



Elm Grove, Trowbridge

Arboricultural Report containing:

- Arboricultural constraints
- Arboricultural impact assessment (AIA)
- Tree protection
- Arboricultural method statement



On behalf of
Redrow Homes Ltd

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1.0 Instructions/Scope

Silverback Arboricultural Consultancy have been instructed to compile an arboricultural report containing tree survey, tree constraints plan, arboricultural impact assessment, tree protection plan and preliminary arboricultural method statement regarding trees growing within an area of land at Elm Grove, Trowbridge. This report is intended to accompany a planning application relating to the construction of a new residential development on the site. This document has been produced to demonstrate that the implications of the proposed development, to the existing trees, has been fully considered during the detailed design process.

- 1.1 Recommendations for the safeguarding of trees in close proximity to development are set out in, BS5837:2012 Trees in relation to design, demolition and construction – Recommendations. We have therefore carried out the assessment of the trees in accordance with that document.
- 1.2 Specifically, this report and the accompanying information are supplied to:
- Identify the constraints that trees on and adjacent to the site present to the development of the site, to inform the site design process.
 - Present information regarding the above ground constraints (crown spreads) and below ground constraints (Root Protection Areas – RPAs), in a Tree Schedule and on a Tree Constraints Plan
 - Assess the impact of the proposed development on the trees on or adjacent to the site, and the impact that retained trees will have on the site post development.
 - Identify trees to be removed, trees to be retained and specify measures necessary to protect retained trees during the construction phases of the development.
 - Recommend necessary remedial tree works to be undertaken to trees that will be retained prior to commencement of the construction phases of the development.
 - Present information regarding the location of protective barriers or fencing and ground protection on a Tree Protection Plan
 - Identify special engineering, excavation or protection measures intended to minimise the impact on retained trees where the site design layout requires a breach of the Root Protection area, (RPA)

- Provide a Preliminary Arboricultural Method Statement for the recommended works detailing measures which should be implemented to protect retained trees during the construction phases of the development.

1.3 This report is based on a ground level assessment of the trees. Except where stated, all dimensions are estimated. We were not presented with any information on the soil type and no soil samples have been taken. An arboricultural consultant initially surveyed the site 25th July 2017. A second visit to update the initial survey was conducted on Tuesday 10th January 2023. The weather was cold with good visibility.

1.4 Documents Provided

- Topographic survey dwg N° 038-003
- Proposed site layout dwg N° 1110 Rev J

2.0 Survey Methodology

The survey includes tree and shrubs with a stem diameter over 75mm at 1.5m height, located within the area shown on the plan included in this report.

2.1 All inspections were made from ground level with the use of binoculars, sounding hammer and metal probe where necessary, using the Visual Tree Assessment method (Mattheck & Breloer 1995). The presence and condition of bark and stem wounds, cavities, decay, fungal fruiting bodies and any structural defects that could affect the structural integrity of the trees have been noted.

2.2 Tree numbers have been noted on the plan. The following details were recorded for each tree and are included in the tree schedule sheets accompanying this report:

Number: an identity number for each tree, prefixed with a 'T' which cross references locations shown on the plan with the tree survey sheets. Where several trees, normally of the same species, are located close together and are similar in character and requirements, they have been treated as a Group under a single Number, prefixed with a 'G'

Species: common name and botanical name in *italics*

Tree Height: approximate height in metres

Stem Diameter: diameter measured in millimetres, taken at 1.5m above ground. Where the tree is multi-stemmed the diameter is calculated in accordance with BS5837:2012

(# estimated dimensions for off-site or inaccessible trees)

Crown spread: approximate spread in metres taken at the four main compass points N, S, E, W

Crown clearance: approximate height from ground to lowest part of canopy

Age class: Young, Semi-Mature, Early Mature, Mature, Over-Mature, Veteran

Structural condition: Good, Fair, Poor

Physiological condition: Good, Fair, Poor, Dead

Observations : observations noted during tree inspections

Preliminary recommendations: recommended action to ensure the health and safety of the tree.

Remaining contribution (years): <10, 10+, 20+, 40+

BS Cat- category grading in accordance with BS 5837:2012

A - trees of high quality with an estimated remaining life expectancy of at least 40 years.

B - trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

C - trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm

U - 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.

BS Sub Cat - sub-category grading in accordance with BS 5837:2012

1- Mainly arboricultural qualities

2- Mainly landscape qualities

3- Mainly cultural values including conservation

RPA – Root Protection Area - measured in metres from the centre of the tree stem

2.3 Presentation of the Data Collected

- Data collected regarding individual trees and groups of trees are presented in the Tree Schedule table in appendix 1 in accordance with BS5837:2012 Trees in Relation to Construction – Recommendations.
- The data significant to the proposed site layout is also presented on the Tree Constraints Plan (Drawing Number 230117-EG-TCP-RevA-AM&NB (appendix 2) and Arboricultural Impact Assessment Plan (Drawing Number 240829-EG-AIA-Rev C-AM&NB (appendix 3).
- All other relevant data are presented within the main body of this report.

- Trees have been allocated an individual tree number. This tree number is used to identify individual trees and/or groups of trees throughout this report, within the Tree Schedule and on all plans presented in the appendices of this report.

3.0 Report Limitations

Trees are living, dynamic organisms that can be affected by external conditions. It is therefore not possible to state with any certainty that a tree is safe.

- 3.1 No internal decay devices, or other invasive tools to assess tree condition, were used. No soil excavation or root inspection was undertaken.
- 3.2 This report has not considered the effect that trees or vegetation may have on the structural integrity of adjacent buildings or structures.
- 3.3 The survey contained within this report is not a tree safety inspection. It has been carried out to inform the planning process. Where clear and obvious hazards have been observed, these have been addressed in the recommendations contained within the tree schedule sheets (appendix 1). A full assessment of the levels of risk posed by trees would be informed by considering site use together with hazards present within the aerial parts of a tree(s). Changes in site use are likely to occur during, and result from, the proposed development. In the light of these changes, regular tree risk assessments are advised.
- 3.4 Tree condition can change rapidly, the recommendations contained within this report are based on the condition of the tree at the time they were inspected. Any amendments to the design or position of the proposed development will invalidate this report
- 3.5 While this appraisal is not a tree risk assessment it nonetheless considers observed structural defects of the inspected trees to inform conclusions regarding their retentive worth.

4.0 Legal duty

It is the responsibility of the tree owner to ensure that their tree(s) is in a safe and stable condition, including the effects of root activity, through duty of care in the *Occupiers Liability Act (1957 & 1984)*.

