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Tree Surveys

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Title:	BS:5837 Tree Survey, Arboricultural Impact Assessment (AIA), Arboricultural Method Statement (AMS) & Tree Protection Plan (TPP)
Client:	Kevin Cunningham
Site:	9 Laburnum Grove, Cleadon, SR6 7RJ
Surveyor:	Andrew Burden, HNDip.arb.
Date:	02 December 2025

Forestry

www.northeasttreesurgeons.co.uk

Arboriculture

Environmental

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1.0 Introductory details

- 1.1 The site was visited following a verbal request from Kevin Cunningham, the purpose of the visit being to collect arboricultural data to provide a tree survey based upon the guidelines set out within the document BS:5837 (2012) Trees in relation to design, demolition & construction recommendations (BSI London 2012).
- 1.2 The trees surveyed are situated within and outside the site boundary.
- 1.3 All trees were visually inspected and surveyed from ground level. Assessment of the trees condition is based upon visual tree assessment (VTA). Tree heights were measured using a Haglof digital clinometer, other measurements taken with the use of specialist tapes.
- 1.4 All trees surveyed are assessed in accordance with sections 4.4 & 4.5 of BS:5837 (2012). Trees are allocated a retention category and colour code reference based upon their quality and value within the existing context. These are:
 - * **Category A** – Trees of high quality with long term future potential – Green
 - * **Category B** – Trees of moderate quality, medium term future potential – Blue
 - * **Category C** – Trees of low-quality, short-term future potential – Grey
 - * **Category U** – Trees in such condition they cannot be realistically retained for longer than ten years - Red
- 1.5 The surveyor Mr. Andrew Burden is an arborist with thirty seven years industry experience, qualified to HND level in arboriculture and woodland management (Houghall Collage, Durham 1994 – 96).
- 1.6 We have been provided with the existing and proposed site drawings, the proposed development works are demolition of the existing building and construction of a new dwelling.

- 1.7 Full details relating to the trees current physiological and structural condition are contained within the BS:5837 (2012) Tree Survey Data Sheets (Appendix 7.1).
- 1.8 This independent report is based upon arboricultural merit alone.
- 1.9 Some DBH (diameter at breast height) measurements of the trees outside the site boundary to the North within the garden of 7 Laburnum Grove are estimates based upon the surveyors professional experience.

2.0 Protected status of trees

- 2.1 Desk based study carried out on 01 December 2025 of the South Tyneside Council online protected trees information shows the site is within the boundary of the Cleadon Village Conservation Area. As such no tree works recommended within this report should be carried out without the formal, written consent of South Tyneside Council Planning & Landscape Department.

3.0 Discussion

- 3.1 The site is currently a domestic dwelling with gardens to the East & West of the property with scattered, mainly perimeter trees of mixed species. Trees to the North & East of the existing property are outside the boundary of 9 Laburnum Grove. Trees to the North are within the garden of 7 Laburnum Grove, Trees to the East are within the boundary of park land.
- 3.2 One category B tree (T 0888) would require removal to facilitate the proposed development. Two Category U trees require removal upon arboricultural grounds. The remaining trees would require fenced protection along with areas of ground protection.

4.0 Arboricultural Impact Assessment (AIA)

4.1 The Arboricultural Impact Assessment (AIA) considers the following factors in relation to the proposed development:

- * Tree location.
- * Ground conditions
- * Likely tree root morphology.
- * Current dimensions & future growth
- * The tolerance of the trees in relation to possible disturbance based on species, age and condition.

4.2 Above ground impacts

4.3 Care should be taken throughout the period of proposed development to prevent any spillage of liquid construction materials (fuel, cement / concrete washings etc) from entering the area of soil close to the tree protection areas. These materials can have a harmful effect upon a tree's health. Spill kits should be available on site, of a sufficient size to immediately deal with any accidental spillages. Any liquid construction materials should be stored and mixed well away from the tree protection areas.

4.4 All construction staff working on the proposed development project should be clearly briefed on these recommendations prior to commencing works on site.

4.5 Below ground impacts

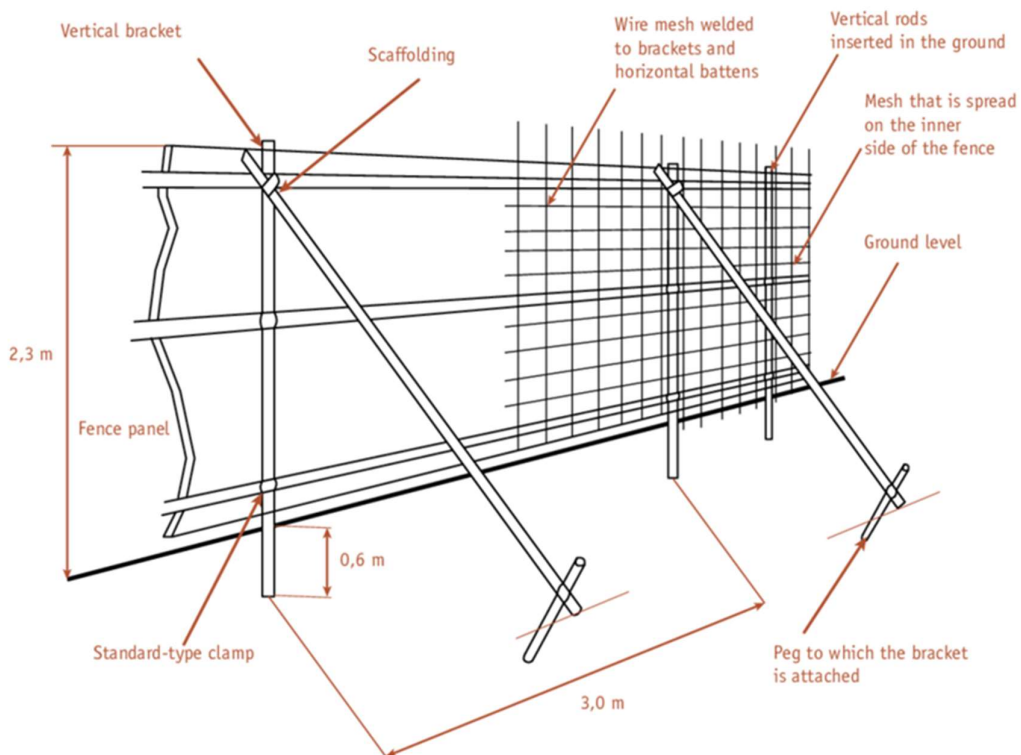
4.6 We assume that the existing property services will be able to be utilised for the proposed development but offer the following advice should any new service installation be required.

