal of three tree, but they are all either poor quality or dead, as in the case of T2 on our survey. A fourth tree will be retained and protected throughout the process.

2. TREE SURVEY

2.1. Survey Distribution Summary

A structural breakdown of the surveyed population according to BS5837:2012 cascade grading metric:

BS5837 Retention Category	Total Count (Template Example)	Percentage Allocation
Category A (High Quality & Value - Light Green)	0	5%
Category B (Moderate Quality & Value - Mid Blue)	1	25%
Category C (Low Quality & Value - Grey)	2	50%
Category U (Unretainable Specimen - Red)	1	25%

2.2. Survey Methodology

The trees were surveyed on August 25th 2026. Locations of the trees were plotted accurately using the baseline site plan provided by Circle Z Architects Ltd. All trees were thoroughly inspected from ground level only using widely accepted Visual Tree Assessment (VTA) techniques; no trees were climbed or physically cored during the survey. No trees were internally investigated via structural diagnostic devices. Should a more advanced detailed diagnostic inspection be technically required, this will be explicitly noted within the recommendations field of the Tree Survey Schedule.

2.3. Retention Criteria & Category Details

With regard to their dynamic desirability for long-term retention, the trees surveyed have been systematically graded with their principal stems colour-coded on the Tree Constraints Plan and Tree Protection Plan using the standard matrix criteria:

A = Light Green: Trees of high quality and value, in such a condition as to be able to make a substantial contribution (a minimum of 40 years is suggested in the British Standard). These are usually a material constraint to any development.

B = Mid Blue: Trees of moderate quality and value in such a condition as to make a significant contribution (a minimum period of 20 years is suggested in the British Standard). Typically worthy of consideration as a material constraint.

C = Grey: Trees of low quality and value, in adequate condition to remain until new landscape planting could be established (a minimum of 10 years is recommended), or immature specimens with a stem diameter below 150mm. Not usually a material constraint.

U = Red: Trees in such a degraded condition that they cannot realistically be retained as living specimens in the context of the current land use for longer than 10 years. These should generally be removed prior to development.

In our survey schedule, the Root Protection Area (RPA) for each specific tree is explicitly calculated and indicated as both a linear radius length (m) and overall structural surface area (m²). This metric is visually plotted on the Tree Constraints Plan and Tree Protection Plan denoted by a heavy black line which dynamically merges individual RPAs where multiple root networks interface. Section 4.6 of BS5837:2012 provides for the standard shape of the RPA to be modified from a perfect circle to realistically account for structural site features (e.g. retaining walls, foundations, hard treatments) where root growth is restricted, provided the overall area volume balance remains identical. In this instance, no RPAs were modified. Please Note: The legacy allowance for offsetting an RPA layout by up to 20% for completely open-grown trees was formally withdrawn on May 01st 2012.

2.4. Legal Protection Status of Trees

A formal review of relevant statutory constraints has revealed the following legal statuses:

Type of Protection Constraint	Details / Reference	Reference Case
Conservation Area Status		No
Tree Preservation Order (TPO)		No
Planning Conditions Requiring Tree Retention		No
Ancient and Veteran Trees		No

3. ARBORICULTURAL IMPACT ASSESSMENT

3.1. Summary of Impact Assessment

A quantitative balance sheet overview of development interactions on the tree population:

Arboricultural Metric Evaluation	Quantity / Count Metric
Total number of trees surveyed on and adjacent to site	4
Number of specific individual trees scheduled for removal	3
Number of retained trees requiring structural pruning operations	0
Number of retained trees facing active Root Protection Area (RPA) incursions	0

3.2. Detailed Removal of Trees

The specific specimens detailed in the matrix below will be fully felled to ground level, and their respective stumps systematically ground out using precision machinery to prevent subsequent structural root damage or fungal infection to the root systems of closely adjacent retained trees. The underlying drivers for structural tree removal correspond to either: A) Direct design spatial conflict with the proposed footprints, or B) Degraded physiological condition making retention undesirable.