- 4.1 The Wildlife and Countryside Act, 1981 makes it an offence to disturb a nesting bird or recklessly endanger a bat or its roost. Professional advice should be sought, where relevant, before undertaking any recommended works.
- 4.2 We were not made aware of any Tree Preservation Orders or other statutory constraints covering the trees on the site.

5.0 **Tree and Site Assessment (to be read in conjunction with the survey schedule sheets)**

The proposed development is for the construction of a new residential development on the site. The site located on the southern edge of Trowbridge, with the A363 to the south of the site, the railway line to the east and Elm Grove Open Space and surrounding residential area to the north-west. The area of the site, including the adjacent Elm Grove Public Open Space is approximately 17.7Ha. Due to the agricultural use of the site, the majority of the trees growing in the field boundary hedgerows, with some tree clusters in the vicinity of the former Elm Grove farmhouse.

- 5.1 On inspection, it was found that all the surveyed Ash trees are infected by Ash dieback disease (*Hymenoscyphus fraxineus*). This was evident in the few remaining leaves in the canopies of the trees and the leaf litter around the base of the trees.
- 5.2 Ash dieback disease destroys the tree's phloem and xylem, which results in the tree being unable to move water and nutrients around its structure. This lack of water and nutrient movement will cause the branches of the tree to fail and the tree to 'die back.' The ongoing loss of nutrition and water plus the depletion of energy reserves due to the lack of foliage, causes the tree to become brittle, lose branches and make it susceptible to other pathogens such as Honey Fungus (*Armillaria*).
- 5.3 The latest evidence nationwide and from local tree surgery teams, is that infected trees can decline rapidly becoming structurally unsound in a matter of months. It is therefore considered that the Ash trees have a very short useful life expectancy and should not be considered as a constraint to any proposed development.

5.4 Twenty-three trees, ten groups of trees, and nine hedgerows were surveyed. Of the trees surveyed one trees was categorised **A**, one tree, two groups and one hedgerow were categorized **B**, eight trees, two tree groups and two hedgerows were categorised **U**, the remaining trees, groups of trees and hedgerow were categorized **C**. The trees were assessed and graded in accordance with the Cascading Chart of Tree Quality Assessment contained within BS5837:2012.

6.0 Arboricultural Constraints

Trees have a widely spreading, shallow root system. In most cases, the majority of tree roots are situated within the top 600 mm of soil although some roots may extend down to 2m. Small feeder roots can also be expected to extend beyond the outer edge of the canopy. Roots can therefore be easily damaged by construction activity.

6.1 Constraints on the design of the development are presented in the Tree Schedule Sheets (appendix 1) Tree Constraints Plan (appendix 2) and the Arboricultural Impact Assessment Plan (appendix 3). These constraints are also considered in the main body of the report below and recommended remedial works and mitigating measures.

6.2 The Tree Constraints Plan (TCP), (appendix 2), shows the Root Protection Areas (RPAs) for the individual trees identified in the tree schedule tables. This represents the minimum area in m² which ideally, should be left undisturbed around each tree were it to be retained. The TCP also shows a representation of the crown spread of each tree measured in four cardinal directions. The RPA has been calculated in accordance with Section 4.6 of BS5837:2012 Trees in relation to design, demolition and construction – Recommendations.

6.3 Trees Identified for Retention and Removal.

It is proposed to remove trees listed below to facilitate the proposed development. Category U trees will be removed in accordance with good arboricultural practice. The remaining trees will be retained and protected throughout the proposed development.

Cat B	Cat C	Cat U
Section of G376	T351, section of G361, T362, G363, T365, G368, T370, T371, T373, section of H04, H05, H06	T350, T357, T356, G364, T366, T367, G372, T374

6.3.1 Mitigation

It is proposed to mitigate for the loss of these trees by the implementation of a landscaping scheme including replacement trees and shrubs to enhance that landscape and visual amenity of the site. The details and specification for the proposed landscaping will be agreed with the Local Planning Authority.

6.3.2 Trees Outside Site Boundary

There are no trees outside of the site boundary which are impacted by the proposed development.

7.0 Arboricultural Impact Assessment

7.1 The position of the main development are outside the calculated Root Protection Area of trees proposed for retention. Any excavation or soil compaction in this area could potentially lead to root severance or damage. This could subsequently lead to a reduction in the trees ability to take up water and nutrients, which may lead to a deterioration in the tree's health.

Protective fencing, in accordance with BS5837:2012 will be erected to prevent any un-authorised access into the Root Protection Area (RPA) during the development works.

7.2 Several footpaths are shown to extend through the calculated Root Protection Area of trees proposed for retention. Any excavation or soil compaction in this area could potentially lead to root severance or damage.

Where new hard surfacing is to be installed within the Root Protection Areas of retained trees construction will be undertaken in accordance with Arboricultural Guidance Note 12 'The use of Cellular Confinement Systems near Trees. A Guide to Good Practice' using a Cellular Confinement System such as 'Cellweb'. Working methodology for these works will be supplied in a detailed Arboricultural Method Statement.

7.3 Storage and mixing of construction materials could lead to soil compaction of ground contamination through spillage.

All storage and mixing of materials will be undertaken outside the Root Protection Area (RPA) of the retained trees. If considered necessary, due to ground levels, a suitable waterproof ground covering with bunds at the edges to prevent leakage will be laid over the storage, mixing area.

- 7.4 Overhanging and low branches could potentially be damaged during the erection of scaffolding or during the delivery of materials to site.

The protective fencing will enclose the branch spreads of the retained trees preventing any potential damage to the tree canopies.

- 7.5 Drainage and service routes in association with the proposed development, have been planned outside the calculated Root Protection Area of any trees proposed for retained.

Should this change, installation of drainage or services runs will be in accordance with Section 7.7 (Underground and above-ground utility apparatus) of BS5837:2012.

- 7.6 **Shading:** - Potential shading of buildings by retained trees can lead to pressure for the pruning or removal of the trees. *BS5837: 2012 par 5.3* states that proposed buildings should be designed to take account existing trees, their ultimate size and density of foliage, and the effect that these will have on the availability of light.

There are no shading issues associated with the proposed development.

- 7.7 **Future growth:** - Future extension growth of branches can result in the continuous whipping of branches against the fabric of a building or damage to the roof tiles. Structures should therefore be located with due consideration for a tree's ultimate growth.

It is considered that the layout has considered any potential future growth, siting the proposed dwellings at a sufficient distance from the retained trees for there to be no issues.

8.0 Tree Protection

The trees to be retained on site during and after development as listed in Section 6.4 will require both above and below ground protection. Above ground protection may involve remedial tree surgery works. These works, where applicable, are presented in the Tree Schedule Sheets (appendix 1) and are discussed in Section 8.1 below.