- .4.7 Service runs where possible should be grouped together and routed away from the tree protection zones.
- 4.8 The National Joint Utilities Group (NJUG) guidelines for the planning and installation of services in proximity to trees should be adhered to.

4.9 Site specific Arboricultural Impacts & Solutions

- 4.10 **Potential Impact:** Damage to the tree's rooting zones or tree roots during demolition and construction phase.

Solution: Install tree protection fencing and ground protection in the locations given in the Tree Protection Plan (appendix 7.6) to the following specification.



4.11 Example of temporary ground protection



- 4.12 Where the set-back of the tree protection fencing is required heavy duty temporary ground protection mats are required to be installed as part of the physical tree protection measures prior to works commencing on site. The objective being to avoid compaction of the soil within tree root protection areas.
- 4.13 For pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression resistant layer (e.g. 100 mm depth of woodchip), laid onto a geotextile membrane.
- 4.14 For pedestrian operated plant up to a gross weight of 2 tonne, proprietary, inter-linked ground protection boards placed on top of a compression resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane.
- 4.15 For wheeled or tracked construction traffic and machinery exceeding 2 tonnes gross weight, and alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected, which will be required in this instance.

4.16 Additional Precautions

- * Any excavation required within any RPA should be carried out by hand under arboricultural supervision following the provision of an Arboricultural Method Statement (AMS).
- * No lowering or raising of site levels within the RPA for any purpose.
- * No storage of plant or materials within or adjacent to the RPA.
- * No storage or handling of any chemical construction materials including cement within or adjacent to the RPA.
- * No vehicle access to the RPA.
- * No substances injurious to tree health including fuels, oil, bitumen, cement, builders sand, chemicals or concrete mixing shall be carried out or stored, within or adjacent to the RPA.
- * No fires should be lit on site at any time.

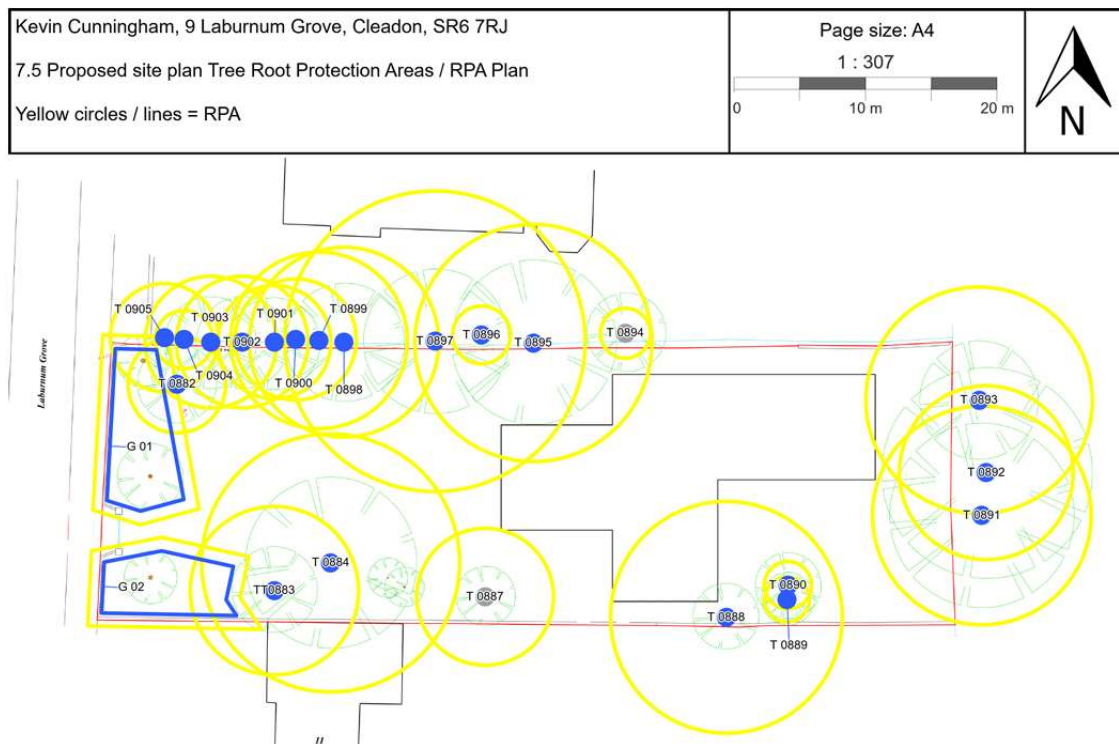
4.17 Sequence of operations

Stages	Action	Arboricultural Input
1. Approval	Tree Survey, AIA, AMS & TPP submitted to and approved by LPA	Lease with LPA if required.
2. Arb works	Remove Tree No's: T 0885, T 0886 & T 0888	
3. Installation of tree protection	Install tree protection fencing & ground protection	Site visit to assess suitability of tree protection measures.

4. Demolition & Construction Phase.		Periodic visits to assess integrity of tree protection measures.
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5.0 Arboricultural Method Statement (AMS)

- 5.1 To achieve the proposed development construction works access, demolition works and foundation construction will be required within tree root protection areas.
- 5.2 Arboricultural supervision will be required during uplift of the existing building foundation where tree root protection areas currently have interface with the property.
- 5.3 Appendix 7.5 Proposed site plan showing existing tree root protection areas.