Category A Trees (High Grade)	Category B Trees (Moderate Grade)	Category C Trees (Low Grade)	Category U Trees (Unretainable)
Not applicable	Not applicable	T1 & T3	T2

Trees Scheduled for Removal	Impact on the Character of the Local Area	Mitigation Strategy
T1 & T3	Low: Both fairly small trees and T1 is in poor condition.	None required
T2	None: T2 is dead	None required

3.3. Tree Works & Management Operations

Apart from the tree removals specified in section 3.2 of this report, no tree work is required for the current proposal to be completed.

3.4. Technical Incursions into Root Protection Areas (RPAs)

In many operational instances, a low, controlled degree of root zone disturbance can be professionally deemed acceptable. Where design spatial constraints render incursions

necessary, structural impact minimisation can often be successfully achieved via specialised no-dig techniques, porous surfacing, or localised architectural bridging.

Type of Specific Incursion	Tree Number(s)	Precautions & Engineering Control Measures
Not applicable	Not applicable	Not applicable

3.5. Light and Proximity Issues

There are no major systemic arboricultural light occlusion or spatial proximity issues associated with the layout of the current structural development proposal.

3.6. Mitigation Planting & Landscape Enhancement

No extensive structural mitigation compensatory tree planting is technically required for the context of the current proposal.

3.7. Conclusion

Assuming absolute, rigorous compliance with the explicit directives of the Arboricultural Method Statement (Section 4) enforced within this formal report, the net residual arboricultural impact of the project layout is professionally evaluated as acceptable.

4. ARBORICULTURAL METHOD STATEMENT

4.1. Introduction & Operational Framework

During the active development process, the explicit tree protection measures, fencing layouts, and operational controls set out within this method statement must be strictly adhered to by all site operators to actively safeguard retained trees. The underlying principles are designed to offer absolute protection to both vulnerable underground root networks and the aerial structural limbs. A physical copy of this method statement must be permanently made available on site at all times until the final cessation of all demolition, construction, and landscaping works. All site personnel must be formally inducted and made thoroughly familiar with key operational constraints. Local Planning Authorities possess full legal powers to issue binding Temporary Stop Notices if agreed tree protection measures are compromised—inducing massive operational delays and costs.

4.2. Pre-commencement Meeting

If the Local Planning Authority tree officer deems it legally necessary, a mandatory pre-commencement site meeting will be executed, attended by the project Arboricultural Consultant, the Principal Site Manager, and the LPA Tree Officer. During this framework meeting, operational sequences will be synchronised, and it is expected that all aspects of tree protective fencing layouts will be formalised. Following this session, all parties will receive a formal minutes log from the Arboricultural Consultant.

4.3. Sequencing, Control and Supervision

Effective multi-stage sequencing and structural monitoring are critical to enforcing compliance. Key stages are:

- Arboricultural Method Statement (AMS) formally issued to Site Manager / Building Company.
- AMS text read and signed off by all site contractors to guarantee a complete understanding of site boundaries.
- Recommended and explicitly agreed pre-development tree works executed by an approved contractor.
- Physical installation of tree protective fencing layouts as detailed in the Tree Protection Plan.
- Signing off of the approved tree protection controls by the project Arboricultural Consultant prior to any site development or demolition..
- Main engineering construction work executed across the site layout.
- Removal of tree protective fencing layouts following structural completion.
- Final landscaping and planting phase executed.

4.4. Prohibited Site Activities & Precautions

The following strict prohibitions must be maintained across the entire site lifecycle:

- No fires will be lit within 15 meters of any retained tree canopy on or around the site boundaries.
- No unauthorised personnel or vehicular access is permitted inside the defined Construction Exclusion Zone (CEZ).