- 8.0.1 Below ground protection measures, based on the root protection areas (RPA), indicated in the Tree Constraints Plan (appendix 2), will involve the erection of tree protection barriers as discussed in Section 8.2. The tree protection fencing is illustrated in Tree Protection Plan (Drawing Number 240829-EG-TPP-Rev B-AM&NB) (appendix 4)

8.0.2 The potential position of tree roots as indicated in the Arboricultural Impact Assessment Plan (appendix 3) and Tree Protection Plan (appendix 4) are only guidelines based on calculations shown in BS5837:2012 '*Trees in relation to design, demolition and construction – Recommendations*'.

8.1 Recommended Remedial Tree Surgery Works

No remedial tree works are considered necessary to facilitate the proposed development.

8.2 Tree Protection Fencing

The Tree Protection Plan (appendix 4) indicates the location of the proposed tree protection barriers where appropriate. These barriers will create a Construction Exclusions Zone (CEZ) around the retained trees.

8.2.1 The Construction Exclusion Zones will be erected in accordance with the recommendations in Section 6.2 of BS5837:2012. The specifications for the barriers are presented in Figure 2 from BS5837:2012 (appendix 5).

8.2.2 It is *essential* that tree protection fencing barriers are erected before any site preparation or construction work be commenced. (Remedial tree works however, should be undertaken before such fencing is erected – See Section 8.1). Once erected the protective fencing will be retained and maintained in position for the duration of the development.

8.2.3 Should any construction activity require the repositioning of the tree protection barriers, advice will be sought from Silverback Arboricultural Consultancy and approval requested from the Local Authority Tree Officer before any of the fencing is altered.

8.3 Damage Limitation-Special Measures

Areas are identified on the Tree Protection Plan (appendix 4) where special measures will be required to minimise the impact of the proposed site layout on the retained trees where the construction works breach the RPAs.

8.3.1 Where new hard surfacing is to be installed within the Root Protection Areas of trees construction will be in accordance with Arboricultural Guidance Note 12 'The use of Cellular Confinement Systems near Trees. A Guide to Good Practice' using a Cellular Confinement System such as 'Cellweb'.

8.3.2 In the event of any unforeseen circumstances the project arboriculturalist will be informed immediately and will advise on suitable precautionary measures.

8.4 Underground Drainage and Service Installation

Drainage and service routes in association with the proposed development have been planned outside of any Root Protection Area of retained trees.

Should this change installation of drainage or services routes will be in accordance with Section 7.7 (Underground and above-ground utility apparatus) of BS5837:2012.

9.0 Preliminary Arboricultural Method Statement

This section sets out the basis of the methodology for all works in relation to the proposed development in proximity to trees located within the site boundary. Once the position and acceptability of the proposed development has been agreed with the Local Planning Authority, it is recommended that a Detailed Arboricultural Method Statement (DAMS) is compiled. It is considered that the DAMS could be conditioned in any planning consent.

9.0.1 Copies of the detailed Arboricultural Method Statement document will be available for inspection on site and will form the basis of the management of all works relating to the trees on the site for the Site Agent/Manager following commencement of the project.

9.1 Programme of Works

- Arboricultural works
- Erection of protective barriers
- Construction of main development
- Installation of no-dig surfacing to form footpaths.

9.2 Arboricultural Works

The work recommendations presented in the Tree Schedule (appendix 1) and the recommendations discussed in Section 9.2.1 set out the proposed works to trees within the development site. These works will be carried out before commencement of other site operations including the erection of protective barriers.

- 9.2.1 The removal trees listed in section 6.3 will be undertaken to facilitate the construction of the new development. The proposed tree works will be undertaken by a professional arboriculturist in accordance with the recommendations contained in BS3998:2010. Tree work-recommendations.

9.3 Tree Protection Fencing

BS5837: 2012 recommends the erection of protective fencing around retained trees before development commences. The position of the fencing is calculated using the tree's diameter (DBH) measured at 1.5m up the stem. The area within the fencing is called the Root Protection Area (RPA).

- 9.3.1 It is proposed to erect the protective fencing as indicated on the Tree Protection Plan (TPP) (appendix 4). This will create a Construction Exclusion Zone (CEZ)
- 9.3.2 The protective fencing will be constructed in accordance with BS5837:2012 'Trees in relation to design, demolition and construction – Recommendations'. This will consist of a vertical and horizontal scaffold framework well braced to resist impacts. Vertical tubes will be spaced at a maximum interval of 3m and driven securely into the ground. Weldmesh panels will then be securely fixed to the framework. (appendix 5)
- 9.3.3 Once erected the protective fencing will be retained and maintained in position for the duration of the development. If it is necessary to move the protective fencing advice will be sought from Silverback Arboricultural Consultancy and approval requested from the Wiltshire Council Tree Officer before any of the fencing is altered.
- 9.3.4 Weatherproof signage will be attached to the fencing indicating its function as illustrated (appendix 6).
- 9.3.5 In the CEZ (construction exclusion zone):
- There must be no alteration of ground levels, including soil stripping other than those detailed within this report.
 - Any installation of drainage or services will be in accordance with Section 7.7 (Underground and above-ground utility apparatus) of BS5837:2012.

- Oil, bitumen, cement or other harmful materials will not be stored, mixed or discharged within 10m of any retained trees.
- Fires will not be lit beneath or within 10m upwind of tree canopies.

9.4 Access for Construction Works – Plant and Machinery

Details of the type and number of machines and plant to be used on the site and the position of any site compound will be clearly identified within the Detailed Arboricultural Method Statement.

9.5 Supervision and Monitoring

The project arboricultural consultant will be employed to oversee operations relating to works close to or within Root Protection Areas of retained trees and to issue a site inspection report of practical completion for the following operations:

- The erection of protective barriers around the retained trees in accordance with TPP (appendix 4)
- Monthly site inspection visits
- Installation of no-dig surfacing

9.5.1 A record of site visits completed by the project arboriculturalist will be maintained for inspection on site and copies are forwarded to the Local Planning Authority Tree Officer.

9.5.2 This development will be overseen Silverback Arboricultural Consultancy. If there are any alterations to the proposed working methodology necessary, works will be stopped until the arboricultural consultant has been notified and agreement reached with the Local Planning Authority Tree Officer.

10.0 Contact Details

10.1 Arboricultural Consultant

Chris Wright

Silverback Arboricultural Consultancy

E-mail: chris@silverbackarb.co.uk

10.2 Local Authority Tree Officer

Kate Tate

Arboricultural Officer

Wiltshire Council

email: Kate.Tate@wiltshire.gov.uk

11.0 References

Mattheck, C. and Breloer, H. (1995). The Body Language of Trees: A handbook for failure analysis. Research for Amenity Trees **4**. HMSO, London.

