

SAINSBURYS SUPERMARKETS LTD

WATERLOOVILLE
HAMPSHIRE

ARBORICULTURAL REPORT FOR PLANNING

**Arboricultural Impact Assessment
Tree Protection Plan
and
Method Statements**

Revision B

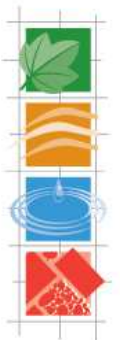
To be read with Arthur Amos Associates Drawings:
779B-01A, 779B-11A, 779B-12B, 779B-13D and 779B-15C

MARCH 2014

arthur amos associates landscape architecture

Pool House, Elgar Business Centre, Hallow, Worcester WR2 6NJ

tel: 01905 640166 fax: 01905 640477 email: mail@arthuramos.co.uk



Arboricultural Report for Sainsbury's Supermarkets Ltd, Waterloooville, Hampshire:

Written by: Julia Mussett	Checked by: Nigel Dobson-Smyth	Date: 25 January 2012
Revision A	Nigel Dobson-Smyth	13 February 2012
Revision B		12 March 2014

Contents	Page No.
1.0 Introduction	2
2.0 Implementation, Supervision & Monitoring of Arboricultural Works	5
3.0 Timing and Phasing of Arboricultural Works	6
4.0 Tree Protection Plan	7
5.0 Work Methodology	10
6.0 Arboricultural Impact Assessment – Sainsbury's PFS Development Site Clearance and Demolition Phase	11
7.0 Arboricultural Impact Assessment – Aston Road S278 Highway Realignment Works Construction Phase Works	13
8.0 Arboricultural Impact Assessment – Maurepas Way Pedestrian Ramp Construction Phase Works	17
9.0 Arboricultural Impact Assessment – Sainsbury's PFS Development Construction Phase Works	19

Appendices:

Appendix 1	Tree Survey Plan and Schedule
Appendix 2	Tree Protection Plans / Protective Fencing Specification
Appendix 3	Arboricultural Method Statements:
3.1	Tree Removal
3.2	Tree Works
3.3	Removal of Shrubs and Groundcover Vegetation
3.4	Treatment of Japanese Knotweed
3.5	Demolition & Removal of Walling and Hard Surfacing
3.6	Ground Cultivation, Grass Seeding and Planting
3.7	Construction Works
3.8	Works within TPZ and RPA of Retained TPO Tree

1.0 Introduction

- 1.1 In December 2011 Planning Permission APP/10/00793 was granted to Sainsbury's for demolition of existing buildings and erection of food store, PFS, pedestrian ramp access and associated landscaping subject to Conditions. The approved development includes removal of existing trees bounding the B2150 Hambledon Road to accommodate the realignment of Aston Road and construction of the PFS, and removal of trees bounding Maurepas Way to accommodate construction of the pedestrian ramp. This Arboricultural Report has been produced by Arthur Amos Associates (AAA) in order to discharge the Conditions relating to protection of retained trees.
- 1.2 The approved planning submission included the following AAA documents:
- Tree Survey Drawing No. 779B-01
 - Tree Survey Schedule, and
 - Tree Retention, Removal & Protection Drawing No. 779B-02B.
- 1.3 Planning Permission APP/10/00793 Condition 5 requires **protective fencing** to conform to the following specification in accordance with BS5837 2012: Minimum 2.4 metres high, comprising a vertical and horizontal framework of scaffolding, well braced to resist impacts, supporting a minimum of 20mm exterior grade ply.
- 1.4 However, due to the weight of the hoarding an amendment to the specification was proposed, substituting the minimum 20mm hoarding specification with 18mm thick hoarding with timber bracing. This was agreed by Havant Borough Council Tree Officer on 2nd March 2012.
- 1.5 The protective fencing is to be maintained throughout the course of the works on the site, during which period no access, placement of materials, fuels or chemicals, soil or other materials shall take place inside the fenced off area.
- 1.6 Planning Permission APP/10/00793 Condition 8 requires that no development shall commence on the site until **details of all works to or affecting trees** on or adjoining the site have been submitted to and approved in writing by the Local Planning Authority, and shall be carried out in accordance with the

relevant recommendations of BS 3998 1989 (Recommendations for Tree Work).

- 1.7 Planning Permission APP/10/00793 Condition 9 requires any **excavation work, including foundations, within the existing crown spread of the trees to be retained** shall be carried out only by hand and under the supervision of a representative of the Local Planning Authority. Any roots over 25mm in diameter shall not be severed without the prior agreement of the Local Planning Authority.
- 1.8 Planning Permission APP/10/00793 Condition 14 requires that no development hereby permitted nor any related site clearance shall commence until a **specification of measures to be undertaken to prevent damage to existing trees** on, or adjacent to, the site throughout implementation of the same has been submitted to and approved in writing by the Local Planning Authority. All measures forming part of such approved specification shall be undertaken and fully adhered to at all times when such implementation is in progress.
- 1.9 The oak tree in the rear garden of No 18 Hambledon Road is protected by Tree Preservation Order issued by Havant Borough Council. The location of the tree is shown on AAA Drawing 779B-15C.
- 1.10 This document should be read in conjunction with the following AAA drawings:
 - 779B-01A Tree Survey
 - 779B-11A Maurepas Way Pedestrian Access Ramp
Tree Removal, Retention & Protection Plan
 - 779B-12B PFS Tree Removal, Retention & Protection Plan
 - 779B-13D Aston Road Tree Removal, Retention &
Protection Plan
 - 779B-15C 18 Hambledon Road Tree Retention &
Protection Plan

- 1.11 A BS 5837 tree survey was initially undertaken by Arthur Amos Associates for some of the trees on the site (Tree No's 1 to 62 including G1) on 15th December 2009 and subsequently extended to include Tree No's 101 to 357 between 1st and 3rd September 2010, and Tree No's 63 to 90 (part of Group 1) between 15th December 2011. The findings of the surveys are appended and should be read in conjunction with AAA drawing 779B-01A Tree Survey Drawing.

2.0 Implementation, Supervision and Monitoring of Arboricultural Works

2.1 Tree Protection Plan (refer to **Section 4.0** for details)

The erection of the protective fencing will be in accordance with AAA Drawing Nos. 779B-11A, 12B & 13D, and directed and supervised by the Main Contractor, and monitored by the arboricultural consultant appointed by Sainsbury's.

2.2 Tree Works (refer to **Section 6.0** and **Section 7.0** for detail)

The arboricultural works, including tree removal and pruning works, will be directed and supervised by the Main Contractor, and monitored by the arboricultural consultant appointed by Sainsbury's. The Contractor will give the Local Planning Authority and the appointed arboricultural consultant 5 days notice before commencing any tree works.

2.3 Construction Works within RPAs (refer to **Section 4.0** for detail)

Construction works within tree RPAs and TPZs will be directed and supervised by the Main Contractor, and monitored by the arboricultural consultant appointed by Sainsbury's. The Contractor will give the Local Planning Authority and the appointed arboricultural consultant 5 days notice before commencing any work within the tree RPA.

3.0 Timing and Phasing of Arboricultural Works

- 3.1 Tree removal and development facilitation pruning works in Area 1 adjacent to Maurepas Way and Area 3 north of Aston Road (refer to AAA Dwg Nos. 779B-11A and 779B-13D respectively) were carried out in March 2012. The tree protection fencing was erected prior to the commencement of the works and will remain in place until completion of the works.
- 3.2 PFS development tree removal works in Area 2 (refer to AAA Dwg No. 779B-12B) are to be carried out between July and August 2014. Exact timing and programme of amenity tip demolition and arboricultural works to be advised by appointed contractor.
- 3.3 Arboricultural works to remove and prune trees shall not be carried out during the bird nesting season (March to September inclusive) except under the direction on site of a suitably qualified ecologist. Before carrying out arboricultural works during the bird nesting season, the trees shall be checked by an ecologist prior to commencement of works to confirm that no birds are nesting. If there are birds nesting the arboricultural works shall be delayed until all the young birds have fledged, as determined by the ecologist.

4.0 Tree Protection Plan

4.1 Introduction

- 4.1.1 This section should be read in conjunction with AAA Drawing Nos 779B-11A, 12B, 13D & 15C Tree Retention, Removal and Protection Plans which show the locations and specification for erection of protective fencing to set out tree Root Protection Areas and Tree Protection Zones around trees to be retained (**Appendix 2**).

4.2 Root Protection Areas

- 4.2.1 British Standard 5837 (2012) describes a Root Protection Area (RPA) and the tree it encloses as concentric circles. The area and shape of a root zone may be changed if local conditions dictate or the trees' condition indicates that a larger zone is required. In the absence of any reasons for altering its shape or area, a RPA is assumed to have a radius whose diameter is twelve times the trunk diameter of the enclosed tree. However RPA diameters never exceed 15 metres. The RPAs of trees near to the proposed developments are indicated on AAA Drawings Nos 779B-11A, 12B & 13D. Although this drawing shows all RPAs as being circular, their shape may differ. Preserving the environment within a tree's Root Protection Area is the most reliable way to way to ensure its survival through and beyond development.