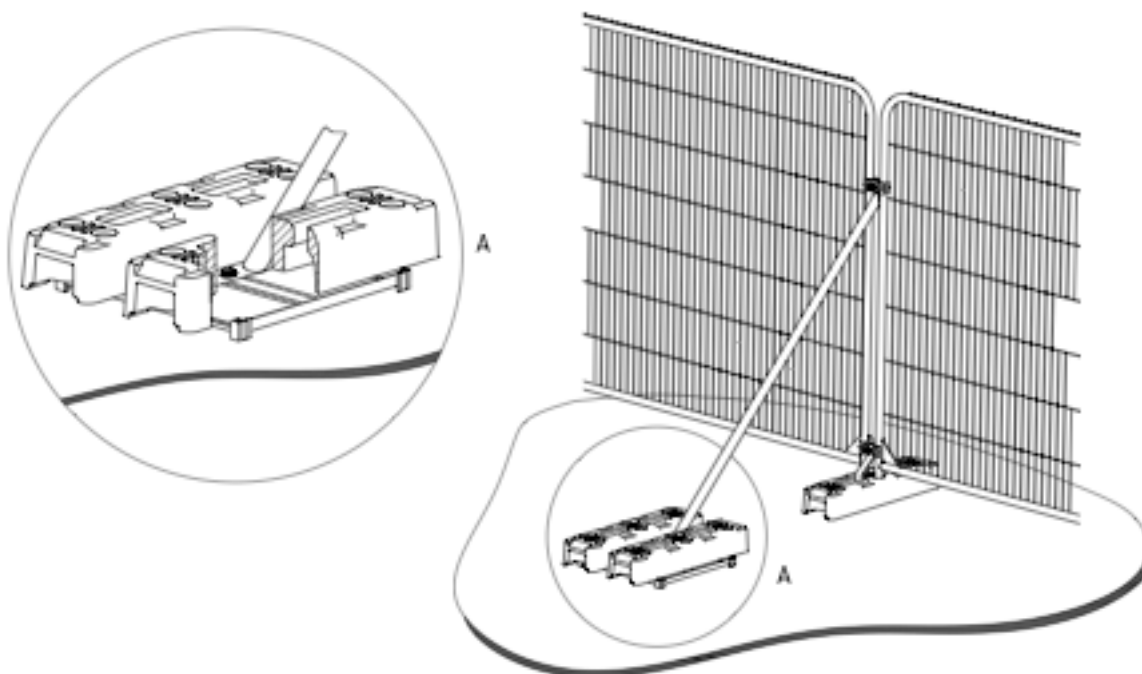
- No operational materials, scaffolding equipment, excavated spoil, or site waste will be stored within the CEZ lines.
- Notice boards, utility telephone cables, or structural guy wires will not under any circumstances be attached to retained tree stems.
- Soil-contaminating chemicals, including liquid concrete, diesel oil, vehicle washings, and builder's sand, must never enter the RPA.

4.5. Execution of Tree Works

All tree works must be executed in absolute accordance with BS3998:2010 (Recommendations for Tree Works) and standard best practices. Works must be conducted exclusively by a fully insured, NPTC qualified contracting crew. The contractor remains solely responsible for generating their own statutory site risk assessments prior to tool deployment.

4.6. Protective Fencing and Ground Protection Framework

The required tree protective fencing must be solidly installed to establish the structural Construction Exclusion Zone (CEZ) illustrated on the Tree Protection Plan. This layout must not be modified, breached, or repositioned without explicit, written prior authorisation from the Local Planning Authority. The structural specification is 2.4m heavy-gauge steel Heras fencing panels supported by concrete or rubber feet with structural struts firmly anchored into the ground on the tree side of the barrier to prevent accidental displacement. Clear, weather-proof signage must be securely zip-tied to panels reading: 'TREE PROTECTION ZONE - CONSTRUCTION EXCLUSION ZONE - KEEP OUT'.



4.7. Site Access & Logistics Control

All heavy construction access and material delivery logistics must occur exclusively via the pre-existing site entrance on South Walk to minimise structural compaction across unmade ground.

4.8. Structural Demolition Work Procedures

In this instance, no demolition work is required for the current proposal. Any landscaping clearance waste will be stored away from the RPA of any retained tree until it can be removed for disposal.

