



Appendix 1 Tree survey and explanatory notes



Tree Survey Schedule

Site: 137 / 135
 Fronks Rd
 Date of Survey: 18/05/2023
 Arboricultural Consultant/Surveyor: J Choat
 Weather: Dry/light wind

Estimated

Tree ref	Species Common and Scientific	Height in m	Stem diameter in mm	Radial distance required for RPA	Branch spread				Height of crown clearance in m	Age class	Ground condition	Water demand	Observations	Preliminary management recommendations	Works urgency	Estimated remaining contribution in years	Category grading
					N	E	S	W									
T1	Oak Quercus robur	18	720	8.64	5	5	5	5	3	M	Bare soil	High	Good condition.	None	0	40	A1/2/3
T2	Cherry Sp Prunus Sp	15	860	10.32	5	5	5	5	1	M	Bare soil	Moderate	Multi stem. 3 stems at 500 dbh. Young Ganoderma fungal fruit body at base. Likely to decline over next 10 years.	None	0	20	C1
G1	Various Fruit	2	90	1.08	1	1	1	1	1	Y	Grass	Moderate	Various fruit trees recently planted forming small orchard.	None	0	15	C1
G2	Leyland cypress Cupressus x leylandii	18	220	2.64	1	1	1	1	0	EM	Grass	High	Close planting centres. Some with open lower crown. Possible issues with high hedges.	Consider speaking with owner to see if the trees could be removed or reduced.	0	15	C1
T3	Gum Eucalyptus sp	19	500	6	4	4	4	6	2	M	Grass	High	3rd Party. Good condition. Tree often cited as a nuisance species due to vigorous growth, high water demand, etc.	None	0	20	C1
T4	Willow Salix Sp	15	500	6	5	5	5	5	0	M	Grass	High	3rd party . Ivy clad stem. Asymmetric crown bias to west. Branch welding at 5m.	None	0	15	C1
T5	Cherry Sp Prunus Sp	15	470	5.64	4	4	4	4	1	M	Grass	Moderate	Compression fork at 2.5m with small inclusion.	Reduce crown by 2m.	0	25	C1
T6	Cherry Sp Prunus Sp	12	300	3.6	3	3	3	3	1	EM	Grass	Moderate	Compression fork at 2.5m with small inclusion.	Reduce crown by 2m.	0	25	C1
T7	Cherry Sp Prunus Sp	12	200	2.4	3	3	3	3	1	EM	Grass	Moderate	3rd party. Ivy clad, unable to fully assess.	None	0	25	C1
T8	Maritime Pine Pinus pinaster	17	600	7.2	4	4	4	4	1	M	Bare soil	Moderate	3rd party, unable to assess. Crown appears in good condition, needles are good size, shape, colour and density.	None	0	30	B1
G3	Cherry Sp Prunus Sp	15	180	2.16	3	3	3	3	2	Y	Grass	Moderate	Group of cherry suckers	None	0	15	C1
T9	Silver Birch Betula pendula	10	200	2.4	2	2	2	2	2	EM	Grass	Low	3rd party unable to assess. Crown appears in good condition, leaves are good size, shape, colour and density.	None	0	15	C1

Explanatory Notes

Referencing

Each tree is given a unique reference number and plotted on the attached plans for clear identity. Individual trees are referenced as T1, T2 etc., Groups G1, G2 etc. Hedgerows H1, H2 etc. and Woodlands W1, W2 etc.

Species

All species are recorded using common names. Identification is made using experience and knowledge.

Tree dimensions

Tree height is measured and recorded in meters and taken from the base of the stem to the tip of the crown. Height is estimated using experience and knowledge.

Diameter at Breast Height (DBH) is measured at approximately 1.5m from the ground up the stem and is measured and recorded in millimeters. DBH is measured accurately using a diameter tape.

Crown spread is measured in meters from the stem to the extent of the crown spread to each compass point (NESW). Crown spread is estimated using experience and knowledge.

Crown clearance is the height from ground level to the lowest branch and is measured in meters. Crown clearance is estimated using experience and knowledge.