4.3 Tree Protection Zones (Construction Exclusion Zone)

- 4.3.1 The broken black lines on AAA Drawings Nos 779B-11A, 12B, 13D and 15C indicate the boundaries of Tree Protection Zones (TPZs). Ideally the boundaries of construction exclusion zones should be contiguous with RPA boundaries, except where a tree canopy extends beyond its RPA, in which case the TPZ boundary may follow the canopy edge if appropriate. However, where development works extend within the crown extent the TPZ boundaries for retained trees may follow the edges of the soft landscaped area to be retained.
- 4.3.2 Before development white painted wooden pegs shall be driven into the ground along these boundaries in soft landscaped areas, or where surrounding ground is hard surfaced, white markers painted onto the surface

along these boundaries. These shall be supplied by the Contractor and their locations checked by the Contract Administrator. Markers are to remain in position until completion of work. The specified protective fencing is to be erected a minimum distance of 25cm from the perimeters indicated by the pegs/white markers.

- 4.3.3 Tree protection fencing should be sufficiently robust to exclude construction activity and personnel and be appropriate to the extent and the proximity of the work to retained trees. The space within this enclosure is referred to within this document as a Tree Protection Zone (TPZ).
- 4.3.4 Tamper resistant personnel barriers and ground protection systems should be installed before work begins, to protect the tree root zone. Areas of new or retained structure planting may also require protection. Once erected, barriers and ground protection should not be removed or altered without the prior agreement of an arboriculturalist and the local planning authority.
- 4.3.5 No work shall be undertaken within the TPZ around the tree, as defined by the protective fencing shown on Drawing Nos 779B-11A, 12B, 13D & 15C unless otherwise specified in this report.
- 4.3.6 Access into the TPZs shall only be permitted to undertake the works described under Sections 7.0 – 12.0 below. Access into the TPZs is not permitted until completion of all work outside its boundary. The Local Authority and the Contract Administrator shall be given 5 days written notice before work starts. Refer to clause 4.5.1 below.

4.4 Management of work outside the TPZ.

- 4.4.1 Outside the TPZs, work is to be planned to avoid contamination of RPAs through the discharge of chemicals, oils, fuels and mixer washings. Fires must not be lit on site.
- 4.4.2 Where the tree canopies extend beyond the protective fencing and over working areas for construction, care shall be taken to avoid damage to tree canopies.
- 4.4.3 Care must be taken to ensure that trees are not damaged by construction machinery, cranes or other lifting equipment and their loads particularly where their canopies extend beyond the TPZ boundaries. Site operations should be planned to ensure that wide or tall loads, and plant with booms, jibs and

counterweights can operate without coming into contact with retained trees. Plant moving or working near to trees must be supervised by a banksman, to ensure that adequate clearance from trees is maintained at all times.

- 4.4.4 Any damage to trees unavoidably incurred during site clearance, demolition or construction phase work shall be made good by a qualified arboriculturalist (Refer to Work Method Statement **3.2 Tree Works**).

- 4.4.5 Site work may not begin until TPZ's have been fenced and any required ground protection laid.

- 4.4.6 Areas subject to pedestrian access

A single layer of scaffold boards may protect ground subject to pedestrian access, or where additional protection is required the boards may be placed on top of a compressible layer over a permeable geo textile membrane.

4.5 Working inside TPZs and RPAs

- 4.5.1 Where TPZ boundaries have to be breached, fencing shall be dismantled and moved closer to the protected trees to provide the minimum working space required to undertake the works. The contractor shall give the Local Authority Tree Officer and Contract Administrator five days notice before undertaking any work within breached TPZ areas. Prior to and during the period of working in these areas, the contractor shall comply with any reasonable requests made by the Local Authority Tree Officer and the Contract Administrator.

- 4.5.2 The protective fencing to be erected 1m outside the canopy spread of the oak tree in the rear garden of No 18 Hambledon Road which is protected by Tree Preservation Order, shall only be temporarily removed to enable breaking out of existing hard surfacing and subsequent topsoiling works, and erection of permanent fencing within the TPZ/RPA of the tree. The contractor shall give the Local Authority Tree Officer and Contract Administrator five days notice before undertaking any work within the breached TPZ areas. On completion of the works, the protective fencing shall be re-erected on the TPZ boundaries as shown on AAA Dwg No. 779B-15C Tree Retention & Protection Plan.

5.0 WORK METHODOLOGY

- 5.1 Method statements provide specifications to maintain the condition and health of root systems thus enabling owners to discharge their duties under relevant statutes and planning conditions. The specific Method Statements for this development are contained in **Appendix 3**. Method statements are based upon the tree survey and should be read in conjunction with the other sections of this report.
- 5.2 Advice should be obtained from the arboricultural consultant regarding the ability of each tree to tolerate the proposed disturbance. Older trees generally adapt less successfully to environmental change and proposals involving such trees should be considered with particular care.

6.0 ARBORICULTURAL IMPACT ASSESSMENT – SAINSBURY'S PFS DEVELOPMENT SITE CLEARANCE AND DEMOLITION PHASE WORKS

6.0.1 Site clearance works will involve felling trees between July and August 2014 (programme to be confirmed by Main Contractor) to accommodate construction of the PFS. This will result in felling of trees around the existing Amenity Tip as shown on AAA Dwg No. 779B-12B. The following trees to be retained at the west end of the tree clearance area will be impacted by the site clearance and demolition phase as follows:

6.1 Work to be undertaken within the crown spread of Trees 181 and 182

6.1.1 The canopies of Trees 181 and 182 (both *Fraxinus excelsior*) which are to be retained, overlap with the canopies of Trees 174, 176, and 177 which are to be removed.

6.1.2 The tree felling works should be carried out in accordance with Work Method Statement **3.1 Tree Removal** (refer to **Appendix 3**) to minimise damage to retained trees.

6.2 Felling of poor condition trees within woodland area

6.2.1 Under the Tree Survey (refer to Tree Survey Schedule) Trees 178 (*Betula pendula*) and 179 (*Fraxinus excelsior*) were recommended to be removed due to poor condition.

6.2.2 These tree felling works should be carried out in accordance with Work Method Statement **3.1 Tree Removal** (refer to **Appendix 3**) to minimise damage to the surrounding retained trees.

6.3 Work to be undertaken within the RPA and canopy spread of Trees 188, 189, 194, 196, 205, 206 and 207

6.3.1 The low retaining wall at the western end of the Amenity Tip is situated within the RPAs of trees which bound the site. Works impacting upon the tree RPAs include:

- Demolition and excavation of low retaining wall and hard surfacing.
- Treatment of Japanese knotweed.

6.3.2 The above works should be carried out in accordance with the following Work Method Statements (refer to **Appendix 3**) to minimise damage to retained trees:

- **Appendix 3.4 Treatment of Japanese knotweed**
- **Appendix 3.5 Demolition & Removal of Walling & Hard Surfacing**

6.3.3 In accordance with Condition 9, wall and surfacing demolition works within the crown spread of the trees shall be carried out by hand and under the supervision of a representative of the Local Planning Authority.

7.0 ARBORICULTURAL IMPACT ASSESSMENT – ASTON ROAD S278 HIGHWAY REALIGNMENT SITE CONSTRUCTION PHASE WORKS

7.0.1 The Construction Phase (31 March 2014 – December 2014) will include highway construction works and reinstatement landscape works and new planting along the edge of retained woodland to the north of Aston Road. The following trees to be retained will be impacted by the development:

7.1 Work to be undertaken within the RPA of Tree 297

7.1.1 The RPA for Tree 297 (*Fraxinus excelsior*) extends a distance of 950mm across the proposed pedestrian footpath. Works impacting upon the RPA include:

- Construction of pedestrian footpath.
- Grass seeding, groundcover and shrub planting.

7.1.2 The above works should be carried out in accordance with the following Work Method Statements (refer to **Appendix 3**) to minimise damage to retained trees:

- **Appendix 3.6 Ground Cultivation, Grass Seeding & Shrub Planting**
- **Appendix 3.7 Construction works**

7.2 Work to be undertaken within the crown spread of Tree 330

7.2.1 The canopy of Tree 330 (*Fraxinus excelsior*) extends a distance of up to 460mm across the proposed pedestrian footpath. In accordance with Condition 9, excavation works to construct the pedestrian footpath within the crown spread of the tree shall be carried out by hand and under the supervision of a representative of the Local Planning Authority.

7.2.2 The above works should be carried out in accordance with the following Work Method Statements (refer to **Appendix 3**) to minimise damage to retained trees:

- **Appendix 3.6 Ground Cultivation, Grass Seeding & Shrub Planting**
- **Appendix 3.7 Construction works**

7.3 Work to be undertaken within the crown spread of Tree 334

7.3.1 The canopy of Tree 334 (*Salix* spp) extends marginally across the proposed pedestrian footpath, overlapping with the canopy spread of Tree 330 (see above). In accordance with Condition 9, excavation works to construct the pedestrian footpath within the crown spread of the tree shall be carried out by hand and under the supervision of a representative of the Local Planning Authority.