4.9. Underground Utilities & Service Routing

All new underground utility runs (water, gas, electricity, telecom) must be routed entirely outside of the calculated RPAs of all retained trees. Runoff drainage must discharge into designated soak-aways located away from vulnerable soil zones.

4.10. Foundations and Architectural Construction

Because the proposed new dwelling is not near to any retained tree or their RPA, no specially engineered solution is necessary.

4.11. Boundary Fencing and External Landscaping

During final landscaping phases, the following strict controls must be actively enforced:

- No mechanical compaction of topsoil layer within the designated RPAs of any retained tree.
- No alterations to existing ground levels (neither structural cutting nor filling operations).
- Removal of unwanted scrub or turf layer must be executed entirely manually or via approved translocated contact herbicides.
- No automatic underground irrigation pipe networks or deep drainage trenches to be mechanically trenched inside root layouts.
- Boundary fence post installation within an RPA must be executed using hand tools under direct arboricultural supervision. Post holes must be lined with heavy polythene sheeting before concrete pouring to eliminate chemical leaching into adjacent roots.

4.12. Formally Authorised Amendments

Should unforeseen site layout difficulties emerge, any modifications or amendments to this operational AMS must be formally reviewed and approved in writing by the Local Planning Authority prior to deployment on site.

APPENDIX A: TREE SURVEY SCHEDULE

Please note that the raw baseline assessments and management recommendations contained within this comprehensive schedule are derived strictly from field observations and physiological tree quality metrics. They do not represent a final design clearance layout, but instead formulate the constraint parameters to guide development footprint design.

Tree Survey Schedule

This tree survey schedule is prepared in strict accordance with the British Standard **BS 5837:2012 (Trees in Relation to Design, Demolition, and Construction)**. The layout is optimised for **Landscape orientation** to give wider data columns ample spacing, making the matrix and canopy measurements clean and easily readable.

Date:	August 25th 2026	Site:	1 South Walk, Hayes, UB3 2RE.
Surveyor:	Jon Harper (Arb)	Standard:	BS 5837:2012

Type(Tag)	Species	Age	Category	DBH(Stems)	Height(L/Hgt)	N	E	S	W	Condition	Life Exp	Comments	Recommendations	RPR	RPA
T1	Prunus avium (Wild Cherry)	M	C1	300(4)	3.5(2)	2	2	2	2	Poor	10	Low vitality.	None at present.	3.6	40.72
T2	Salix X chrysocoma (Weeping Willow)	M	U	420(1)	3(2)	0.5	0.5	0.5	0.5	Dead	<10	Dead.	Remove tree and root.	5.04	79.81
T3	Ilex aquifolium (Holly)	M	C1	212(2)	3.5(0.5)	2	2	2	1.5	Fair	10	Stunted.	None at present.	2.54	20.27
T4	Fraxinus excelsior (Ash)	M	B3	550(1)	7(2)	4	4	4	4	Good	20	Pollard.	None at present.	6.6	136.87