- 5.4 Tree No: T 0888 will require removal to facilitate the proposed development.

- 5.5 There is a slight interface with the root protection areas (RPA) of T 0895 & T 0897, these trees are situated within the garden of 7 Laburnum Grove to the North. There is a retaining wall and ground level difference of between 600 – 700 mm along the boundary between the two properties. As the existing property is already constructed within the outer edge of the RPA of these trees normal foundation construction methods may be applied without causing harm to these trees.
- 5.6 Any hard surfacing or driveway construction will require the installation of an aggregate cellular confinement system as in the following examples.



- 5.7 Any preparatory works for new landscaping to complete the scheme should be carried out using hand tools only following completion of all construction works.

5.8 Additional Precautions

- 5.9 No moving, alterations or construction works access is allowed to the fenced tree protection zones for any purpose.
- 5.10 Planning of site operations should take account of wide loads, tall loads and any plant with booms, jibs etc in order that they can safely operate without coming into contact with retained trees.
- 5.11 Any transit or traverse of plant in proximity to retained trees should be conducted under the supervision of a banksman to ensure that adequate clearance from trees is maintained at all times.

5.12 Drainage and utilities.

- 5.13 We assume that utility services are already installed within the existing building, should any further works to utility service runs be required the following shall apply.
- 5.14 Drainage and utilities are to be directed away from the trees which are being retained. Any overground services should be routed away from areas where they may interfere with the crowns of trees. Any new underground services should be grouped together where possible and routed away from tree RPA's. The National Joint Utilities Group (NJUG) guidelines relating to the planning, installation and maintenance of utility services in proximity to trees should be considered when planning installing services.

5.15 Site Contacts.

Title	Name	Telephone	email
Client	Kevin Cunningham	07533 936108	

Arboriculturist	Andrew Burden	07719 734990	andrewrburden@hotmail.co.uk
Project Architects	TBC		
Site Manager	TBC		

5.9 Site monitoring.

5.10 Whenever trees on or adjacent to a site have been identified for protection an auditable system of arboricultural site monitoring is required.

6.0 Conclusions

6.1 The proposed development can be achieved without impacting the health of the trees being retained by following the details set out within this report.

7.0 Appendices

- 7.1 BS:5837 (2012) Tree Survey data sheets
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Surveyor: **Mr. Andrew Burden, HNDip.arb**

Signed: *A R Burden*

Date: **02 December 2025**

BS5837 Survey Data



Ref.	Species	Measurements	General Observations	Category	Recommendations
G 01	Mixed species (Mixed species) Common hawthorn x2 (Crataegus monogyna) English yew (Taxus baccata) Laurel (Laurus sp.)	Height (m): 6 5 stems Crown Clearance (m): 0 Life Stage: Semi Mature Rem. Contrib.: 20+ Years	Shrub bed of fair condition. Additional Comments: This group will not have to be removed to facilitate a proposed future development.	B2 RPA Area: 95 sq m.	
G 02	Mixed species (Mixed species) Laurel (Laurus sp.) Berberis (Berberis sp.)	Height (m): 6 3 stems Crown Clearance (m): 0 Life Stage: Semi Mature Rem. Contrib.: 20+ Years	Shrub bed of fair condition. Additional Comments: This group will not have to be removed to facilitate a proposed future development.	B2 RPA Area: 81 sq m.	
T 0882	Common holly (Ilex aquifolium)	Height (m): 9 2 stems, avg.(mm): 220 Spread (m): 2N, 3E, 4S, 3W Crown Clearance (m): 0 Life Stage: Semi Mature Rem. Contrib.: 20+ Years	Twin stem from base, lean South. Upper crown has interface with electricity cables. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 3.7m. Area: 43 sq m.	

7.1 BS:5837 Tree Survey Data Sheets

Ref.	Species	Measurements	General Observations	Category	Recommendations
T 0883	Silver fir (Abies alba)	Height (m): 17 Stem Diam(mm): 530 Spread (m): 5N, 3E, 4S, 4W Crown Clearance (m): 1.5 Life Stage: Early Mature Rem. Contrib.: 20+ Years	Ivy from base into high crown, sparse crown suppressed slightly by adjacent larger Beech. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 6.4m. Area: 129 sq m.	
T 0884	Common beech (Fagus sylvatica)	Height (m): 18 Stem Diam(mm): 820 Spread (m): 7N, 8E, 6S, 4W Crown Clearance (m): 1 Life Stage: Mature Rem. Contrib.: 20+ Years	Historically pollarded at 5 m, large swollen bulge below point of pollard. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 9.8m. Area: 302 sq m.	
T 0885	Sycamore (Acer pseudoplatanus)	Height (m): 9 Stem Diam(mm): 120 Spread (m): 1N, 2E, 3S, 0W Crown Clearance (m): 5 Life Stage: Young Rem. Contrib.: <10 years	Lower stem / buttress damage to West, no scope for safe future development. Additional Comments: This tree will not have to be removed to facilitate a proposed future development but will require removal upon arboricultural grounds.	U RPA Radius: 1.4m. Area: 6 sq m.	
T 0886	Common ash (Fraxinus excelsior)	Height (m): 7 Stem Diam(mm): 150 Spread (m): 1N, 1E, 3S, 1W Crown Clearance (m): 2 Life Stage: Young Rem. Contrib.: <10 years	Tree has Ash Disease, 40% of crown is dead wood. Additional Comments: This tree will not have to be removed to facilitate a proposed future development but requires removal upon arboricultural grounds.	U RPA Radius: 1.8m. Area: 10 sq m.	
T 0887	Common beech (Fagus sylvatica)	Height (m): 8 Stem Diam(mm): 430 Spread (m): 2N, 2E, 4S, 3W Crown Clearance (m): 1.5 Life Stage: Semi Mature Rem. Contrib.: 10+ Years	Lean South, unbalanced crown. Multiple included limbs at point of crown break (1.8 m) limited scope for safe future retention. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	C1 RPA Radius: 5.2m. Area: 85 sq m.	