British Standard 5837:2012 - Trees in relation to design, demolition and construction – Recommendations. British Standards Institution, London

British Standard 3998:2010 - Tree Work Recommendations. British Standards Institution, London

12.0 Appendices

- Tree schedule sheets
- Tree constraints plan
- Arboricultural impact assessment (AIA)
- Tree protection plan
- BS5837:2012 Trees in relation to construction: Recommendations Protective Fencing Detail
- Protective fencing sign

Chris Wright. MArborA.

Principal Consultant

Silverback Arboricultural Consultancy

25th April 2024

Arboricultural Survey Elm Grove, Trowbridge

Tree Number	Common name	Botanical name	Height (m)	Number of stems	Calculated stem diameter (mm)	Crown Spread (m)				Crown Clearance (m)	Life Stage	Structural Condition	Physiological Condition	Observations	Preliminary Recommendations	Remaining contribution (yrs)	BS Category	Root Protection Area Radius (m) Area m2
						N	E	S	W									
H02	Mixed species	Mixed species	5	1	150	2	2	2	2	0	Mature	Poor	Fair	Hedgeline consisting of Bramble, Elder and dead Elms	No action required at the time of inspection.	10+ Years	C2	Radius: 1.8m. Area: 10 sq m.
H03	Mixed species	Mixed species	1	1	150	0.5	0.5	0.5	0.5	0	Mature	Fair	Good	Boundary Hedge line consisting of Blackthorn and Elder Recently topped at 1m	No action required at the time of inspection.	20-40 Years	C2	Radius: 1.8m. Area: 10 sq m.
H04	Common Hawthorn	<i>Crataegus monogyna</i>	1	1	100	0.5	0.5	0.5	0.5	0	Mature	Fair	Good	Field boundary hedgeline predominantly Hawthorn with Bramble Recently topped at 1m	No action required at the time of inspection.	20-40 Years	C2	Radius: 1.2m. Area: 5 sq m.
H05	Common Hawthorn	<i>Crataegus monogyna</i>	1	1	100	0.5	0.5	0.5	0.5	0	Mature	Fair	Good	Boundary hedge predominantly Hawthorn with English Elm Recently topped	No action required at the time of inspection.	20-40 Years	C2	Radius: 1.2m. Area: 5 sq m.
H06	Blackthorn	<i>Prunus spinosa</i>	6	1	150	2	2	2	2	0	Mature	Fair	Fair	Mix species boundary hedge predominantly Blackthorn with Field maple Previously flailed	No action required at the time of inspection.	20-40 Years	C2	Radius: 1.8m. Area: 10 sq m.
H07	Mixed species	Mixed species	4	1	150	2	2	2	2	0	Mature	Fair	Fair	Mixed species hostel be predominantly Hawthorn, Field maple, Blackthorn. Goat Willow Numerous gaps in hedgeline	No action required at the time of inspection.	20-40 Years	C2	Radius: 1.8m. Area: 10 sq m.
H08	English Elm	<i>Ulmus procera</i>	6	1	100	2	2	2	2	0	Semi Mature	Poor	Poor	Indications of Dutch Elm Disease Numerous dead and dying trees in hedge	No action required at the time of inspection.	<10 years	U	None - due to Retention Category of U.
H09	Blackthorn	<i>Prunus spinosa</i>	4	1	100	3	3	3	3	0	Mature	Fair	Fair	Overgrown boundary hedge extending into fields	No action required at the time of inspection.	20-40 Years	C2	Radius: 1.2m. Area: 5 sq m.

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						N	E	S	W									
H10	Mixed species	Mixed species	4	1	150	1	1	1	1	0	Mature	Fair	Good	Mixed species boundary hedge including Sycamore, Hawthorn, Ash, Blackthorn, Willow Field mapleb	No action required at the time of inspection.	20-40 Years	B2	Radius: 1.8m. Area: 10 sq m.
T350	Crack Willow	<i>Salix fragilis</i>	11	1	1300	4	5	4	4	0	Over Mature	Poor	Fair	Previously pollarded at 2m Stem hollow, decayed, cracked Fractured limbs - storm damage Major deadwood in canopy Prolific ivy throughout canopy	No action required at the time of inspection.	<10 years	U	None - due to Retention Category of U.
T352	Field Maple	<i>Acer campestre</i>	7	2	420	4	4	4	3	1	Mature	Fair	Fair	Growing in hedgeline Twin stemmed from base Included bark at stem union Ivy growing up main stem	No action required at the time of inspection.	20-40 Years	C2	Radius: 5.0m. Area: 79 sq m.
T353	Field Maple	<i>Acer campestre</i>	6	1	390	3	4	3	4	1	Mature	Fair	Fair	Growing in hedge line Suppressed by neighbouring trees Prolific ivy throughout canopy Power line through ctr of tree	No action required at the time of inspection.	20-40 Years	C2	Radius: 4.7m. Area: 69 sq m.
T354	Field Maple	<i>Acer campestre</i>	6	1	390	2	4	3	4	0	Mature	Fair	Good	Growing in hedge line Multi- stemmed from base Prolific ivy throughout canopy	No action required at the time of inspection.	20-40 Years	C2	Radius: 4.7m. Area: 69 sq m.
T355	Common Hawthorn	<i>Crataegus monogyna</i>	6	1	320	2	2	3	2	0	Mature	Fair	Good	Growing in hedgeline Prolific ivy throughout canopy Twin stemmed from base	No action required at the time of inspection.	20-40 Years	C2	Radius: 3.8m. Area: 45 sq m.
T356	English Elm	<i>Ulmus procera</i>	5	1								Dead	Dead	Standing dead tree	No action required at the time of inspection.	Dead	U	None - due to Retention Category of U.

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						N	E	S	W									
T357	English Elm	<i>Ulmus procera</i>	5	1								Dead	Dead	Standing dead tree	No action required at the time of inspection.	Dead	U	None - due to Retention Category of U.
T358	Common Ash	<i>Fraxinus excelsior</i>	15	1	950	7	9	7	7	2	Mature	Poor	Poor	Growing in hedgeline Inonotus brackets south side on main stem at 4m over road Major deadwood in canopy Power cable through canopy Dieback in the canopy chlorotic, sparse foliage Evidence of Ash dieback disease in canopy Major limb previously shed south side	No action required at the time of inspection.	<10 years	U	None - due to Retention Category of U.
T359	Common Ash	<i>Fraxinus excelsior</i>	12	1	600	4	3	3	3	3	Mature	Fair	Diseased	Previously crown reduced Evidence of Ash dieback disease in canopy Dieback in the canopy chlorotic, sparse foliage Ivy growing up main stem	No action required at the time of inspection.	<10 years	U	None - due to Retention Category of U.
G360	Crack Willow	<i>Salix fragilis</i>	12	1	-500#	4	4	4	4	0	Mature	Poor	Fair	Group of mixed species trees predominantly Crack Willow with Poplar Field Maple. Unable to access group to accurately survey trees Suppressed by neighbouring trees Asymmetric crown Major deadwood in canopy Some stems previously collapsed Fractured limbs - storm damage	No action required at the time of inspection.	20-40 Years	C2	Radius: 6.0m. Area: 113 sq m.
G361	Mixed species	Mixed species	8	1	-200#	3	3	3	3	0	Mature	Fair	Fair	Linear group of mixed species trees predominantly Blackthorn, Hawthorn, Crack willow	No action required at the time of inspection.	20-40 Years	C2	Radius: 2.4m. Area: 18 sq m.