7.4 Work to be undertaken within the RPAs of Trees 330 and 334

7.4.1 The RPA for Tree 330 (*Fraxinus excelsior*) and Tree 334 (*Salix* spp) are not affected by the proposed footpath construction works, but are likely to be impacted by reinstatement grass seeding or shrub planting. These landscape works should be carried out in accordance with Work Method Statement **3.6 Ground Cultivation, Grass Seeding & Shrub Planting** (refer to **Appendix 3**) to minimise damage to retained trees.

7.5 Work to be undertaken within the crown spread of Tree 280

7.5.1 The southern face of the canopy of Tree 280 (*Fraxinus excelsior*) extends across the proposed pedestrian footpath up to 400mm. In accordance with Condition 9, excavation works to construct the pedestrian footpath within the crown spread of the tree shall be carried out by hand and under the supervision of a representative of the Local Planning Authority.

7.5.2 The above works should be carried out in accordance Work Method Statement **3.7 Construction works** (refer to **Appendix 3**) to minimise damage to retained trees.

7.6 Work to be undertaken within the RPA of Tree 280

- 7.6.1 The RPA for Tree 280 (*Fraxinus excelsior*) is not affected by the proposed footpath construction works, but is likely to be impacted by reinstatement grass seeding or shrub planting. These landscape works should be carried out in accordance with Work Method Statement **3.6 Ground Cultivation, Grass Seeding & Shrub Planting** (refer to **Appendix 3**) to minimise damage to retained trees.

7.7 Work to be undertaken within the crown spread of Tree 318

- 7.7.1 The western face of the canopy of Tree 318 (*Fraxinus excelsior*) extends across the proposed visibility splay area where existing tree are to be felled. The canopies of Trees 317, 319, and 340 which are to be felled to accommodate construction works overlap with the canopy of Tree 318.
- 7.7.2 In accordance with Condition 9, excavation works to construct the pedestrian footpath within the crown spread of the tree shall be carried out by hand and under the supervision of a representative of the Local Planning Authority.
- 7.7.3 The above works should be carried out in accordance with the following Work Method Statements (refer to **Appendix 3**) to minimise damage to retained trees:
- **Appendix 3.6 Ground Cultivation, Grass Seeding & Shrub Planting**
 - **Appendix 3.7 Construction works**

7.8 Work to be undertaken within the RPA of Tree 318

- 7.8.1 The RPA for Tree 280 (*Fraxinus excelsior*) is not affected by the proposed footpath construction works, but is likely to be impacted by reinstatement grass seeding or shrub planting. These landscape works should be carried out in accordance with Work Method Statement **3.6 Ground Cultivation, Grass Seeding & Shrub Planting** (refer to **Appendix 3**) to minimise damage to retained trees.

7.9 Work to be undertaken within the RPA and canopy spread of TPO Oak Tree (18 Hambledon Road)

7.9.1 The RPA and canopy spread of the oak tree in rear garden of No 18 Hambledon Road extend into the Sprint Print site. Works impacting upon the tree's RPA include:

- Breaking out and excavation of existing car park hard surfacing.
- Topsoiling and planting
- Erection of noise attenuation fence

7.9.2 The erection of 3m height noise attenuation fencing beneath the canopy spread of the tree may necessitate tree surgery work involving pruning or removal of the lower limb of the tree to lift the tree canopy.

7.9.3 The above works should be carried out in accordance with the following Work Method Statements (refer to **Appendix 3**) to minimise damage to the tree:

3.2 Tree Works

3.5 Demolition & Removal of Walling and Hard Surfacing

3.6 Ground Cultivation, Grass Seeding & Planting

3.7 Construction Works

3.8 Works within TPZ and RPA of Retained TPO Tree

8.0 ARBORICULTURAL IMPACT ASSESSMENT – MAUREPAS WAY PEDESTRIAN ACCESS RAMP SITE CONSTRUCTION PHASE WORKS

- 8.0.1 The Construction Phase will include ramp construction works and new groundcover and shrub planting, and tree planting.
- 8.0.2 Works to install ramp support piles and associated trial holes will not impact upon retained trees.
- 8.0.3 Existing services are located within the area proposed to be cleared of trees and therefore any works to relocate services should not impact upon retained trees.

The following trees to be retained will be impacted by the development works:

8.1 Work to be undertaken within the RPA of Tree 76

- 8.1.1 The RPA for Tree 76 extends across the proposed access ramp maintenance easement and to a distance of 420mm beneath the proposed ramp structure. Works impacting upon the RPA include:

- Potential construction of ramp structure support columns.
- Groundcover and shrub planting.

- 8.1.2 The above works should be carried out in accordance with the following Work Method Statements (refer to **Appendix 3**) to minimise damage to retained trees:

- **Appendix 3.6 Ground Cultivation, Grass Seeding & Shrub Planting**
- **Appendix 3.7 Construction works**

8.2 Work to be undertaken within the RPA of Tree 80

8.2.1 The RPA for Tree 81 extends marginally into the proposed access ramp maintenance easement. Works impacting upon the RPA include:

- Groundcover and shrub planting.

8.2.2 These works should be carried out in accordance with Work Method Statement Work Method Statement **3.6 Ground Cultivation, Grass Seeding & Shrub Planting** (refer to **Appendix 3**) to minimise damage to retained trees.

8.3 Work to be undertaken within the RPA of Tree 81

8.3.1 The RPA for Tree 81 extends approximately 350mm into the proposed access ramp maintenance easement. Works impacting upon the RPA include:

- Groundcover and shrub planting.

8.3.2 These works should be carried out in accordance with Work Method Statement Work Method Statement **3.6 Ground Cultivation, Grass Seeding & Shrub Planting** (refer to **Appendix 3**) to minimise damage to retained trees.

8.4 Work to be undertaken within the RPA of Tree 82

8.4.1 The RPA for Tree 82 extends approximately 1m into the proposed access ramp maintenance easement. Works impacting upon the RPA include:

- Groundcover and shrub planting.

8.4.2 These works should be carried out in accordance with Work Method Statement Work Method Statement **3.6 Ground Cultivation, Grass Seeding & Shrub Planting** (refer to **Appendix 3**) to minimise damage to retained trees.

9.0 ARBORICULTURAL IMPACT ASSESSMENT – SAINSBURY'S PFS DEVELOPMENT CONSTRUCTION PHASE WORKS

9.1 Work to be undertaken within the RPA of Trees 188, 189, 194, 196, 205, 206 and 207

9.1.1 Following the demolition phase and removal of existing hard surfacing and retaining wall, the following construction phase works impacting upon the tree RPAs will be carried out:

- Topsoiling.
- Tree and shrub planting
- Treatment of Japanese knotweed.

9.1.2 The above works should be carried out in accordance with the following Work Method Statements (refer to **Appendix 3**) to minimise damage to retained trees:

- **Appendix 3.4 Treatment of Japanese knotweed**
- **Appendix 3.6 Ground Cultivation, Grass Seeding & Shrub Planting**
- **Appendix 3.7 Construction works**

Appendices:

Appendix 1: Tree Survey Plan and Schedule

Appendix 2: Tree Protection Plan / Protective Fencing Specification

Appendix 3: Arboricultural Method Statements

3.1 Tree Removal

3.2 Tree Works

3.3 Removal of Shrubs and Groundcover Vegetation

3.4 Treatment of Japanese Knotweed

3.5 Demolition & Removal of Walling and Hard Surfacing

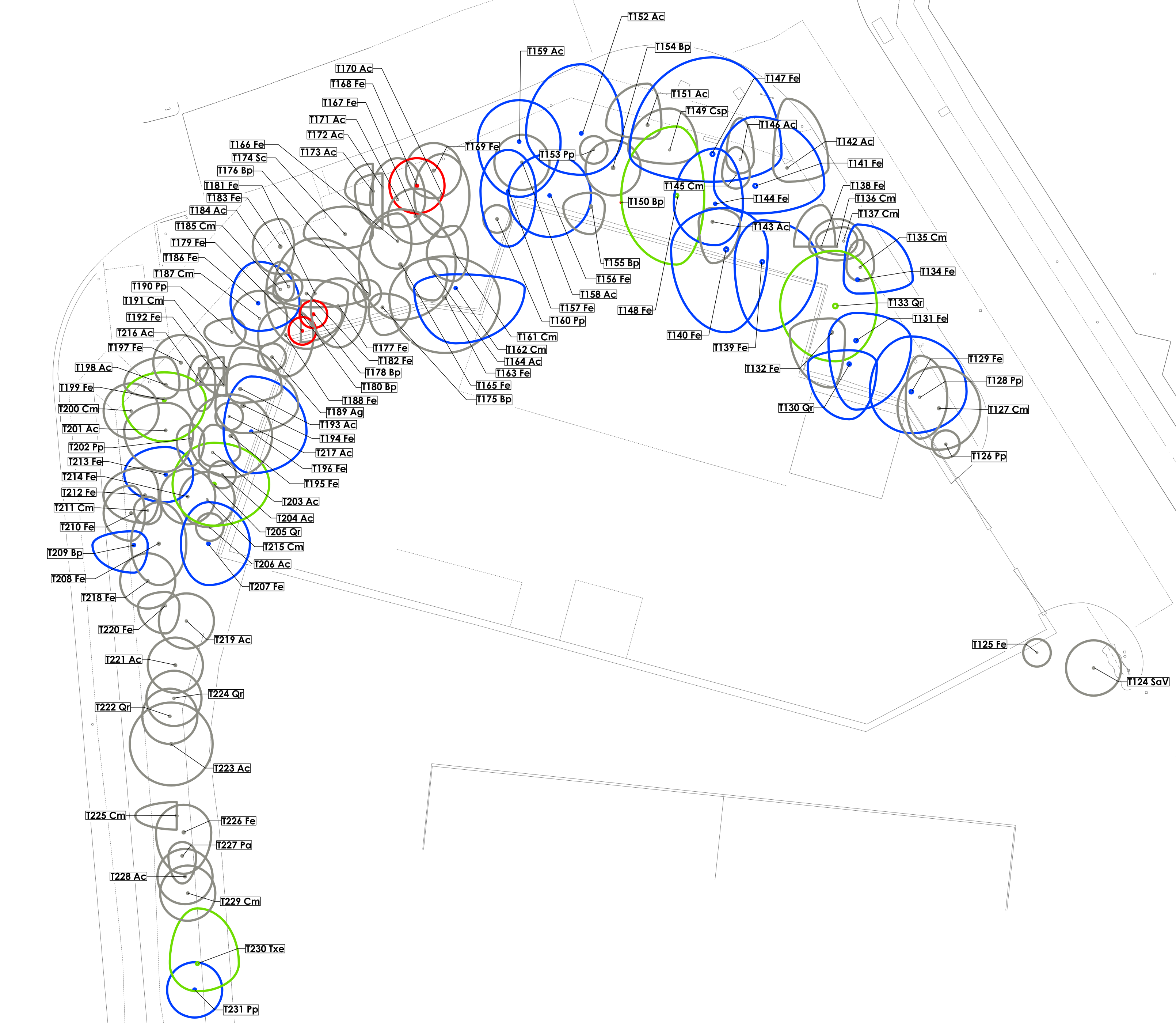
3.6 Ground Cultivation, Grass Seeding and Planting