Age class

Age class falls in to 4 categories:

Y	Young
EM	Early Mature
M	Mature
OM	Over Mature

Observations

The biological condition of the tree is assessed and noted. Notable defects are recorded; fruiting bodies, cankers, die back, exudates, etc. are recorded.

The mechanics of the tree are assessed and noted. Notable defects are recorded; buckling, rib formation, stresses, bulges, soil cracks, large cavities or wounds, tight branch junctions, etc. are recorded.

Preliminary management recommendations

Tree management is recommended following the assessment of physiological and structural condition. Recommended works may include, no work required, crown reduction, crown lift, fell, crown thin, monitor etc.

Estimated remaining contribution in years

An estimate of remaining life expectancy recorded in years. Estimated remaining contribution is made using experience considering the structural and physiological condition of the tree, nuisance, previous management, etc.

Category grading and colour coding on plan

A (Green square) high quality and value

B (Blue square) moderate quality and value

C (Grey square) low quality and value

U (Red Square) those that cannot be retained as living trees

Sub categories

- 1 arboricultural values
- 2 landscape values
- 3 cultural values, including conservation

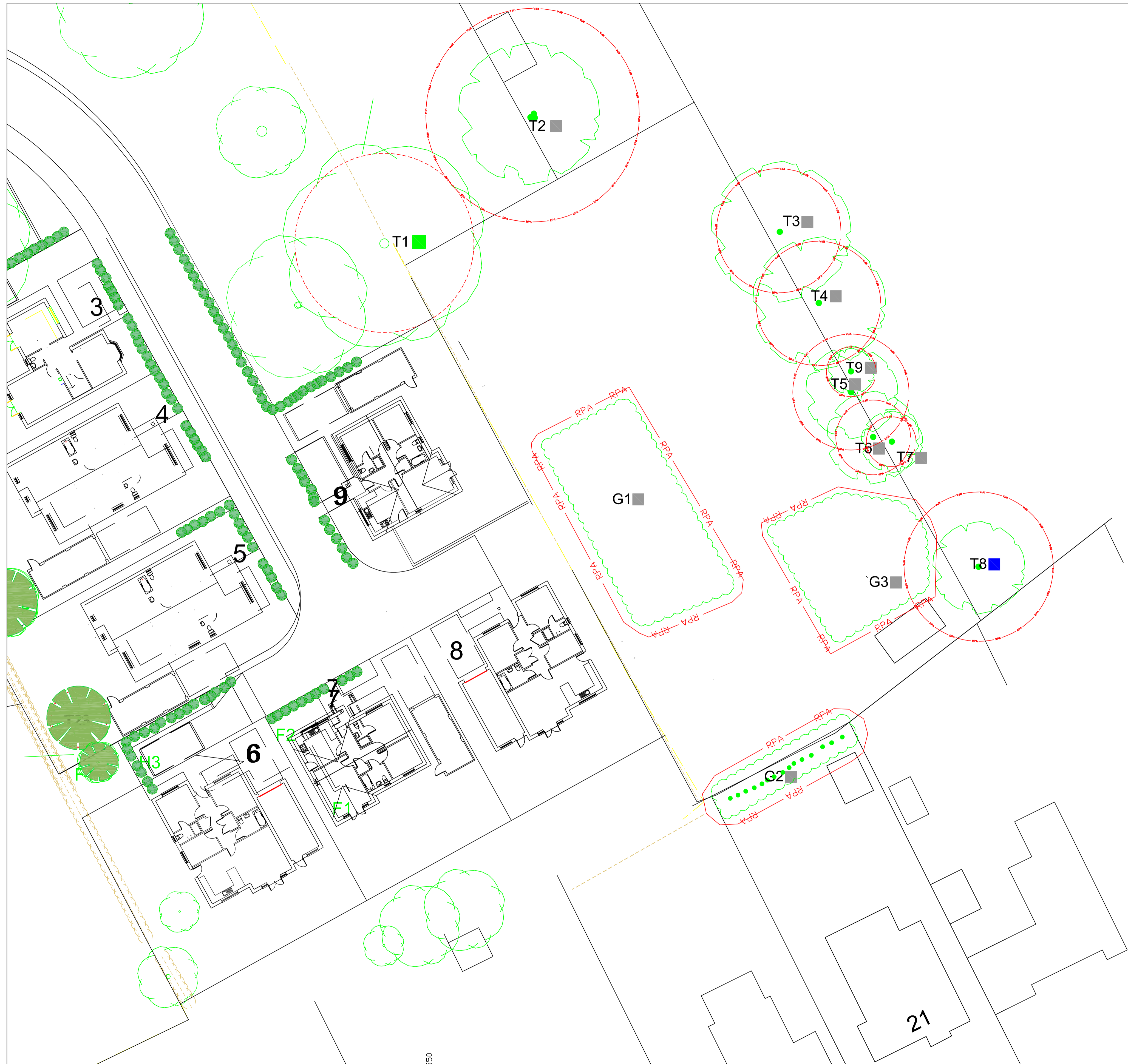
Works priority