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						N	E	S	W									
T362	Field Maple	<i>Acer campestre</i>	9	1	380	0	3	3	3	1	Mature	Fair	Good	Growing on end of group Suppressed by neighbouring trees Asymmetric crown	No action required at the time of inspection.	20-40 Years	C2	Radius: 4.6m. Area: 66 sq m.
T363	Common Hawthorn	<i>Crataegus monogyna</i>	7	1	150	1	1	1	1	0	Mature	Fair	Fair	Linear group of 10 stem form hedge line Suppressed by neighbouring trees Asymmetric crown	No action required at the time of inspection.	20-40 Years	C2	Radius: 1.8m. Area: 10 sq m.
G364	Crack Willow	<i>Salix fragilis</i>	14	1	-400#	0	3	6	5	0	Mature	Collapsed	Poor	Partially collapsed	No action required at the time of inspection.	<10 years	U	None - due to Retention Category of U.
T365	Plum	<i>Prunus domestica</i>	6	1	260	3	3	3	3	0	Mature	Fair	Fair	Growing at end of mixed sp group	No action required at the time of inspection.	20+ Years	C2	Radius: 3.1m. Area: 30 sq m.
T366	English Elm	<i>Ulmus procera</i>	8	1								Dead	Dead	Two standing dead trees	No action required at the time of inspection.	Dead	U	None - due to Retention Category of U.
T367	English Elm	<i>Ulmus procera</i>	6	1								Dead	Dead	Standing dead tree	No action required at the time of inspection.	Dead	U	None - due to Retention Category of U.
T368	Laurel Cherry	<i>Prunus laurocerasus</i>	6	1	80	1	1	1	1	0	Mature	Fair	Fair	Laurel hedge overgrown with Bramble	No action required at the time of inspection.	20+ Years	C2	Radius: 1.0m. Area: 3 sq m.
T369	Goat Willow	<i>Salix caprea</i>	8	1	120	3	3	3	3	0	Mature	Fair	Fair	Multi- stemmed from base probably self set	No action required at the time of inspection.	20+ Years	C2	Radius: 1.4m. Area: 6 sq m.
T370	Norway Spruce	<i>Picea abies</i>	8	1	160	1	1	1	1	1	Semi Mature	Fair	Fair	No significant defects visible at time of inspection Overgrown by bramble and ivy	No action required at the time of inspection.	20-40 Years	C2	Radius: 1.9m. Area: 11 sq m.

Arboricultural Survey Elm Grove, Trowbridge

Tree Number	Common name	Botanical name	Height (m)	Number of stems	Calculated stem diameter (mm)	Crown Spread (m)				Crown Clearance (m)	Life Stage	Structural Condition	Physiological Condition	Observations	Preliminary Recommendations	Remaining contribution (yrs)	BS Category	Root Protection Area Radius (m) Area m2
						N	E	S	W									
T371	Cherry Plum	<i>Prunus cerasifera</i>	7	1	300	2	4	2	0	1	Semi Mature	Poor	Fair	Heavy lean to east Suppressed by neighbouring trees Asymmetric crown	No action required at the time of inspection.	20+ Years	C2	Radius: 3.6m. Area: 41 sq m.
G372	English Elm	<i>Ulmus procera</i>	9	1		2	1	2	1	1	Semi Mature	Dead	Dead	Indications of Dutch Elm Disease in remaining trees 4 standing dead trees	No action required at the time of inspection.	<10 years	U	None - due to Retention Category of U.
T373	Leyland Cypress	<i>Cupressocyparis leylandii X</i>	12	1	-500#	4	4	4	4	0	Mature	Fair	Good	Unable to access base of tree Fractured limbs - storm damage	No action required at the time of inspection.	20+ Years	C2	Radius: 6.0m. Area: 113 sq m.
T374	Crack Willow	<i>Salix fragilis</i>	8	1		4	5	4	3	0	Over Mature	Poor	Poor	Unable to access tree Multi- stemmed from 1m previously pollarded Tree appears to be in terminal decline Prolific ivy throughout canopy	No action required at the time of inspection.	<10 years	U	None - due to Retention Category of U.
G375	Common Ash	<i>Fraxinus excelsior</i>	12	1	220	3	3	3	3	2	Mature	Fair	Diseased	Linear group of multi stems growing in hedgeline Suppressed by neighbouring trees Asymmetric crown Evidence of Ash dieback disease in canopy Dieback in the canopy chlorotic, sparse foliage	No action required at the time of inspection.	10+ Years	C2	Radius: 2.6m. Area: 21 sq m.
G376	Mixed species	Mixed species	12	1	-250#	4	4	4	4	0	Mature	Fair	Good	Linear group of mixed species group containing Aspen, Field maple, Ash, Oak and Blackthorn understorey	No action required at the time of inspection.	20-40 Years	B2	Radius: 3.0m. Area: 28 sq m.
G377	Crack Willow	<i>Salix fragilis</i>	8	1	200					0	Over Mature	Fair	Fair	Multiple stem growing in hedge line potentially originating from single collapsed tree. unable to access base due to hedge and ditch	No action required at the time of inspection.	20-40 Years	C2	Radius: 2.4m. Area: 18 sq m.