3.7 Construction Works

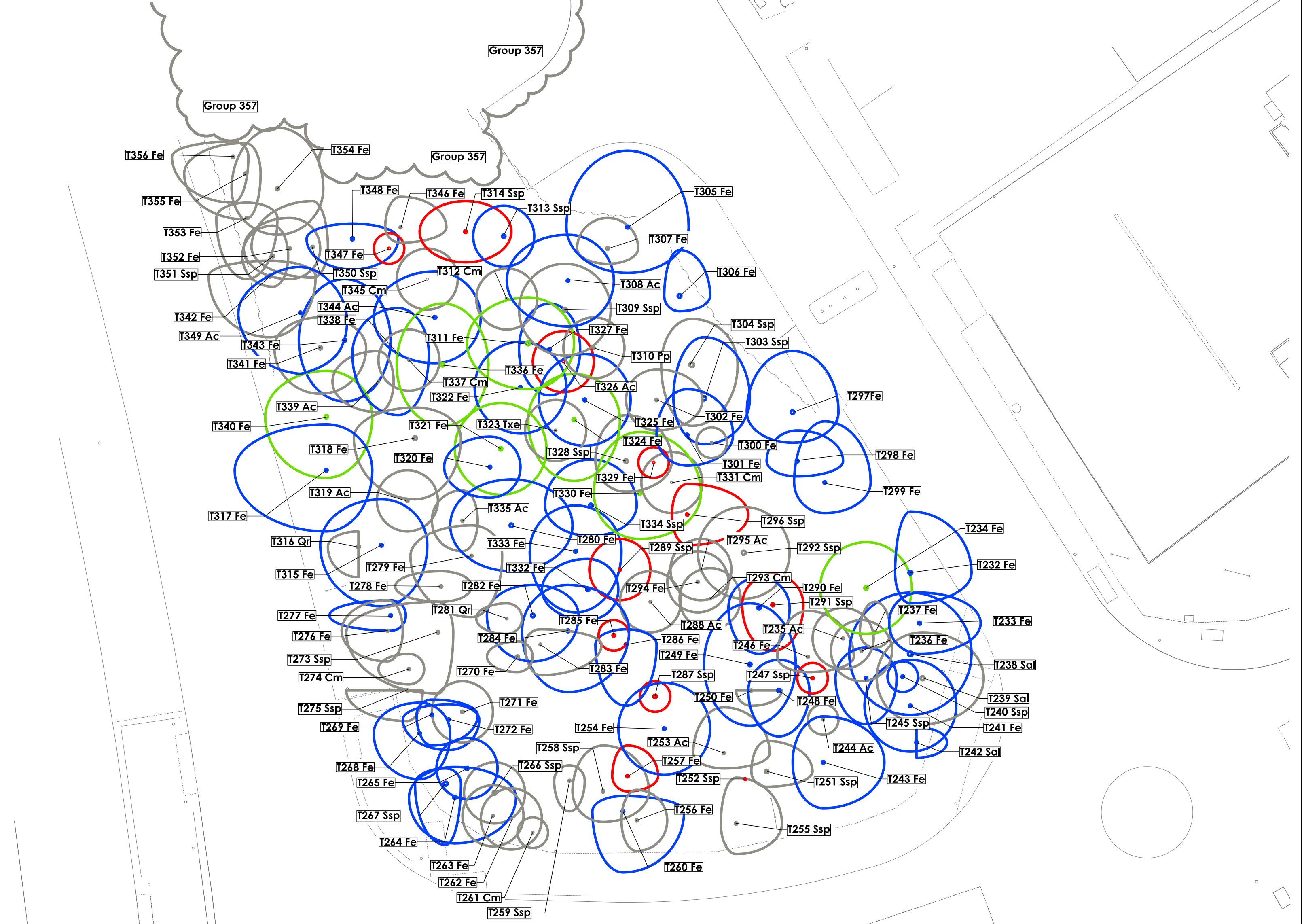
Appendix 1

Tree Survey Plan and Schedule

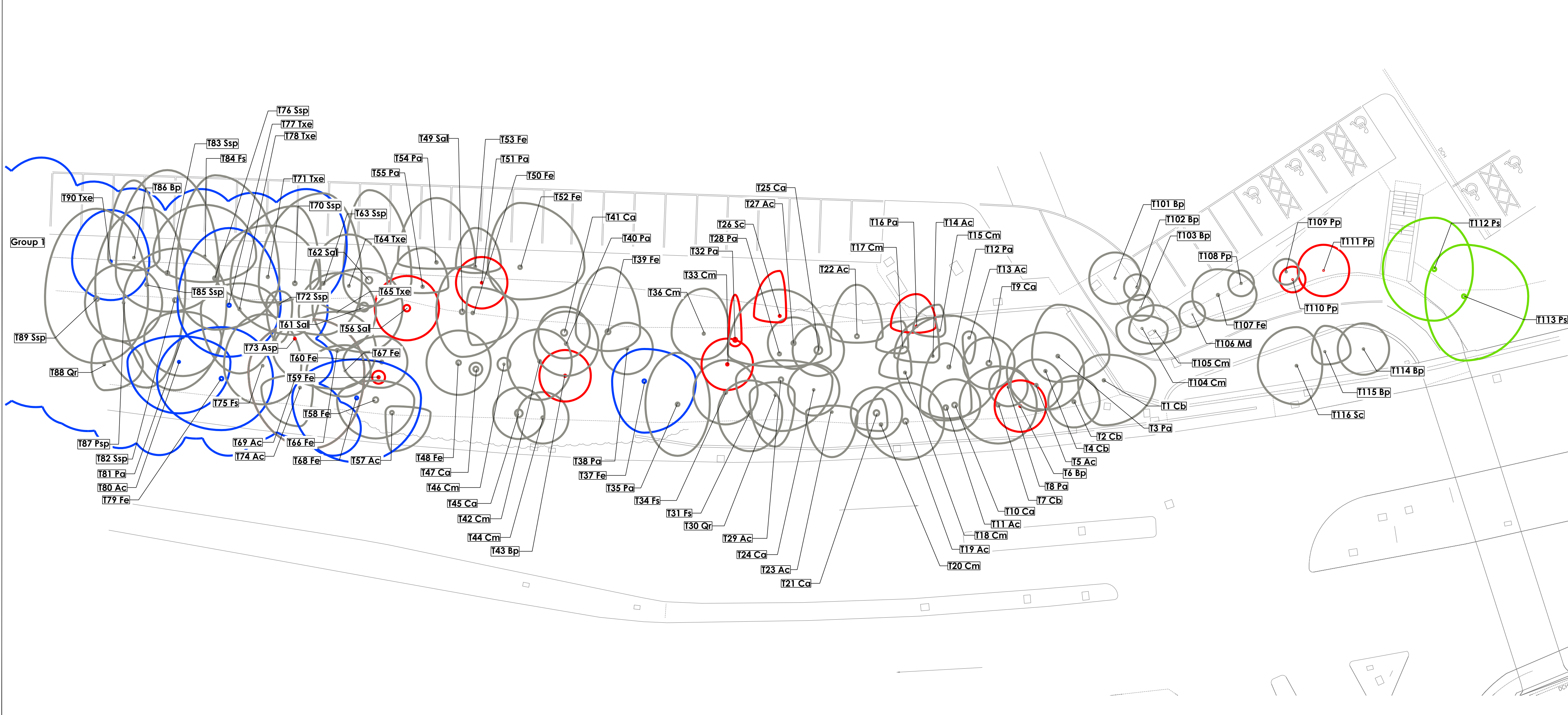
Area 2 - Scale 1:200



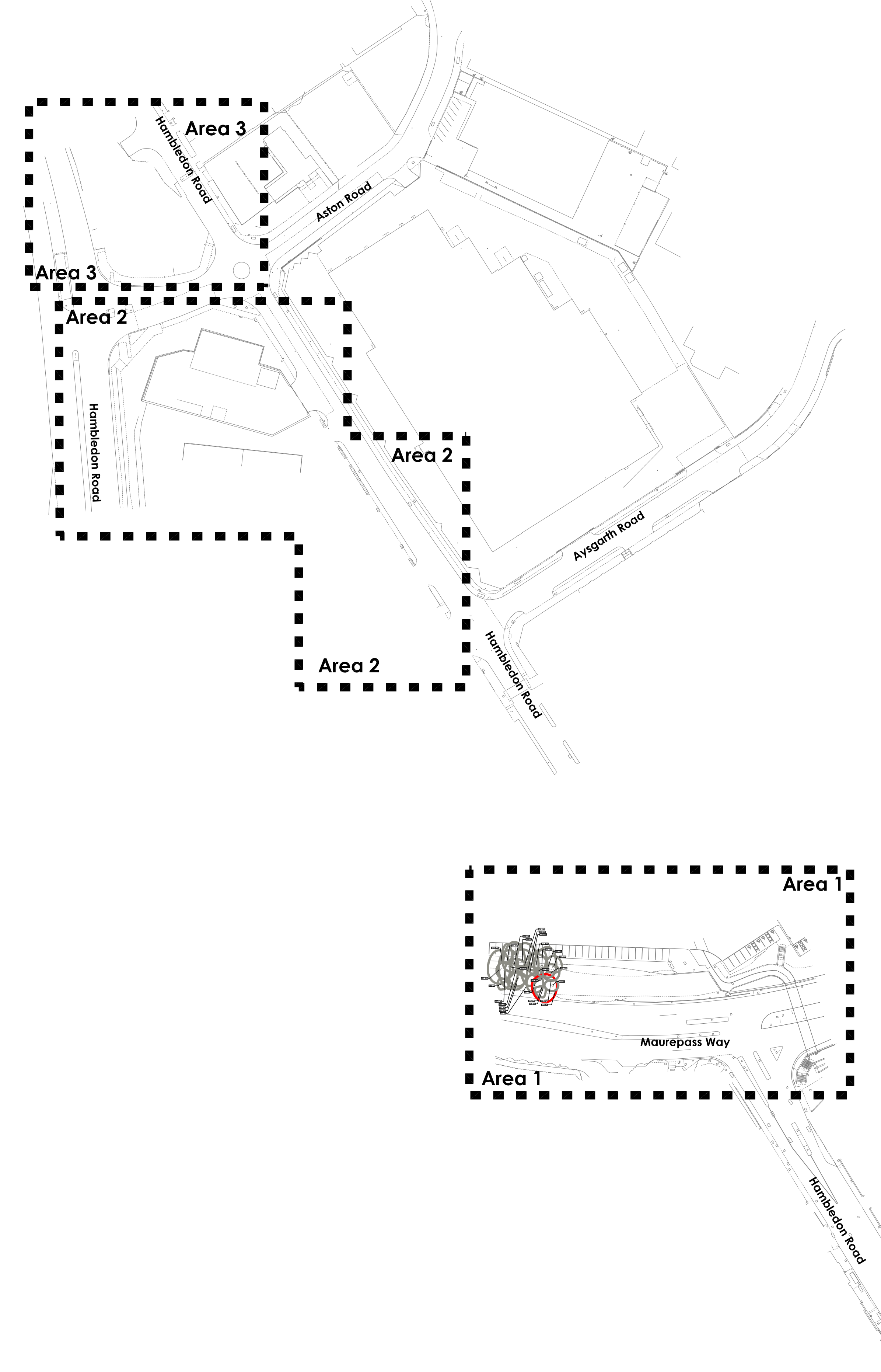
Area 3 - Scale 1:200



Area 1 - Scale 1:200

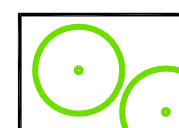
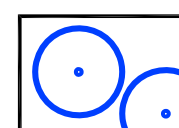
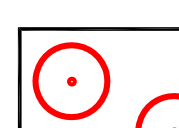
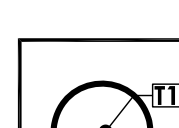


Location Plan - Scale 1:1000



Legend

Tree Survey and Tree Categorisation carried out in accordance with BS 5837:2005 'Trees in relation to construction recommendations'

-  Trees / groups of trees of high quality and value (Grade A): in such a condition as to be able to make a substantial contribution (a minimum of 40 years is suggested).
-  Trees / groups of trees of moderate quality and value (Grade B): in such a condition as to be able to make a significant contribution (a minimum of 20 years is suggested).
-  Trees / groups of trees of low quality and value (Grade C): currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150mm.
-  Trees / groups of trees to be considered for removal (Grade R): in such a condition that any existing value would be lost within 10 years regardless of the proposed development.
-  Tree reference number & species to be read in conjunction with Tree Survey Schedule AAA ref 779 : 15/12/09 & 779B : 1.2.3/09/10. (see key below).
-  Trees Surveyed as Group (to be read in conjunction with AAA Tree Survey Schedule AAA ref 779 : 15/12/09 & 779B : 1.2.3/09/10. (see key below).

Refer to AAA Tree Survey Schedule Ref: AAA ref 779 : 15/12/09 & 779B : 1.2.3/09/10. (see key below).

Key	Name	Common Name
Ac	Acer campestre	Field Maple
Ap	Aulus glutinosus	Common Alder
ApCK	Acer platanoides 'Crimson King'	Norway Maple 'Crimson King'
Bp	Betula pendula	Silver Birch
Ca	Corylus avellana	Common Hazel
Cb	Carpinus betulus	Hornbeam
Cm	Crataegus monogyna	Common Hawthorn
Cp	Cornus species	Dogwood species
Fe	Fraxinus excelsior	Common Ash
Id	Malus domestica	Common Brambling
Pa	Prunus avium	Wild Cherry / Gean
Pp	Prunus padus	Bird Cherry
Ps	Pinus sylvestris	Scots Pine
Qr	Quercus robur	Common Oak
Sal	Salix alba	White Willow
SaV	Sorbus aria variety	Whitebeam
Sc	Salix caprea	Goat Willow
Ssp	Salix species	Willow species
Txe	Tilia x europaea	Common Lime

Tree Groups	Key	Species
Group 1	Various including: Salix sp., Fraxinus sp., Betula sp., Tilia sp., Crataegus sp.	
Group 357	Overstorey: Acer campestre; Fraxinus excelsior; Salix alba; Understorey: Crataegus monogyna; Prunus spinosa	

Key	Species
Group 1	Various including: Salix sp., Fraxinus sp., Betula sp., Tilia sp., Crataegus sp.
Group 357	Overstorey: Acer campestre; Fraxinus excelsior; Salix alba; Understorey: Crataegus monogyna; Prunus spinosa

FOR PLANNING

arthur amos associates
landscape architecture
urban design regeneration arboriculture
planning environmental assessment ecology

Paul Hous, 100 Business Centre, Mauney Road, Halesowen, West Midlands B63 4AL
t: 01905 544 166 e: paul@arthuramos.co.uk w: www.arthuramos.co.uk

Client: **Sainsbury's**

Project: Sainsbury's Supermarket, Waterlooville

Drawing title: **Tree Survey Plan**

Drawing No: **7798-01** Version: **A** Scale: **1:200 @ A0**
Drawn by: **DB** Checked by: **JM** Date: **07/09/10**

NOTES: This is a site plan for the purpose of planning. All dimensions to be checked on site. Dimensions shown on this drawing are for information only and should not be used for construction purposes.