Ref.	Species	Measurements	General Observations	Category	Recommendations
T 0888	Chinese juniper (Juniperus chinensis)	Height (m): 11 Stem Diam(mm): 730 Spread (m): 2N, 3E, 2S, 2W Crown Clearance (m): 1.5 Life Stage: Early Mature Rem. Contrib.: 20+ Years	Twin stem from 1.6 m of otherwise fair condition. Additional Comments: This tree will have to be removed to facilitate a proposed future development.	B2 RPA Radius: 8.8m. Area: 243 sq m.	
T 0889	Sycamore (Acer pseudoplatanus)	Height (m): 9 Stem Diam(mm): 140 Spread (m): 0N, 2E, 2S, 2W Crown Clearance (m): 2.5 Life Stage: Young Rem. Contrib.: 20+ Years	Self seeded sapling. Squirrel damage (bark stripping) throughout crown. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 1.7m. Area: 9 sq m.	
T 0890	Wild cherry (Prunus avium)	Height (m): 9 Stem Diam(mm): 150 Spread (m): 2N, 2E, 1S, 2W Crown Clearance (m): 3 Life Stage: Young Rem. Contrib.: 20+ Years	Self seeded sapling of fair condition. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 1.8m. Area: 10 sq m.	
T 0891	Sycamore (Acer pseudoplatanus)	Height (m): 16 Stem Diam(mm): 690 Spread (m): 1N, 1E, 6S, 6W Crown Clearance (m): 2 Life Stage: Early Mature Rem. Contrib.: 20+ Years	Heavy Ivy cover from base into high crown, unbalanced crown, extensive overhang into property garden. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 8.3m. Area: 216 sq m.	
T 0892	Sycamore (Acer pseudoplatanus)	Height (m): 14 Stem Diam(mm): 550 Spread (m): 4N, 2E, 4S, 6W Crown Clearance (m): 4 Life Stage: Early Mature Rem. Contrib.: 20+ Years	Heavy Ivy cover from base into high crown, unbalanced crown, extensive overhang into property garden. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 6.6m. Area: 137 sq m.	
T 0893	Sycamore (Acer pseudoplatanus)	Height (m): 16 Stem Diam(mm): 720 Spread (m): 4N, 2E, 4S, 6W Crown Clearance (m): 4 Life Stage: Early Mature Rem. Contrib.: 20+ Years	Heavy Ivy cover from base into high crown, unbalanced crown, extensive overhang into property garden. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 8.6m. Area: 232 sq m.	

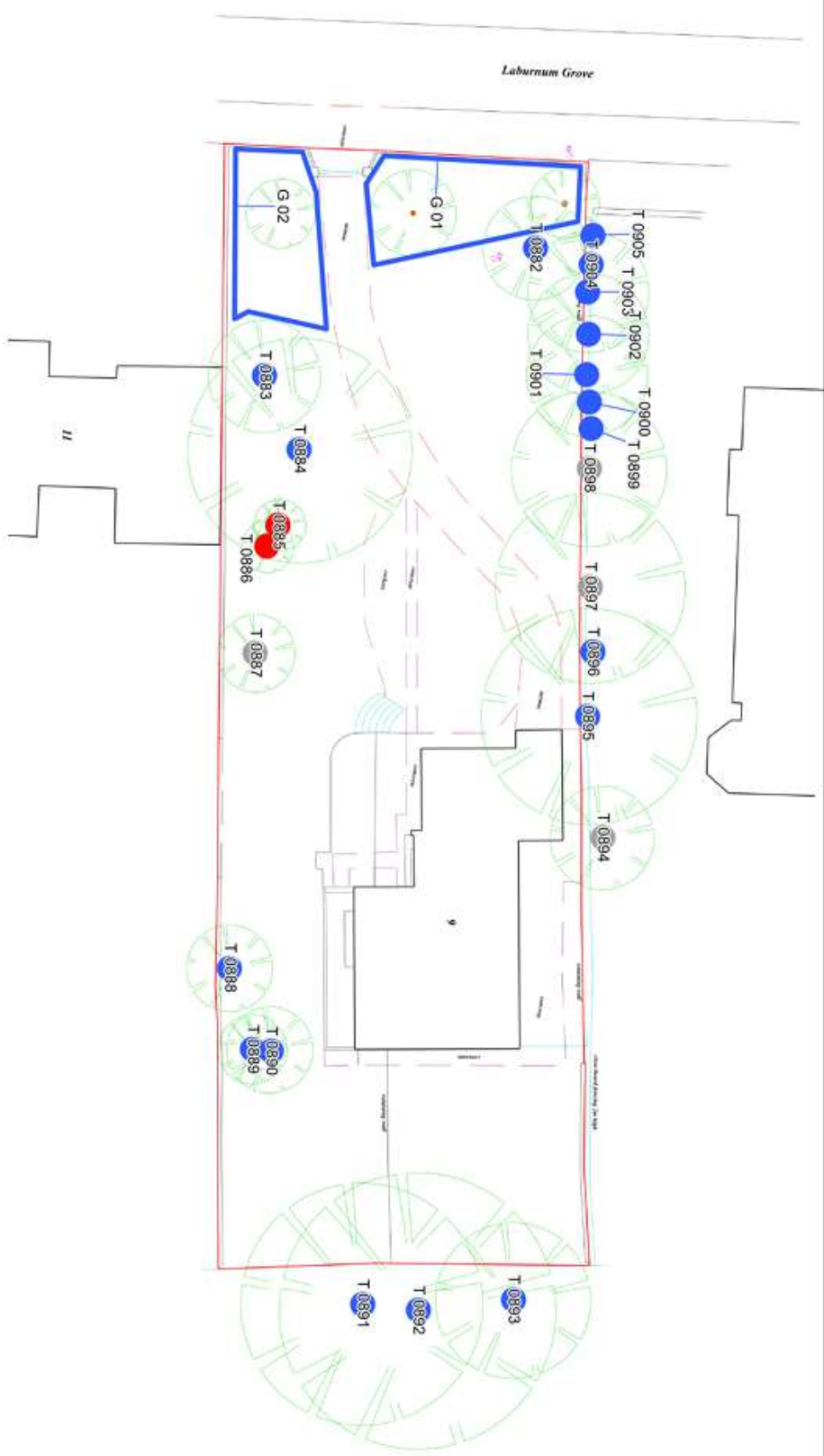
Ref.	Species	Measurements	General Observations	Category	Recommendations
T 0894	Weeping willow (Salix babylonica)	Height (m): 5 Stem Diam(mm): 160 Spread (m): 2N, 2E, 3S, 2W Crown Clearance (m): 1 Life Stage: Young Rem. Contrib.: 10+ Years	Fair for age & species, overhangs existing property. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	C1 RPA Radius: 1.9m. Area: 11 sq m.	
T 0895	Common beech (Fagus sylvatica)	Height (m): 14 Stem Diam(mm): 750 Spread (m): 4N, 4E, 6S, 3W Crown Clearance (m): 4 Life Stage: Early Mature Rem. Contrib.: 20+ Years	Twin stem from 2.6 m. Northern stem has been pollarded. Lower crown to South has interface with overhead electricity cables. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 9.0m. Area: 254 sq m.	
T 0896	Field maple (Acer campestre)	Height (m): 7 Stem Diam(mm): 180 Spread (m): 3N, 2E, 1S, 3W Crown Clearance (m): 2 Life Stage: Semi Mature Rem. Contrib.: 20+ Years	Historically pollarded at 3 m Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 2.2m. Area: 15 sq m.	
T 0897	Common beech (Fagus sylvatica)	Height (m): 16 Stem Diam(mm): 950 Spread (m): 5N, 4E, 7S, 3W Crown Clearance (m): 1.5 Life Stage: Early Mature Rem. Contrib.: 10+ Years	Lean South, unbalanced crown. Twin stem from 1.8 m with weak, included union. Tree has potential to fall at this point. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	C1,2 RPA Radius: 11.4m. Area: 408 sq m.	
T 0898	Common beech (Fagus sylvatica)	Height (m): 16 Stem Diam(mm): 600 Spread (m): 4N, 2E, 5S, 2W Crown Clearance (m): 6 Life Stage: Early Mature Rem. Contrib.: 10+ Years	Lower crown to North has been pruned leaving large branch stubs / snags. Tight compression fork between 2.5 m & 3 m with bulge, crown weight South. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	C1 RPA Radius: 7.2m. Area: 163 sq m.	
T 0899	Common beech (Fagus sylvatica)	Height (m): 16 Stem Diam(mm): 560 Spread (m): 4N, 2E, 5S, 2W Crown Clearance (m): 6 Life Stage: Early Mature Rem. Contrib.: 20+ Years	Twin stem from 5 m of fair condition. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 6.7m. Area: 141 sq m.	