- 1 Works required immediately to make the tree safe
- 2 Works required within 60 days
- 3 Works required as part of routine operations
- 0 no works required



Appendix 2 Tree survey and constraints plan



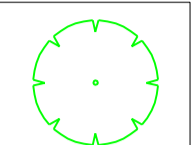


Legend:

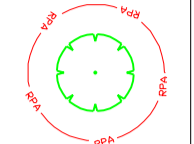
Tree reference



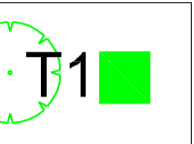
Tree and crown spread



Root protection area



BS 5837 Retention Category A



BS 5837 Retention Category B



BS 5837 Retention Category C



BS 5837 Retention Category U



Notes:

This drawing was produced in colour; a monochrome copy should not be relied upon.



Project:

Land to rear of 135 and 137 Fronks Rd

Drawing Title:

Tree Survey and Constraints Plan

TPS

Arboricultural Consultancy

25 Frietuna Road
Frinton On Sea
Essex
CO130QP

Date: 18th May 2023

Scale: 1:200 @ A1

Drawing Number: TPSQU0058 TSCP

Appendix 3 Barrier construction profile

Permission to reproduce extracts from BS 5837:2012 is granted by the British Standards Institution (BSI). No other use of this material is permitted. The complete British Standard can be purchased from the BSI online shop: <http://shop.bsigroup.com/en/ProductDetail/?pid=00000000030213642>

Diagram 1 Weldmesh panels with block supports pegged to brace light impact

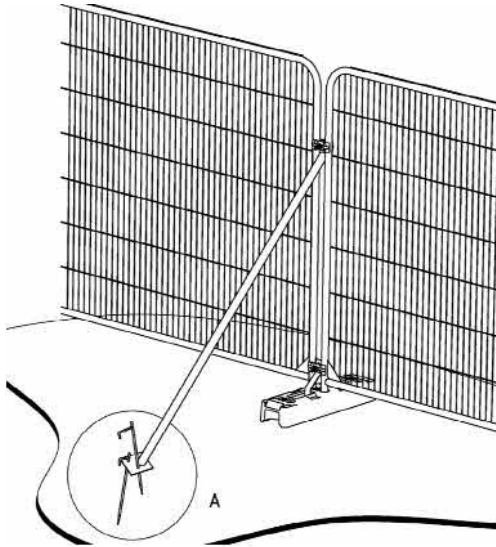


Diagram 2 Weldmesh panels with block supports and further block supports to brace intermediate impacts