THIS DRAWING IS NOT FOR CONSTRUCTION

Arthur Amos Associates				Tree Survey Schedule				AAA ref:							
site: Waterlooville				surveyor: P J Billin				date of survey: Tree No's 360 to 591 - 17,18,19/10/2011, Tree No's 101 to 357 - 1,2,3/09/10 & Tree No's 1 to 62 (including G1) - 15/12/2009							
Rev A: Tree numbers T1 to T100 & T63 to T90 added. 18.11.2011															
KEY TO NOTATIONS USED:															
STEM D = Stem diameter (mm) at 1.5m above ground level												Category Grading			
C.C = Height of Crown Clearance (m)												A = High quality & value			
R.C = Remaining Contribution (yrs)												B = Moderate quality & value			
Arf = Measurement around base (mm)												C = Low quality & value			
												R = In need of removal			
AGE CLASS:															
Yng = Young															
Mid = Middle aged															
Mat = Mature															
O/Mat = Over mature															
D = Dead															
NO	SPECIES	HEIGHT m	STEM D	BRANCH SPREAD m				AGE CLASS	C.C (m)	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	R. C.	PRELIMINARY MANAGEMENT	CATEGORY GRADING	
				N	E	S	W								
1	Carpinus betulus (Hornbeam)	10	180	2	4	3.5	2	M	0.2	Fair	Poor	10	Typical of the species, justifiable removal, twin codom included bark stem 1.7M, grows through fence to E	C	
2	Carpinus betulus (Hornbeam)	10	225 arf	2	2	2	2	Y	0.2	Fair	Poor	10	Typical of the species, twin codom included bark stem from base, subdom SE, justifiable removal	C	
3	Prunus avium (Wild Cherry/Gean)	11	210	4	4	2	2	M	1.5	Fair	Indifferent	10	Typical of the species, worthy of retention, twin stem 2.5m, dom vertical, subdom NE, Ivy to approx 8m	C	
4	Carpinus betulus (Hornbeam)	11	175	3	3	3	3	M	0.6	Fair	Indifferent	10	Typical of the species, worthy of retention, single stem to approx 8m forks into 2 codom stems both vertical	C	
5	Acer campestre (Field Maple)	10	205 arf	2	2	2	2	M	1	Fair	Indifferent	10	Typical of the species, worthy of retention, multistemmed from .6m, 4 stems 2 dom vertical, 2 subdom NW & E	C	
6	Betula pendula (Silver Birch)	12	145	2	2	2	2	M	1.5	Fair	Poor	5	Typical of the species, single stem for entire height, pruning wound S side .8m approx .1m by .1m, tree has engulfed tree ties [hanging out of stem] and possibly stake, lean to E, multiple pruning wounds up trunk	R	
7	Carpinus betulus (Hornbeam)	11	260	3	3	3	3	M	0.6	Fair	Indifferent	10	Typical of the species, worthy of retention, single stem to approx 6m forks into 2 codom stems vertical	C	
8	Prunus avium (Wild Cherry/Gean)	10	120	1.5	1.5	1.5	1.5	M	1.7	Fair	Indifferent	10	Typical of the species, kink in stem 3m W, single stem 8m forks twin codom	C	
9	Corylus avellana (Common Hazel)	10	370 arf	2	2	2	2	Y	1	Fair	Poor	10	Typical of the species, justifiable removal, stand of whips closely planted, therefore multistemmed from base, some welding, included bark unions	C	
10	Corylus avellana (Common Hazel)	10	370 arf	2	2	2	2	Y	1	Fair	Poor	10	Typical of the species, justifiable removal, stand of whips closely planted, therefore multistemmed from base, some welding, included bark unions	C	
11	Acer campestre (Field Maple)	12	350 arf	5	2	1	2	M	0.5	Fair	Poor	10	Typical of the species, worthy of retention, multistemmed from base, 2 distinct codom stems vertical, Ivy to 9m	C	

KEY TO NOTATIONS USED:
STEM D = Stem diameter (mm) at 1.5m above ground level
C.C = Height of Crown Clearance (m)
R.C = Remaining Contribution (yrs)

Arf = Measurement around base (mm)

AGE CLASS:
Yng = Young
Mid = Middle aged
Mat = Mature
O/Mat = Over mature
D = Dead

Category Grading
A = High quality & value
B = Moderate quality & value
C = Low quality & value
R = In need of removal

NO	SPECIES	HEIGHT m	STEM D	BRANCH SPREAD m				AGE CLASS	C.C (m)	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	R. C.	PRELIMINARY MANAGEMENT	CATEGORY GRADING
				N	E	S	W							
12	Prunus avium (Wild Cherry/Gean)	11	235	4	4	4	4	M	1.8	Fair	Indifferent	10	Typical of the species, worthy of retention, single stem 5m forks dom vertical subdom NNW, minor deadwood	C
13	Acer campestre (Field Maple)	10	130	0.5	0.5	2	0.5	Y	2.5	Fair	Poor	5	Typical of the species, single stem 3m forks 2 codom vertical and S, justifiable removal, compensatory bulge at base	C
14	Acer campestre (Field Maple)	10	120	3	0.5	0.5	3	Y	1	Fair	Poor	5	Typical of the species, justifiable removal, biased NW, stem kink .4 N, poor form poor structure	C
15	Crataegus monogyna (Common Hawthorn)	10	120	2	0.5	0.5	2	Y	0.3	Fair	Indifferent	10	Typical of the species, single stem 2m forks codom noth lean NW, justifiable removal	C
16	Prunus avium (Wild Cherry/Gean)	3	120	2.5	1.5	0.5	2	Y	0.8	Fair	Indifferent	5	Typical of the species, single stem 1m forks 2 stems dom vertical subdom N, justifiable removal	R
17	Crataegus monogyna (Common Hawthorn)	10	185 arf	2	0.5	0.5	2	Y	0.3	Fair	Indifferent	10	Typical of the species, justifiable removal	C
18	Crataegus monogyna (Common Hawthorn)	10	150 arf	2	0.5	0.5	2	Y	0.3	Fair	Indifferent	10	Typical of the species, justifiable removal	C
19	Acer campestre (Field Maple)	8	390 arf	3	3	3	3	M	1	Fair	Poor	5-10	Typical of the species, twin codom stem from base included bark, justifiable removal	C
20	Crataegus monogyna (Common Hawthorn)	10	195 arf	2	0.5	0.5	2	Y	0.3	Fair	Indifferent	10	Typical of the species, justifiable removal	C
21	Corylus avellana (Common Hazel)	10	430 arf	2	2	2	2	Y	1	Fair	Poor	10	Typical of the species, justifiable removal, stand of whips closely planted, therefore multistemmed from base, some welding, included bark unions	C
22	Acer campestre (Field Maple)	10	290 arf	4	2	0.5	2	M	1	Fair	Indifferent	10	Typical fo the species, multistemmed from base, Ivy to approx 6m, justifiable removal	C
23	Acer campestre (Field Maple)	8	120	0.5	2	3.5	2	Y	2	Fair	Indifferent	5-10	Typical of the species, single stem .8m forks 2 stems dom vertical, subdom SW, justifiable removal	C
24	Corylus avellana (Common Hazel)	10	120	2	2	2	2	Y	1	Fair	Poor	10	Typical of the species, justifiable removal, stand of whips closely planted, therefore multistemmed from base, some welding, included bark unions	C
25	Corylus avellana (Common Hazel)	10	600 arf	2	2	2	2	Y	1	Fair	Poor	10	Typical of the species, justifiable removal, stand of whips closely planted, therefore multistemmed from base, some welding, included bark unions	C
26	Salix caprea (Goat Willow)	5	145 arf	3.5	0.5	0.5	2	M	1.3	Fair	Poor	5	Typical of the species, significant lean to N approx 45°, multistemmed 1.1m with included bark, cavities W and S sides, previous leaders removed, justifiable removal	R

KEY TO NOTATIONS USED:
STEM D = Stem diameter (mm) at 1.5m above ground level
C.C = Height of Crown Clearance (m)
R.C = Remaining Contribution (yrs)

Arf = Measurement around base (mm)

AGE CLASS:
Yng = Young
Mid = Middle aged
Mat = Mature
O/Mat = Over mature
D = Dead

Category Grading
A = High quality & value
B = Moderate quality & value
C = Low quality & value
R = In need of removal