Ref.	Species	Measurements	General Observations	Category	Recommendations
T 0900	Not identified (Not identified)	Height (m): 16 Stem Diam(mm): 380 Spread (m): 3N, 1E, 4S, 2W Crown Clearance (m): 5 Life Stage: Early Mature Rem. Contrib.: 20+ Years	Stem grown into fence of otherwise fair condition. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 4.6m. Area: 66 sq m.	
T 0901	Common beech (Fagus sylvatica)	Height (m): 16 Stem Diam(mm): 360 Spread (m): 2N, 2E, 5S, 1W Crown Clearance (m): 7 Life Stage: Early Mature Rem. Contrib.: 20+ Years	Stem grown into fence of otherwise fair condition. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 4.3m. Area: 58 sq m.	
T 0902	Common beech (Fagus sylvatica)	Height (m): 16 Stem Diam(mm): 420 Spread (m): 7N, 1E, 6S, 2W Crown Clearance (m): 7 Life Stage: Early Mature Rem. Contrib.: 20+ Years	Twin stem from 3 m, both stems rubbing / touching at 9 m Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 5.0m. Area: 79 sq m.	
T 0903	Common beech (Fagus sylvatica)	Height (m): 16 Stem Diam(mm): 420 Spread (m): 7N, 2E, 5S, 4W Crown Clearance (m): 5 Life Stage: Early Mature Rem. Contrib.: 20+ Years	Twin stem from 1.7 m, unbalanced crown. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 5.0m. Area: 79 sq m.	
T 0904	Common beech (Fagus sylvatica)	Height (m): 14 Stem Diam(mm): 180 Spread (m): 1N, 1E, 3S, 2W Crown Clearance (m): 4 Life Stage: Early Mature Rem. Contrib.: 20+ Years	Suppressed by adjacent larger trees but fair condition. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 2.2m. Area: 15 sq m.	
T 0905	Common beech (Fagus sylvatica)	Height (m): 15 Stem Diam(mm): 340 Spread (m): 4N, 2E, 4S, 6W Crown Clearance (m): 4 Life Stage: Early Mature Rem. Contrib.: 20+ Years	Snapped hanging branch in crown to North otherwise fair condition. Additional Comments: This tree will not have to be removed to facilitate a proposed future development.	B2 RPA Radius: 4.1m. Area: 53 sq m.	