BS 5837:2012 Explanatory Notes & Reference Guides

1. Tree Quality Assessment Cascade Chart

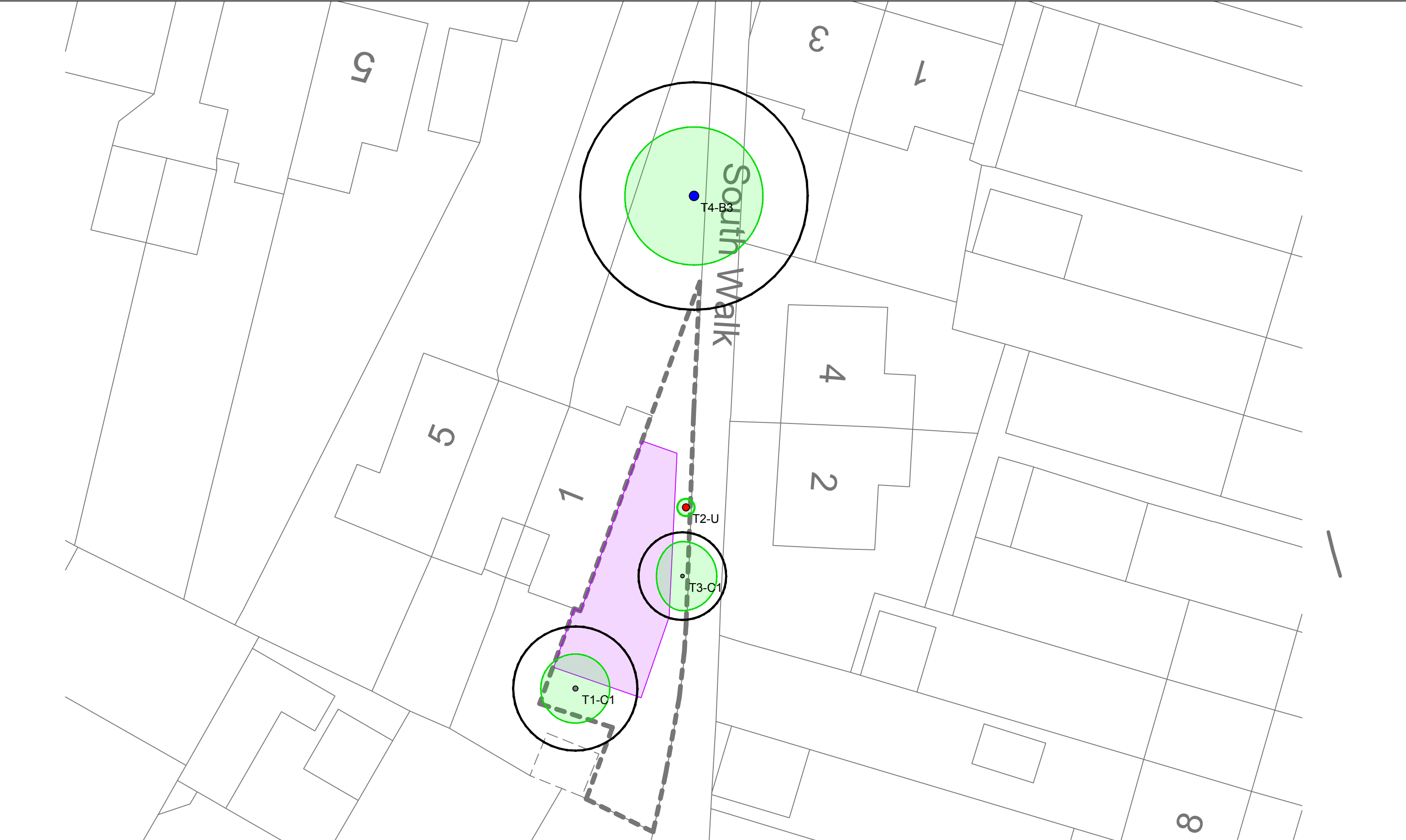
Category	Definition & Criteria	Sub-category Criteria	Retention / Action Guidance
Category A (High Quality)	Trees of high quality with an estimated remaining life expectancy of at least 40 years. Particularly good specimens or visually/historically significant assets.	1: Mainly arboricultural values. 2: Mainly landscape values. 3: Mainly cultural/conservation values.	These trees carry the most weight in planning. Highly desirable for retention; site designs should be adapted to preserve them and their RPAs.

Category B (Moderate Quality)	Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. Sound trees but downgraded from Category A due to minor defects.	1: Mainly arboricultural values. 2: Mainly landscape values. 3: Mainly cultural/conservation values.	Highly suitable for retention. Site layout adjustments should prioritize avoiding construction damage within their RPAs.
Category C (Low Quality)	Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter under 150mm.	1: Mainly arboricultural values. 2: Mainly landscape values. 3: Mainly cultural/conservation values.	Should not usually pose a significant constraint on development. May be retained if compatible with designs, or removed and mitigated with new plantings.
Category U (Unviable / Dead)	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.	• Structural defects / collapse risk. • Dead, dying, or in irreversible decline. • Significant pathogen infections.	Unsuitable for retention. Typically recommended for removal prior to development, regardless of the design layout, unless they possess high ecological/deadwood value.