NO	SPECIES	HEIGHT m	STEM D	BRANCH SPREAD m				AGE CLASS	C.C (m)	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	R. C.	PRELIMINARY MANAGEMENT	CATEGORY GRADING
				N	E	S	W							
27	Acer campestre (Field Maple)	10	320 arf	2	2	2	2	Ma	3.5	Fair	Poor	5-10	Typical of the species, twin codom stern 1.3m, lvy 8m, minor deadwood, justifiable removal	C
28	Prunus avium (Wild Cherry/Gean)	14	240	5	4	1	4	M	2.5	Fair	Poor	5-10	Typical of the species, single stem 3m forks 2 stems dom vertical, subdom NW, minor deadwood, lvy to 12m	C
29	Acer campestre (Field Maple)	14	340 arf	1.5	4	4	3.5	Ma	1	Fair	Poor	5-10	Typical of the species, single stem to 1m then multistemmed, included bark, lvy to 7m	C
30	Quercus robur (Common Oak)	10	140	1	1.5	4	2	Y	4	Fair	Indifferent	10	Typical of the species, single stem 4m forksinto 2 dom S, subdom N, justifiable removal	C
31	Fagus sylvatica (Common Beech)	12	255	2.5	2.5	3	2.5	M	7	Fair	Poor	10	Typical of the species, single stem 2m forks into 2 codom stems both vertical included bark, highway prune in past evident, justifiable removal	C
32	Prunus avium (Wild Cherry/Gean)	10	295 arf	3.5	0.5	0.5	0.5	M	5	Poor	Poor	5	Typical of the species, codom included bark stem .6m, 1 vertical 1 N, lvy clad	R
33	Crataegus monogyna (Common Hawthorn)	8	180 arf	2	2	2	2	M	2	Poor	Poor	5	Typical of the species, twin codom stem .8m occluded bark, stem E side dead	R
34	Fagus sylvatica (Common Beech)	14	250	2.5	2.5	2.5	2.5	M	7	Fair	Poor	10	Typical of the species, single stem to 3m forks 2 codom included bark stems both vertical, lvy encroaching 5m S, justifiable removal	C
35	Prunus avium (Wild Cherry/Gean)	13	280	4	2.5	4	2.5	M	5	Fair	Indifferent	10	Typical of the species, single twisting / kinking stem 2.5m, forks 2 codom stems both vertical occluded bark	C
36	Crataegus monogyna (Common Hawthorn)	5.5	170	3.5	2	2	2.5	M	1	Fair	Indifferent	5-10	Typical of the species, twin codom stem 1.5m occluded bark, lvy to 4m, justifiable removal	C
37	Fraxinus excelsior (Common Ash)	14	270	2.5	4	4	2.5	M	3.5	Fair	Indifferent	10+	Typical of the species, worthy of retention, single stem 10m forks 2 codom stems E & W, lvy 4m	B
38	Prunus avium (Wild Cherry/Gean)	13	175	2	2	2	2	M	6	P	Indifferent	5	Typical of the species, single stem for entire height, resinous bleeding canker N side .7m, justifiable removal	C
39	Fraxinus excelsior (Common Ash)	13	380 arf	5	2.5	1.5	2.5	M	7	Fair	Poor	5	Typical of the species, twin stem from base, dom vertical subdom W included bark, justifiable removal	C
40	Prunus avium (Wild Cherry/Gean)	13	205	2.5	2.5	2.5	2.5	M	7	Fair	Indifferent	10	Typical of the species, single stem for entire height, minor deadwood, lvy to 2.5m E side	C
41	Corylus avellana (Common Hazel)	10	470 arf	2	2	2	2	Y	1	Fair	Poor	10	Typical of the species, justifiable removal, stand of whips closely planted, therefore multistemmed from base, some welding, included bark unions	C

KEY TO NOTATIONS USED:
STEM D = Stem diameter (mm) at 1.5m above ground level
C.C = Height of Crown Clearance (m)
R.C = Remaining Contribution (yrs)

Arf = Measurement around base (mm)

AGE CLASS:
Yng = Young
Mid = Middle aged
Mat = Mature
O/Mat = Over mature
D = Dead

Category Grading
A = High quality & value
B = Moderate quality & value
C = Low quality & value
R = In need of removal

NO	SPECIES	HEIGHT m	STEM D	BRANCH SPREAD m				AGE CLASS	C.C (m)	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	R. C.	PRELIMINARY MANAGEMENT	CATEGORY GRADING
				N	E	S	W							
42	Crataegus monogyna (Common Hawthorn)	6	215 arf	2.5	2.5	3	2.5	M	0.6	Fair	Indifferent	10	Typical of the species, multistemmed .7m, 2 codoms vertical & SW, 2 subdoms S & N, ivy to 4m	C
43	Betula pendula (Silver Birch)	8	175 arf	2	2	2	2	Y	6	Poor	Poor	5	Typical of the species, twin codom stems from, base included bark, 1 vertical 1 kinks NE-SW, very poor form very poor structure, severe decline	R
44	Crataegus monogyna (Common Hawthorn)	6	230 arf	2	2	2	2	M	0.5	Fair	Indifferent	10	Typical of the species, 3 codom stems .5m, dom vertical, subdoms SE & W	C
45	Corylus avellana (Common Hazel)	10	590 arf	2	2	2	2	Y	1	Fair	Poor	10	Typical of the species, justifiable removal, stand of whips closely planted, therefore multistemmed from base, some welding, included bark unions	C
46	Crataegus monogyna (Common Hawthorn)	7	100 arf	0.5	0.5	0.5	0.5	Y	0.1	Fair	Indifferent	10	Typical of the species, young whip planting, justifiable removal	C
47	Corylus avellana (Common Hazel)	6	380 arf	0.5	0.5	0.5	0.5	Y	0.5	Fair	Indifferent	10	Typical of the species, group whip planting, justifiable removal	C
48	Fraxinus excelsior (Common Ash)	14	355 arf	2.5	2.5	2.5	2.5	M	5	Fair	Poor	5-10	Typical of the species, twin stems from base included bark, dom vertical SW, subdom vertical NW, justifiable removal	C
49	Salix alba (White Willow)	19	355	3.5	3.5	3.5	2	Ma	6.5	Fair	Indifferent	10	Typical of the species, single stem 10m forks into 2 dom vertical, subdom N, minor deadwood, ideally retained	C
50	Fraxinus excelsior (Common Ash)	12	200	2	3.5	2.5	0.5	M	4	Fair	Indifferent	5-10	Typical of the species, single stem for entire height, Ivy to 10m, justifiable removal	C
51	Prunus avium (Wild Cherry/Gean)	10	120	2	2	2	2	M	2	Fair	Poor	5	Typical of the species, twin codom stem .6m, dom vertical N, subdom SE, lost 2nd subdom .6m, included bark, justifiable removal	R
52	Fraxinus excelsior (Common Ash)	12	270	5	5	2.5	2.5	M	4	Fair	Indifferent	10	Typical of the species, worthy of retention, single stem 3.5m, forks 2 codom vertical N & vertical SE, 1 subdom vertical W, pruning wounds 2.5m N side stem	C
53	Fraxinus excelsior (Common Ash)	10	140	3	2	0.5	1.5	M	4	Fair	Indifferent	5-10	Typical of the species, single stem 2.5m forks 2 codom, 1 vertical, 1 vertical N, pruning wounds, Ivy, justifiable removal	C
54	Prunus avium (Wild Cherry/Gean)	9	185	5	3	0.5	3	M	4	Fair	Poor	5-10	Typical of the species, single stem 2.5m forks 2 stems 1 dom vertical N, subdom NWN, impact damage SE side stem, .6m long .1m wide callusing, exposed wood rotting, justifiable removal	C
55	Prunus avium (Wild Cherry/Gean)	9	180	3	2	0.5	2.5	Y	4	Fair	Indifferent	5	Typical of the species, single stem for entire height, justifiable removal	C

KEY TO NOTATIONS USED:
STEM D = Stem diameter (mm) at 1.5m above ground level
C.C = Height of Crown Clearance (m)
R.C = Remaining Contribution (yrs)

Arf = Measurement around base (mm)

AGE CLASS:
Yng = Young
Mid = Middle aged
Mat = Mature
O/Mat = Over mature
D = Dead

Category Grading
A = High quality & value
B = Moderate quality & value
C = Low quality & value
R = In need of removal