Arboricultural Survey Elm Grove, Trowbridge

Tree Number	Common name	Botanical name	Height (m)	Number of stems	Calculated stem diameter (mm)	Crown Spread (m)				Crown Clearance (m)	Life Stage	Structural Condition	Physiological Condition	Observations	Preliminary Recommendations	Remaining contribution (yrs)	BS Category	Root Protection Area Radius (m) Area m2
						N	E	S	W									
T378	Pedunculate Oak	<i>Quercus robur</i>	12	1	670	5	5	5	5	2	Mature	Good	Good	No significant defects visible at time of inspection Twin stemmed from base Prolific ivy throughout canopy	No action required at the time of inspection.	40+ Years	A1,2	Radius: 8.0m. Area: 201 sq m.
T379	Common Ash	<i>Fraxinus excelsior</i>	12	4	380	5	4	5	5	3	Mature	Poor	Fair	Growing in hedgeline Multi- stemmed from base Included bark at stem union some stems hollow, decayed at base Suppressed by neighbouring trees Major deadwood in canopy Ivy growing up main stem Evidence of Ash dieback disease in canopy	No action required at the time of inspection.	10+ Years	C2	Radius: 4.5m. Area: 64 sq m.
T380	Common Ash	<i>Fraxinus excelsior</i>	12	4	370	5	5	5	3	3	Mature	Poor	Fair	Growing in hedgeline Multi- stemmed from base Included bark at stem union some stems hollow, decayed at base Suppressed by neighbouring trees Major deadwood in canopy Ivy growing up main stem Evidence of Ash dieback disease in canopy	No action required at the time of inspection.	10+ Years	C2	Radius: 4.4m. Area: 61 sq m.
G381	Mixed species	Mixed species	12	1	200	3	3	3	3	0	Mature	Fair	Good	Linear group of mixed species tree predominantly Ash with Sycamore and English Oak forming single unified canopy Suppressed by neighbouring trees Evidence of Ash dieback disease in canopy	No action required at the time of inspection.	20-40 Years	C2	Radius: 2.4m. Area: 18 sq m.

Arboricultural Survey Elm Grove, Trowbridge

Tree Number	Common name	Botanical name	Height (m)	Number of stems	Calculated stem diameter (mm)	Crown Spread (m)				Crown Clearance (m)	Life Stage	Structural Condition	Physiological Condition	Observations	Preliminary Recommendations	Remaining contribution (yrs)	BS Category	Root Protection Area Radius (m) Area m2
						N	E	S	W									
G382	Field Maple	<i>Acer campestre</i>	6	1	150	3	3	3	3	0	Mature	Fair	Good	Two multi stemmed trees growing in linear group forming single canopy	No action required at the time of inspection.	20-40 Years	B2	Radius: 1.8m. Area: 10 sq m.
G383	Mixed Species Group	Mixed species	5	1	180	2	2	2	2	0	Early Mature	Fair	Fair	Mixed species hedgerow growing along boundary fence, including Oak, Field Maple and Hawthorn forming single canopy No significant defects visible at time of inspection Hedgerow previously topped at 1m	No action required at the time of inspection.	20-40 Years	C2	Radius: 2.2m. Area: 15 sq m.



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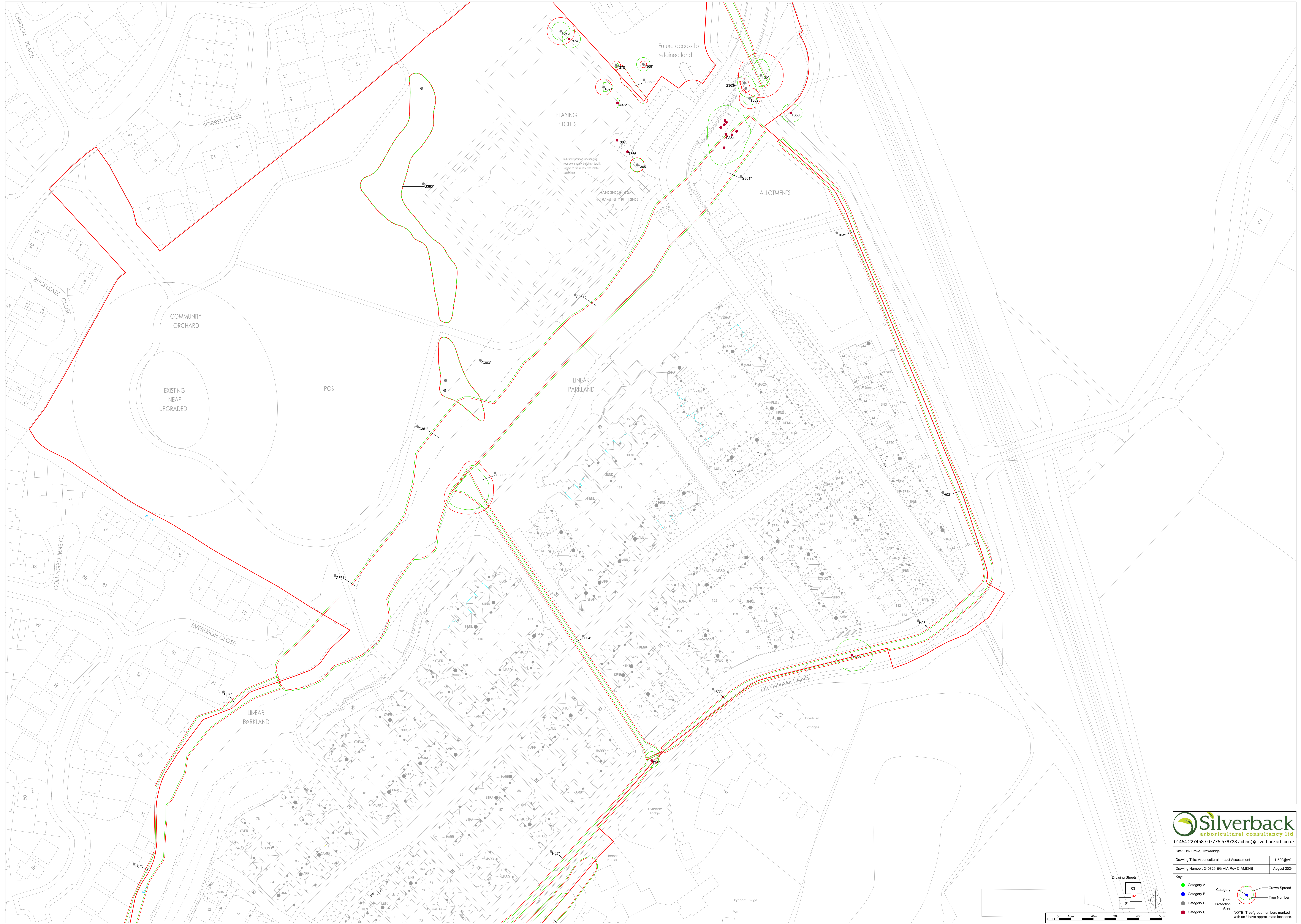
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Drawing Title: Tree Constraints Plan
Drawing Number: 230117-EG-TCP-Rev A-AM&NB
Jen 2023

Key:

- Category A
- Category B
- Category C
- Category U

Category: Crown Spread
Root Protection Area
Tree Number

NOTE: Treegroup numbers marked with an * have approximate locations.