2. Abbreviation & Column Key

Field Column	Explanation & Standards Criteria
Age Class	Y (Young): Recently planted/establishing; transplantable. SM (Semi-mature): Established but yet to reach ultimate height. EM (Early-mature): Growth slowing but still expanding. M (Mature): Fully established. OM (Over-mature): Canopy decline. V / A (Veteran/Ancient): Historical/ecological value.
DBH (mm)	Stem diameter measured in millimeters at 1.5 meters above ground level. Multi-stems use equivalent diameter formulas (stem count shown in parentheses, e.g., 283(2)).
Height (m)	Overall tree height in meters, followed by the height of the canopy base in parentheses (e.g., 11(2)).
Crown Spread	Radial crown spread in meters from the center of the trunk to the branch tips at the cardinal points (North, East, South, West).
RPR (m) / RPA (m²)	Root Protection Radius: Nominal circle radius (DBH × 12). Root Protection Area: Critical layout zone (max 707 m²) that must be protected during development.

APPENDIX B: TREE CONSTRAINTS PLAN



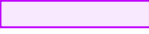
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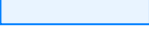


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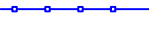
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Project: 1 South Walk, Hayes
Date: August 25th 2026
Scale @ A3: 1:200
Drawing Number: 2026057/TCP001

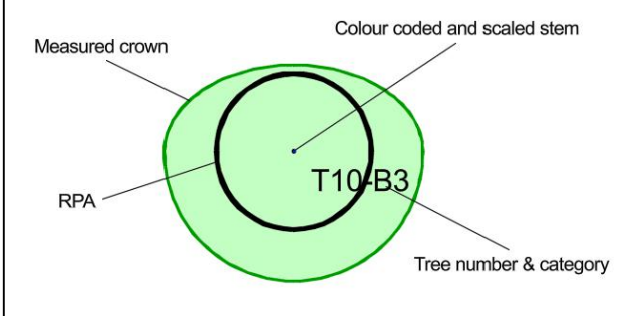
Drawing Title: Tree Constraints Plan

Proposed development: 

Ground Protection: 