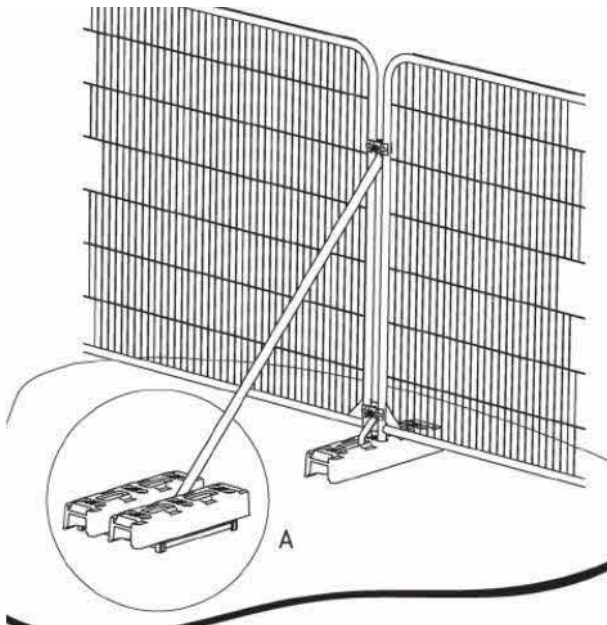
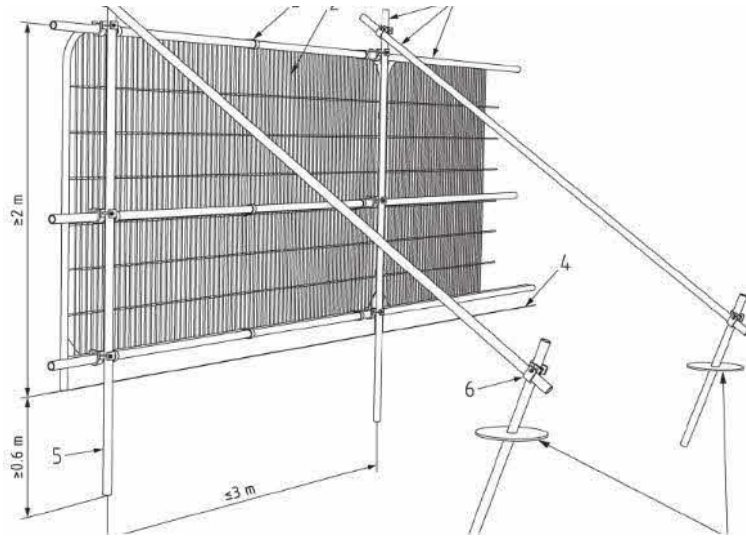


Diagram 3 Weldmesh panels with scaffold frame posts driven into the ground to brace heavy impacts