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Site: Elm Grove, Trowbridge

Drawing Title: Arboricultural Impact Assessment

Drawing Number: 240829-EG-AIA-Rev C-AMMB

1:500@A0

August 2024

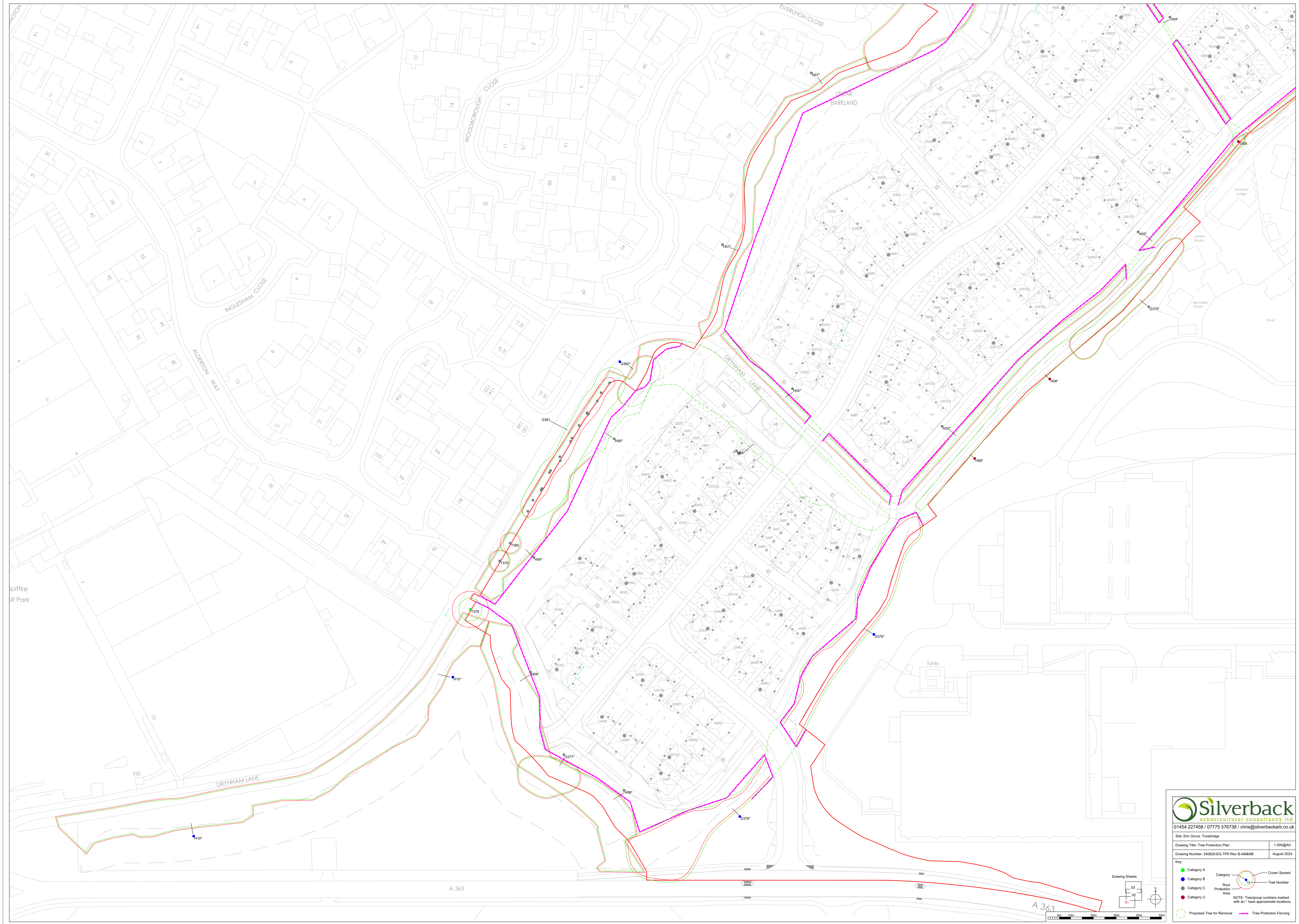
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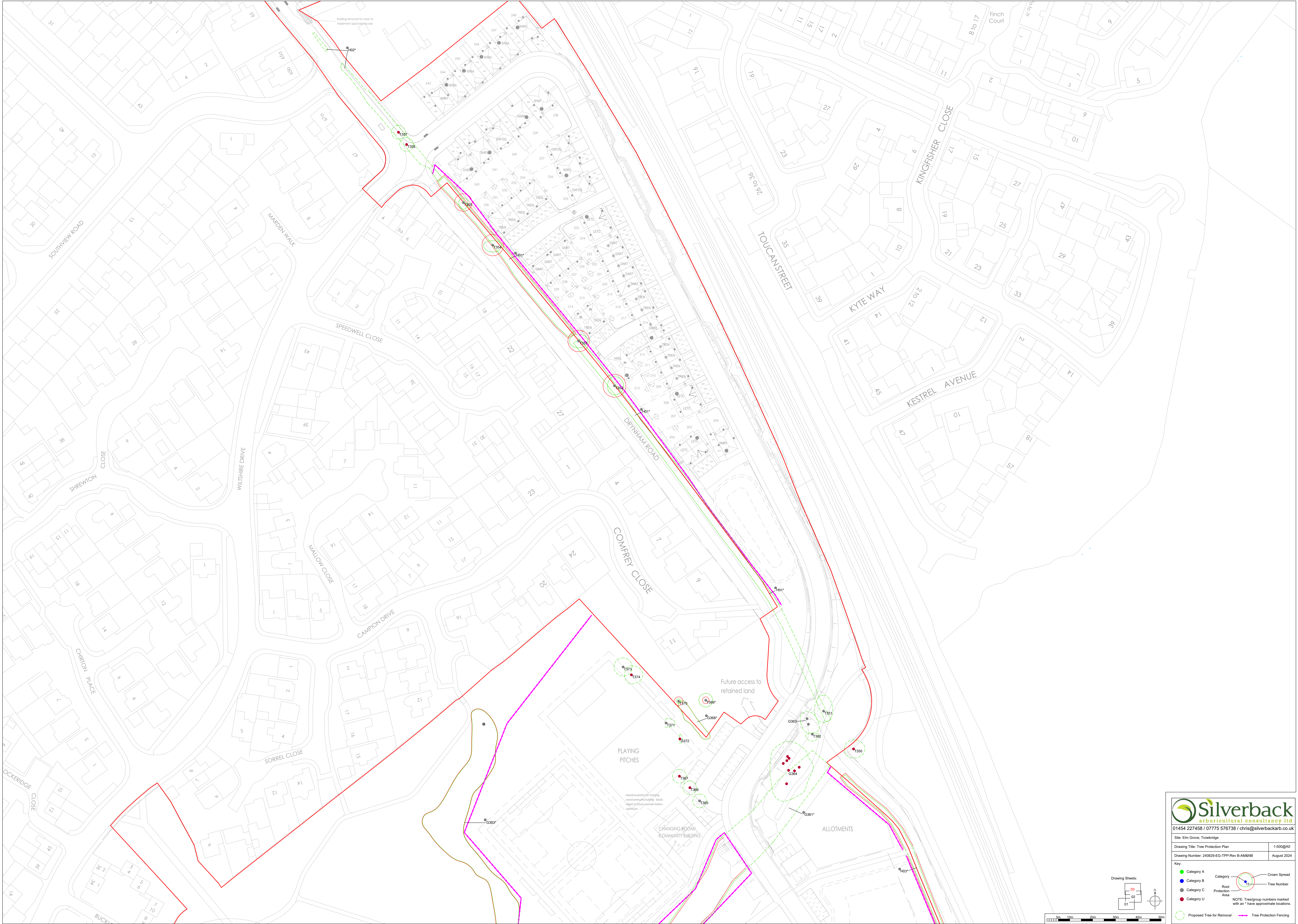
- Category A
- Category B
- Category C
- Category U