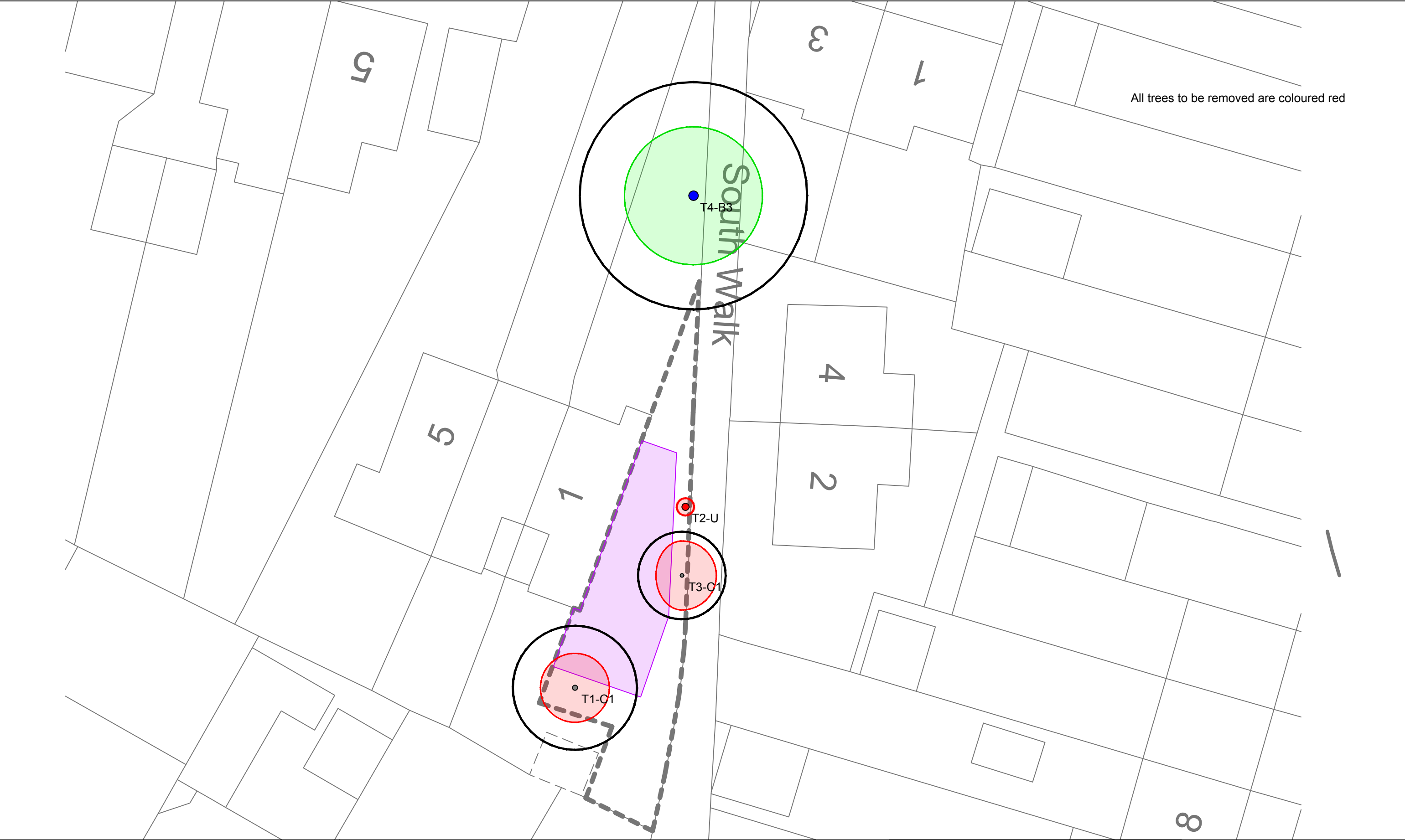
No Dig Surfacing: 

Tree Fencing: 



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APPENDIX C: TREE REMOVAL PLAN



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Client: Lotus Soft Ltd.

Project: 1 South Walk, Hayes

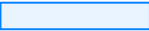
Date: August 25th 2026

Scale @ A3: 1:200

Drawing Number: 2026057/TRP001

Drawing Title: Tree Removal Plan

Proposed development: 

Ground Protection: 

No Dig Surfacing: 

Tree Fencing: 