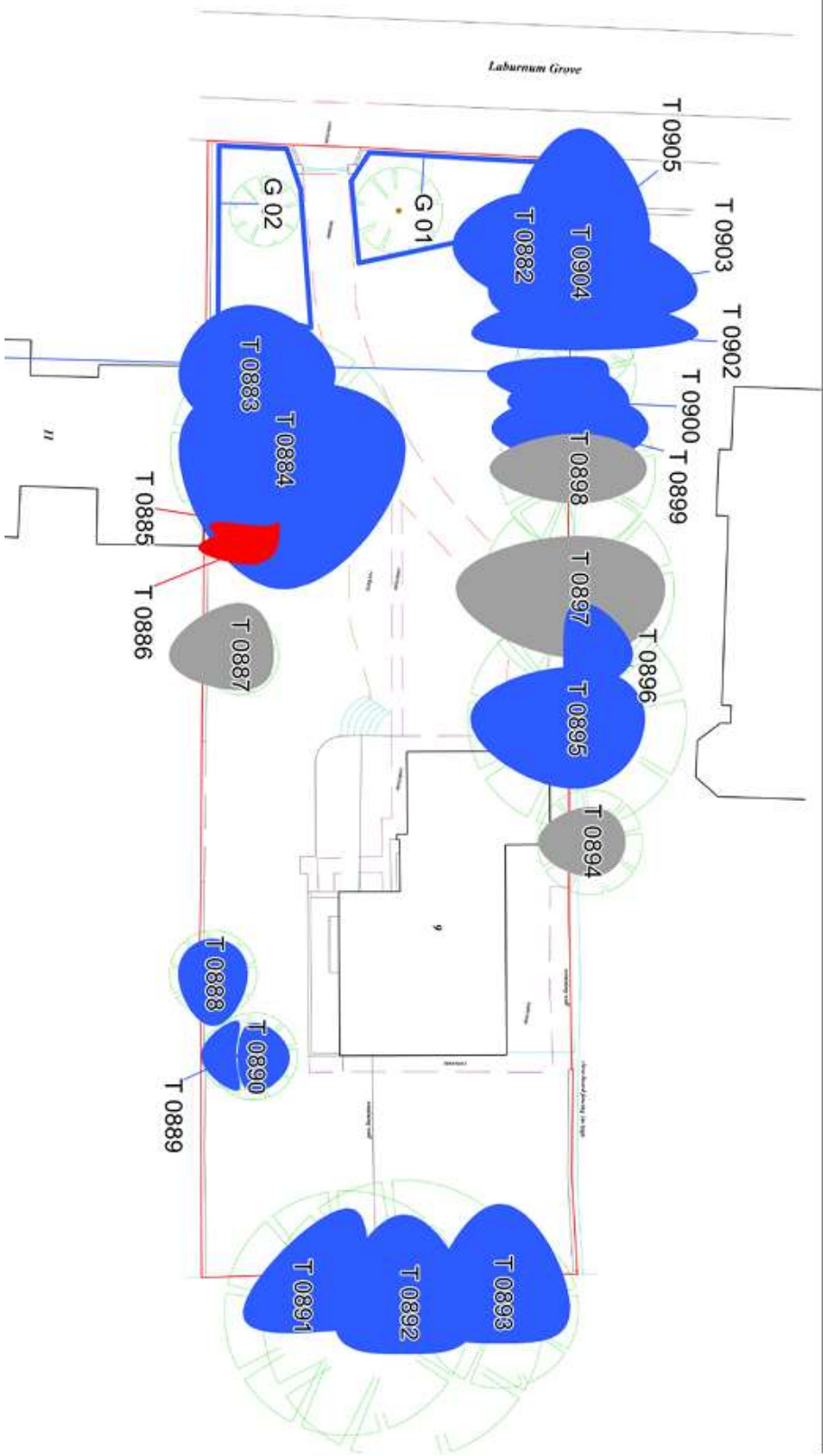
7.2 Existing site plan location of trees

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7.3 Existing site plan crown spread of trees