Category

- Crown Spread
- Root Protection Area
- Tree Number

NOTE: Tree group numbers marked with an * have approximate locations.







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Site: Elm Grove, Trowbridge

Drawing Title: Tree Protection Plan	1-500@A0
Drawing Number: 240829-EG-TPP-Rev B-AMMB	August 2024

Key:

● Category A	Category	○ Crown Spread
● Category B	○ Root Protection Area	○ Tree Number
● Category C		
● Category U		

NOTE: Treegroup numbers marked with an * have approximate locations.

○ Proposed Tree for Removal — Tree Protection Fencing

**BS 5837:2012 – TREES IN RELATION TO DESIGN, DEMOLITION AND
CONSTRUCTION – RECOMMENDATIONS**

PROTECTIVE BARRIER DETAIL

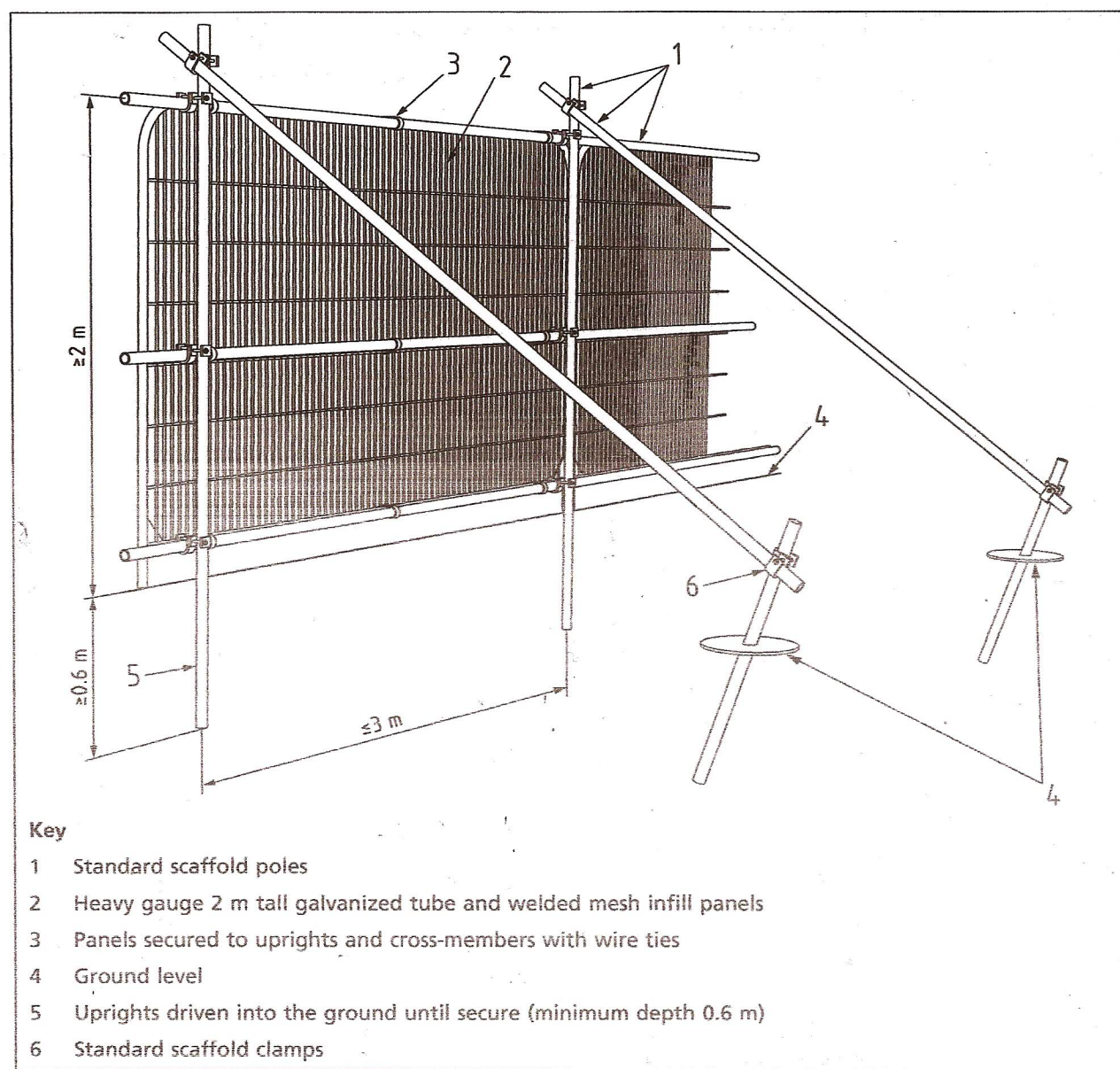


Figure 2 Default specification for protective barrier



**PROTECTIVE FENCING. THIS
FENCING MUST BE
MAINTAINED IN ACCORDANCE
WITH THE APPROVED PLANS
AND DRAWINGS FOR THIS
DEVELOPMENT.**



**TREE PROTECTION AREA
KEEP OUT !**

**(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY
PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A
TREE PRESERVATION ORDER.
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY
LEAD TO CRIMINAL PROSECUTION**

**ANY INCURSION INTO THE PROTECTED AREA MUST BE
WITH THE WRITTEN PERMISSION OF THE LOCAL
PLANNING AUTHORITY**