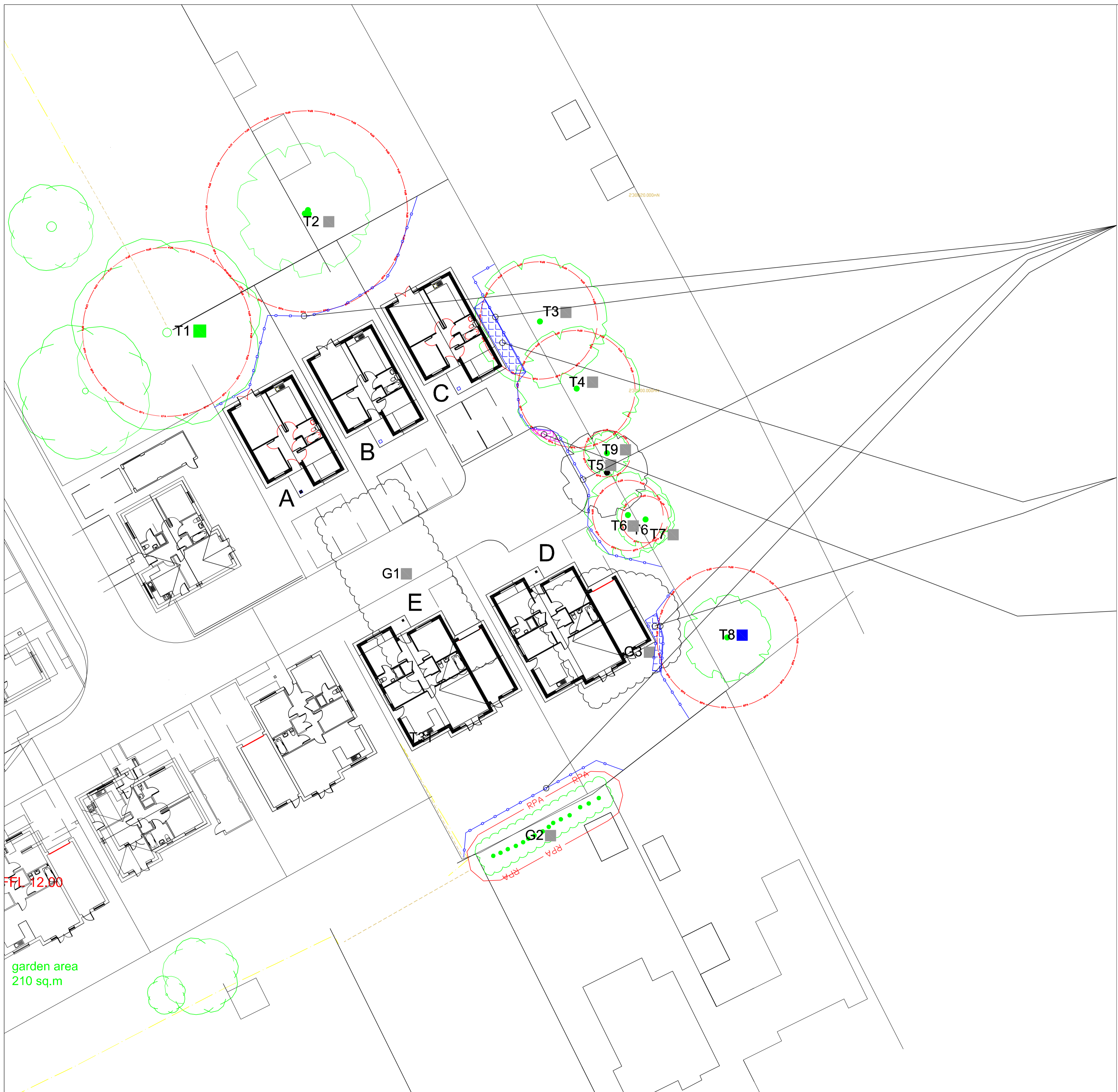
Construction Exclusion Zone

These trees have been retained and protected as part of the planning permission for this site.

Any breach of the protection will result in enforcement action from the Local Authority.



Appendix 5 Tree protection plan



Key Arboricultural Work Phasing

All methods statements below are associated to the plan and to be read in conjunction with the arboricultural impact assessment Ref TPSQU058

The retention and removal of the tree protection on site is to be supervised by the project arboriculturist and confirmed in writing as per the methodology specified in section 3.1.1.1.1 of the arboricultural impact assessment Ref TPSQU058. Further tree survey assessments during the construction phase are to be undertaken within the monitoring specifications, the condition of the tree protection will be assessed and the tree retained.

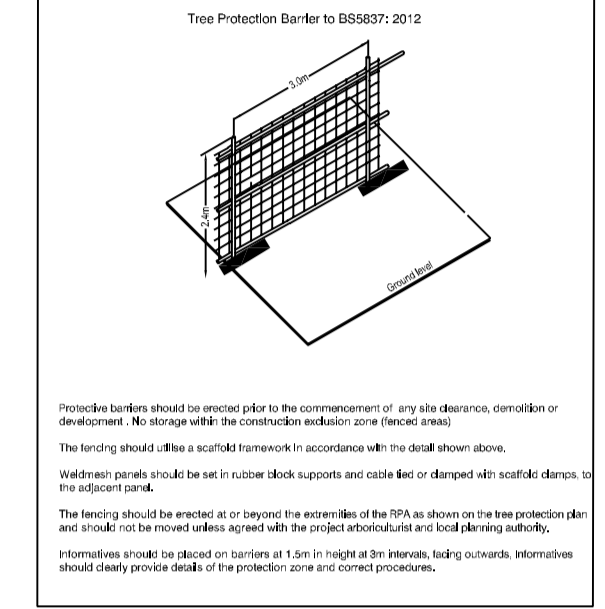
Phase 1 - Tree works - See section 7 of accompanying impact assessment, arboricultural movements within the RPA

Phase 2 - Build / demolition phase barrier and ground protection

Phase 3 - Final scaffold frame or post during construction barrier and location (over to built)

Phase 4 - Final ground protection as per drawing provided below and location chosen to the site

Phase 5 - Removal of ground and barrier protection. Temporary barrier to be removed following any root protection or the arboricultural ground protection and landscape phase is complete.