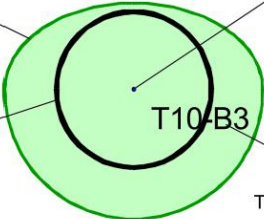
Measured crown

Colour coded and scaled stem

RPA

T10-B3

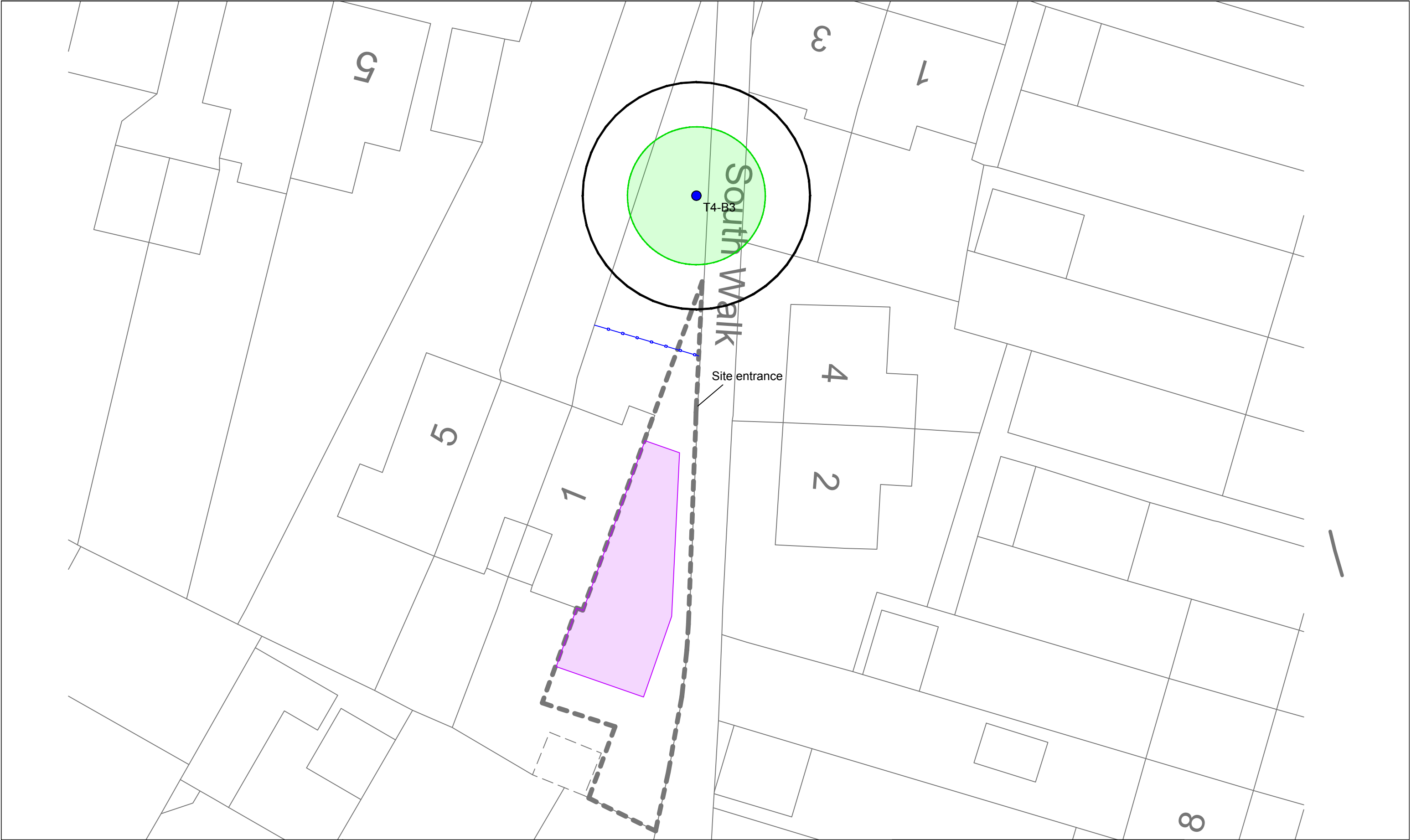
Tree number & category



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APPENDIX D: TREE PROTECTION PLAN



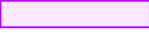
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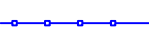
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Project: 1 South Walk, Hayes
Date: August 25th 2026
Scale @ A3: 1:200
Drawing Number: 2026057/TRP001

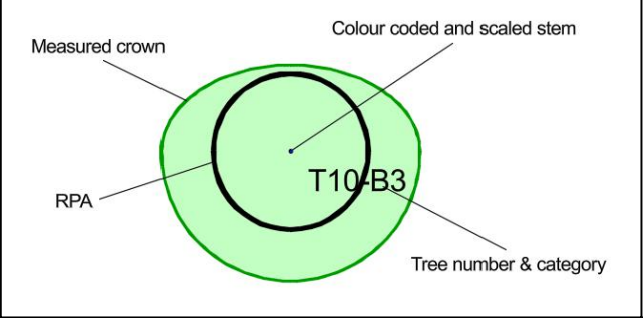
Drawing Title: Tree Removal Plan

Proposed development: 

Ground Protection: 

No Dig Surfacing: 

Tree Fencing: 



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