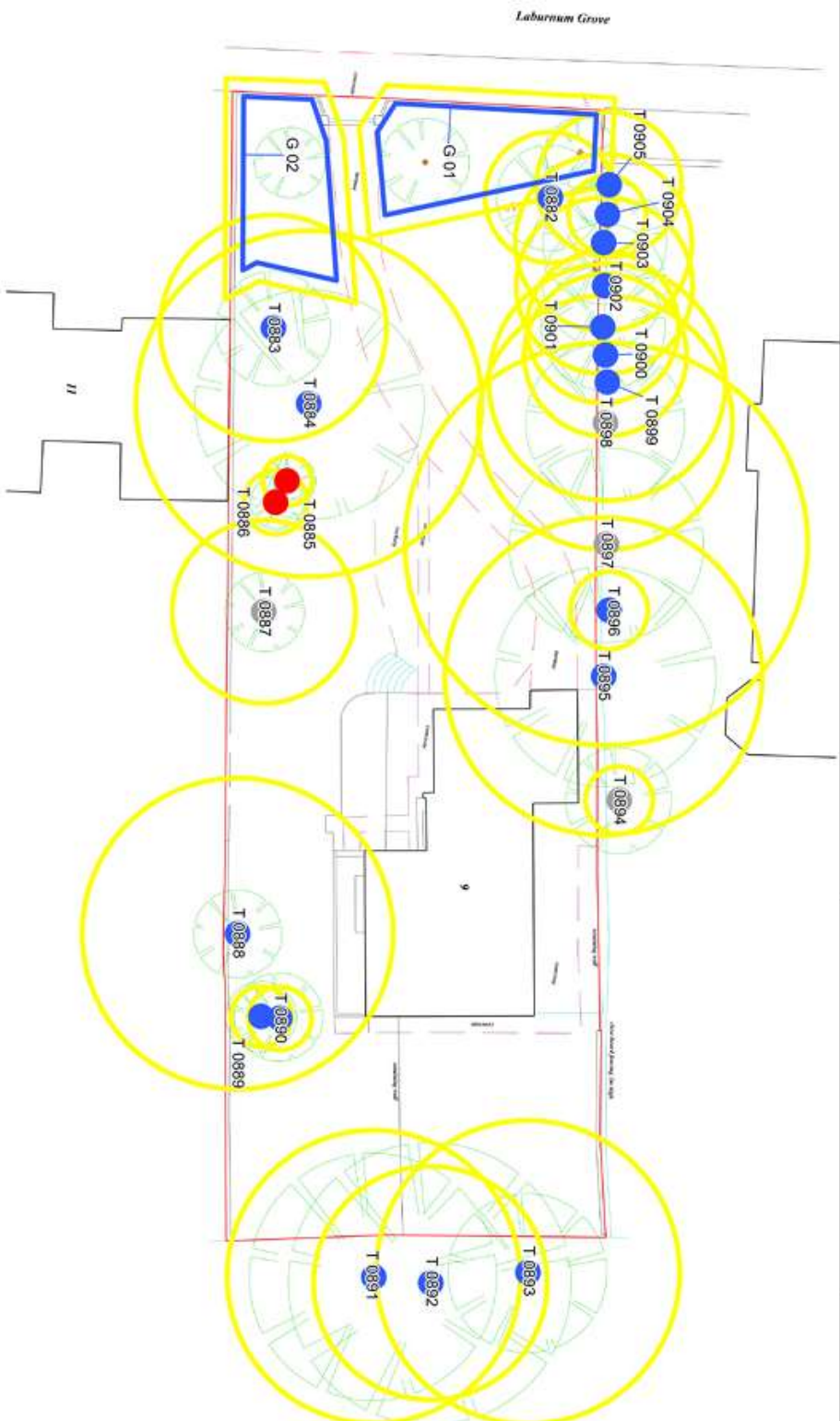


7.4 Existing site plan Tree Root Protection Areas of trees / RPA Plan

Yellow Circles / Lines = RPA

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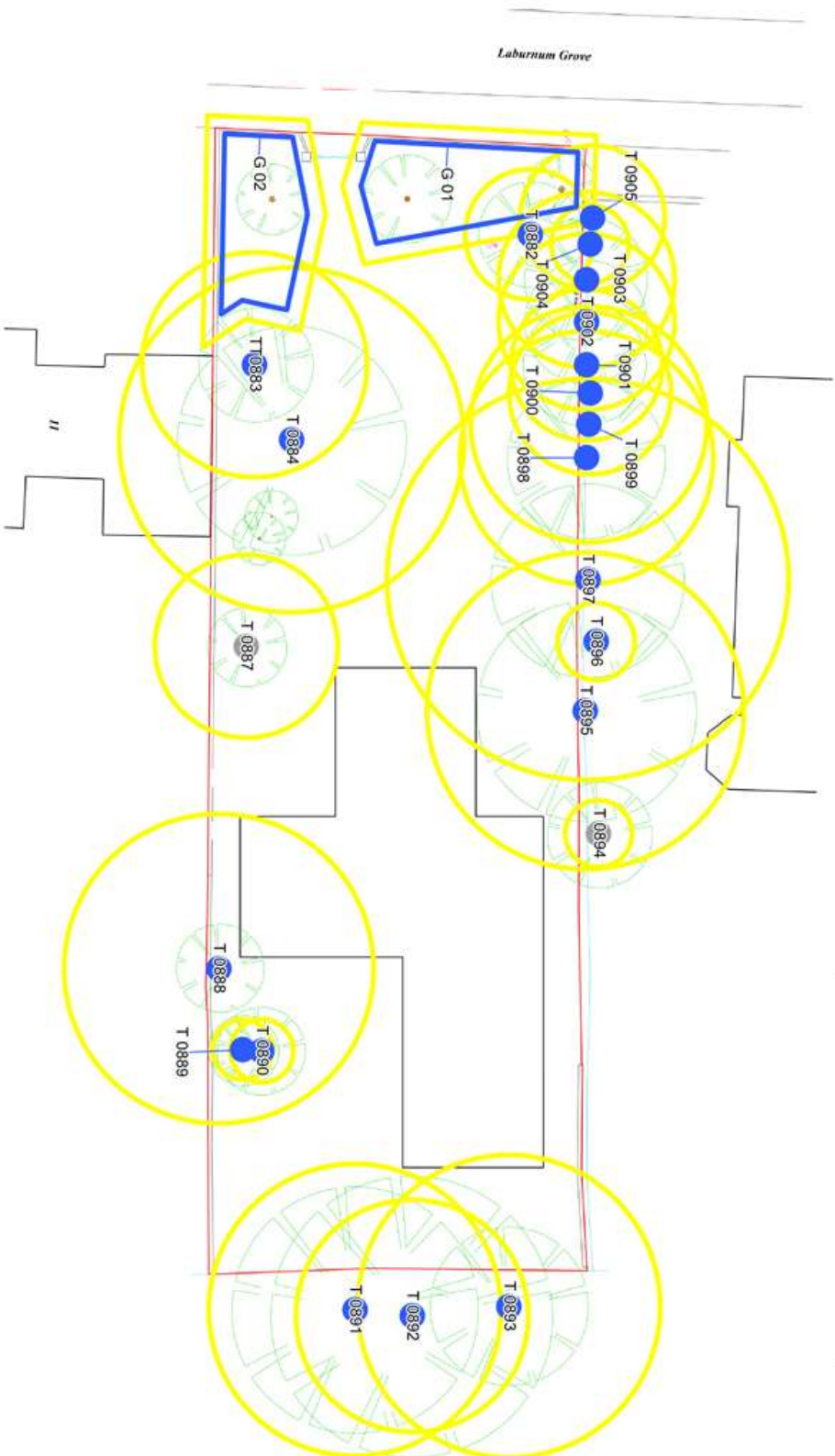