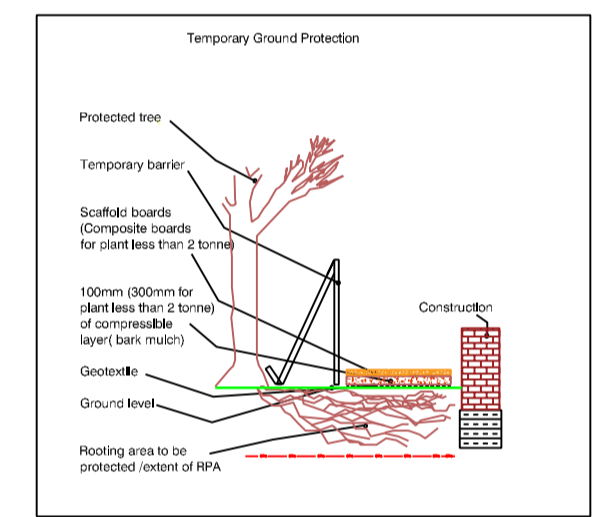


Construction Exclusion Zone

No access is permitted

The trees beyond this protected zone are subject to planning conditions and statutory protection

Any breach of this zone will result in enforcement action by the Local Authority

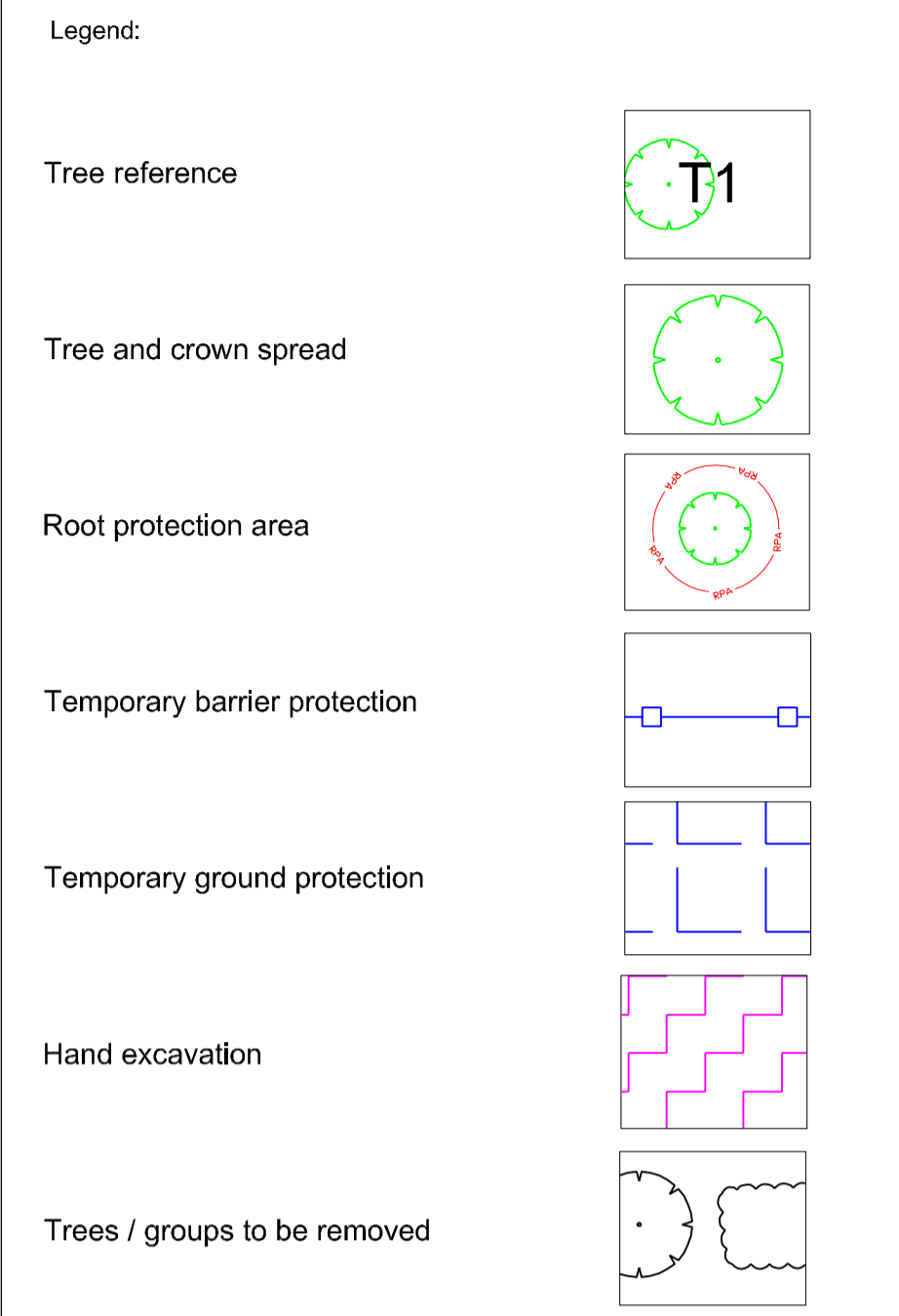


Sequential method statement for hand excavation and root pruning within the RPA

1. Soft surfaces / underlying soils (using a 100mm x 100mm x 2m barrier) of ground surface and root retention will occur within the RPA. Careful attention to the underlying structure and condition of the soil is required. All excavations should be made within the RPA. The project arboriculturist will be consulted for all excavations and root pruning work.
2. Where roots are visible and will be damaged from movement jobs to side of job or downwards, roots can be pruned with soil or small root tool.
3. Any excavated roots should be manually wrapped or covered in damp hessian to prevent desiccation and to protect them from rapid decomposition.
4. If required, cover any roots with a minimum 100mm x 100mm x 2m barrier to provide a clear cut across the root when near to a root junction (root point).
5. Hand excavating roots greater than 25mm or clumps of roots (root mats) will be necessary, then manual or arboricultural to attend the site to assess likely impact upon tree health and future viability.
6. Prior to backfilling any roots should be removed from the protection wrapping and surrounded by a layer of soil or other cover (e.g. 100mm x 100mm x 2m barrier) to protect the roots from any contaminants or foreign objects.
7. Monitor tree health during over 2 growth seasons. Check that colour, size, density and extension growth.

Soft surface within RPA

- No tractor mounted or heavy plant entering machinery is to be used unless working on surface is for a purpose to protect / spread material or prevent soil compaction.