7.5 Proposed site plan Tree Root Protection Areas / RPA Plan

Yellow circles / lines = RPA

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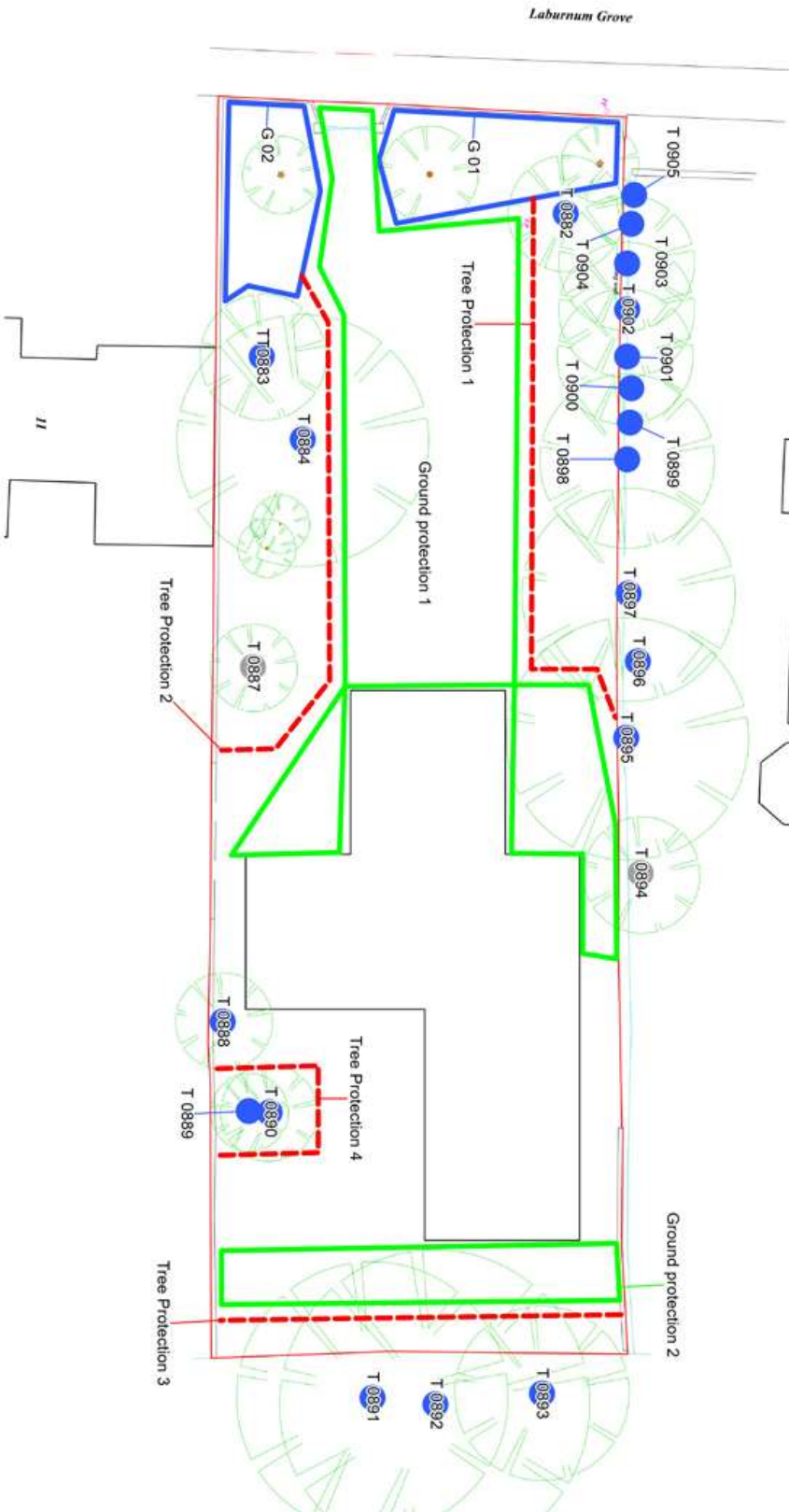


7.6 Tree Protection Plan

Red Broken Line = Tree Protection Fencing / Green Line = Area For Ground Protection

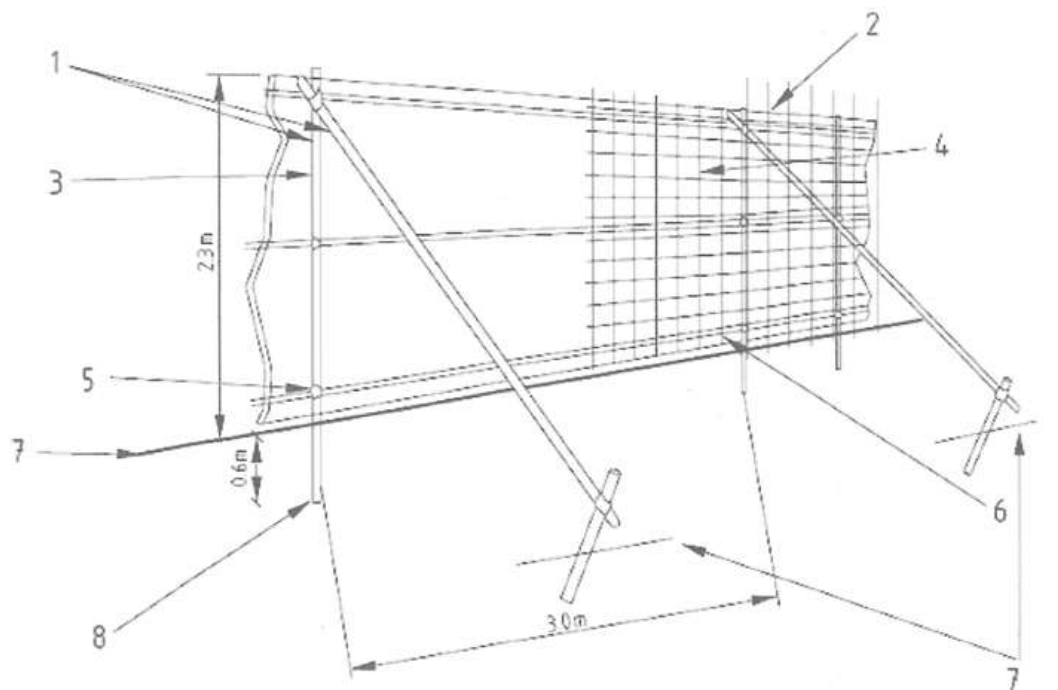
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7.7 Specification for tree protection fencing

II. Protective Fencing Details



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|--|--|
| 1 Standard scaffold poles | 5 Standard clamps |
| 2 Uprights to be driven into the ground | 6 Wire twisted and secured on inside face of fencing to avoid easy dismantling |
| 3 Panels secured to uprights with wire ties and where necessary standard scaffold clamps | 7 Ground level |
| 4 Weldmesh wired to the uprights and horizontals | 8 Approx 0.6 m driven into the ground |