- Collection is to be completed using manual handfield tools only.
- The existing soil to be used, where additional soil is required it should be contained in a well drained and suitable PM, texture and structure for the site and planting / existing tree types.
- Damage to the roots is to be avoided, large structural roots may be seen at or near the surface and where this occurs then the stems of the tree from edge boundaries, when around the root collar, structural roots tend to taper to around 50mm in diameter.
- Changes in ground levels are to be avoided, any lowering or raising of the levels should be carried out using a suitable method statement that requires continuous soil conservation and girth exchange and water provision.
- Planting is to be done with care and to avoid severing tree roots, generally, planting should be completed outside the RPA.



Notes:

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Project: Land to rear of 135 and 137 Fronks Rd

Drawing Title: Tree Protection Plan

TPS
Arboricultural Consultancy

25 Frietuna Road
Frinton On Sea
Essex
CO130QP

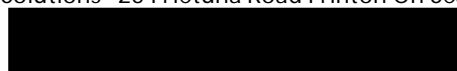
Date: 10th June 2023

Scale: 1:200 @ A1

Drawing Number: TPSQU058 TPP

Appendix 6

Example of arboricultural monitoring form



Tree Planning Solutions

Contract Monitoring Form

Details

Date	
Time	
Surveyor	
Client	
Site	
Ref	

Trees

Tree ref	Condition	Recommendations

Barrier

Tree ref	Barrier type	RPA radial distance as per planning permission	Actual barrier radial distance at site	Condition of barrier	Condition of signage	Comments

Tree Planning Solutions

Ground Protection

Tree ref	Type of ground protection installed	RPA distance as per planning permission	Actual distance of ground protection at site	Condition of ground protection	Comments

Additional Comments