NO	SPECIES	HEIGHT m	STEM D	BRANCH SPREAD m				AGE CLASS	C.C (m)	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	R. C.	PRELIMINARY MANAGEMENT	CATEGORY GRADING
				N	E	S	W							
56	Salix alba (White Willow)	19	500 arf	2.5	2.5	2.5	2.5	Y	8	Fair	Poor	5	Typical of the species, codom stem from ground level, 1 vertical 1 SE, included bark, minor deadwood	R
57	Acer campestre (Field Maple)	10	275 arf	0.5	3	3	0.5	Y	1	Fair	Poor	5	Typical of the species, codom stem .6m vertical & SW, justifiable removal	C
58	Fraxinus excelsior (Common Ash)	11	400 arf	1.5	3	3	3	M	4	Fair	Poor	5-10	Typical of the species, twin stem from ground level, included bark dom vertical, subdom vertical E, dom forks 1.1m vertical S, included bark, multiple pruning wounds, justifiable removal	C
59	Fraxinus excelsior (Common Ash)	9	165 arf	0.5	0.5	0.5	0.5	Y	6	Fair	Poor	5	Typical of the species, codomn stem from ground level, occluded bark, codoms vertical for entire height, NE codom forks 3m 2 subdoms	R
60	Fraxinus excelsior (Common Ash)	12	230	2	2	2	3	M	4	Fair	Indifferent	10	Typical of the species, worthy of retention, single stem for entire height, minor deadwood, Ivy to 4m	C
61	Salix alba (White Willow)	19	690 arf	3	3	3.5	4	Ma	9	Fair	Poor	10	Typical of the species, worthy of retention, multi stemmed from base 3 codoms, vertical, vertical & SW, 3 subdoms, SE dead, NE & N, Ivy obscures base	C
62	Salix alba (White Willow)	19	510 arf	7	3.3	2	2	Ma	9	Fair	Poor	5-10	Typical of the species, worthy of retention, multistemmed from base, included bark, 2 codom vertical & NE, 1 subdom NW, minor deadwood	C
G1	Various including: Salix ssp. Fraxinus ssp. Betula ssp. Tilia ssp. Crataegus ssp.	Up to 20	Up to 600 arf	Up to 10	Up to 10	Up to 10	Up to 10	Y - Ma	Up to 9	Fair	Fair	Up to 10	Throughout a group of trees typical of the species and replicating trees 1 to 62, surveyed as a group and therefore not individually surveyed, worthy of retention as a gorup screen of moderate quality and moderate value collectively, individuals may rate lower	B
63	Salix sp. Willow	20.0	230	7	3	4	5	Mat	5.0	Fair	Multi stem coppice. Fair	10-20	Consider the long term management of this belt with mature willows. Pollard within 3 to 5 years	C2
64	Tilia x europaea (Common lime)	7.5	140	4	3	2	3	Mid	1.8	Fair	Single stem. Poor; suppressed by neighbouring willow	10-20	No Action Required	C2
65	Tilia x europaea (Common lime)	8.5	120	3	3	3	3	Yng	1.8	Fair	Co-dominant stems. Poor; thin crown, suppressed	20-40	No Action Required	C2
66	Fraxinus excelsior (Common ash)	14.5	230	3	3	3	5	Mid	3.5	Fair	Single stem. Poor; tall narrow crown, ivy partially obscuring trunk	20-40	Cut ivy at base; within 3 -5 years	C2
67	Fraxinus excelsior (Common ash)	9.5	80	2	2	2	3	Mid	5.0	Fair	Co-dominant stems. Poor; tall, narrow crown	20-40	No Action Required	C2
68	Fraxinus excelsior (Common ash)	14.0	230	3	5	5	5	Mid	2.8	Fair	Co-dominant stems. Fair	20-40	No Action Required	B2
69	Acer campestre Field maple	11.5	150	4	4	6	5	Mid	0.5	Good	Co-dominant stems. Fair	20-40	No Action Required	C2

KEY TO NOTATIONS USED:
STEM D = Stem diameter (mm) at 1.5m above ground level
C.C = Height of Crown Clearance (m)
R.C = Remaining Contribution (yrs)

Arf = Measurement around base (mm)

AGE CLASS:
Yng = Young
Mid = Middle aged
Mat = Mature
O/Mat = Over mature
D = Dead

Category Grading
A = High quality & value
B = Moderate quality & value
C = Low quality & value
R = In need of removal

NO	SPECIES	HEIGHT m	STEM D	BRANCH SPREAD m				AGE CLASS	C.C (m)	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	R. C.	PRELIMINARY MANAGEMENT	CATEGORY GRADING
				N	E	S	W							
70	Salix sp. Willow	19.5	280	6	2	4	5	Mat	1.9	Fair	Single stem. Good	10-20	Consider the long term management; Pollard within 3 to 5 years	C2
71	Tilia x europaea (Common lime)	7.0	170	4	4	2	4	Yng	0.2	Fair	Single stem. Poor; suppressed by neighbours	20-40	No Action Required	C2
72	Salix sp. Willow	14.0	140	1	1	3	1	Mid	5.0	Fair	Co-dominant stems. Poor; tall, narrow crown, suppressed by neighbours	10-20	No Action Required	C2
73	Acer sp. (Maple)	7.5	120	-	-	-	-	-	-	Dead	Single stem.	-	Fell; within 2 years	R
74	Acer campestre Field maple	8.5	140	1	1	3	3	Mid	0.1	Fair	Multi stem coppice. Fair; suppressed by neighbours	10-20	No Action Required	C2
75	Fagus sylvatica (Common beech)	13.0	130	4	3	3	3	Yng	1.5	Good	Co-dominant stems. Fair	20-40	No Action Required	C2
76	Salix sp. Willow	19.5	290	8	5	4	3	Mat	3.0	Good	Single stem. Fair	10-20	Consider the long term management; Pollard within 3 to 5 years	C2
77	Tilia x europaea (Common lime)	13.5	250	6	4	4	4	Mid	0.0	Fair	Co-dominant stems from 2m. Fair; suppressed by neighbours	> 40	No Action Required	B2
78	Tilia x europaea (Common lime)	16.5	170	2	3	5	3	Yng	4.5	Poor	Single stem. Fair; tall, narrow crown, suppressed by neighbours	20-40	No Action Required	C2
79	Fraxinus excelsior (Common ash)	15.0	280	4	4	4	5	Mid	2.0	Fair	Co-dominant stems from 2m. Fair	20-40	No Action Required	B2
80	Acer campestre Field maple	10.5	160	2	4	4	4	Yng	2.1	Good	Co-dominant stems from 2m. Fair; tall, narrow crown, suppressed by neighbours	10-20	No Action Required	B2
81	Prunus avium Wild Cherry	13.5	150	2	3	3	3	Yng	4.0	Poor	Single stem. Fair; tall, narrow crown, co-suppressed by neighbours	20-40	No Action Required	C2
82	Salix sp. Willow	20.0	320	4	4	7	4	Mat	4.5	Good	Single stem. Good	10-20	Consider the long term management; Pollard within 3 to 5 years	C2
83	Salix sp. Willow	21.0	290	8	4	3	4	Mat	2.8	Good	Co-dominant stems. Fair	10-20	Consider the long term management; Pollard within 3 to 5 years	C2
84	Fagus sylvatica (Common beech)	11.5	120	4	4	2	4	Yng	1.7	Good	Co-dominant stems from 4m. Fair	20-40	No Action Required	C2
85	Salix sp. Willow	20.5	230	6	3	8	4	Mat	3.0	Good	Co-dominant stems. Good	10-20	Consider the long term management; Pollard within 3 to 5 years	C2
86	Betula pendula Silver Birch	8.0	130	6	2	1	2	Mid	3.0	Fair	Single stem. Poor; lean to N. Ivy obscured	10-20	Cut ivy at base; within 2 years	C2
87	Prunus sp. Prunus	9.0	130	3	3	3	3	Mid	2.5	Good	Single stem. Good; ivy partially obscuring trunk	20-40	Cut ivy at base; within 2 years	C2
88	Quercus robur (Common oak)	13.0	130	2	3	2	1	Mid	2.8	Good	Single stem. Fair; tall, narrow crown, co-suppressed by neighbours	20-40	No Action Required	C2
89	Salix sp. Willow	20.5	350	7	4	5	4	Mat	3.5	Good	Single stem. Good	10-20	Consider the long term management; Pollard within 3 to 5 years	C2
90	Tilia x europaea (Common lime)	11.5	170	4	3	3	3	Mid	1.2	Good	Single stem. Good; ivy obscuring trunk	20-40	Cut ivy at base; within 2 years	B2
101	Betula pendula (Silver Birch)	6.0	90	2	2	2	2	Yng	2.0	Good	Co-dominant stems from 1.9m	20-40	None	C2
102	Betula pendula (Silver Birch)	5.5	90	1	1	1	1	Yng	2.0	Good	Co-dominant stems from 2.2m	20-40	None	C2
103	Betula pendula (Silver Birch)	5.5	60	1	1	1	1	Yng	2.0	Good	Single stem	20-40	None	C2

KEY TO NOTATIONS USED: STEM D = Stem diameter (mm) at 1.5m above ground level C.C = Height of Crown Clearance (m) R.C = Remaining Contribution (yrs) Arf = Measurement around base (mm) AGE CLASS: Yng = Young Mid = Middle aged Mat = Mature O/Mat = Over mature D = Dead Category Grading A = High quality & value B = Moderate quality & value C = Low quality & value R = In need of removal														
NO	SPECIES	HEIGHT m	STEM D	BRANCH SPREAD m				AGE CLASS	C.C (m)	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	R. C.	PRELIMINARY MANAGEMENT	CATEGORY GRADING
				N	E	S	W							
104	Crataegus monogyna (Common Hawthorn)	4.5	80	1	2	2	2	Yng	2.4	Good	Co-dominant stems from 1.5m	20-40	None	C2
105	Crataegus monogyna (Common Hawthorn)	4.5	70	2	2	1	2	Yng	2.4	Good	Co-dominant stems from 1.5m	20-40	None	C2
106	Malus domestica (Apple)	3.5	30	1	1	1	1	Yng	1.3	Good	Single stem	20-40	None	C2
107	Fraxinus excelsior (Common Ash)	7.5	170	2	3	2	2	Yng	2.2	Slightly thinning crown	Slight dieback, poor branching pattern	20-40	None	C2
108	Prunus Padus (Bird Cherry)	4.0	100	1	1	1	1	Yng	2.2	Dieback in crown 40%	Multi-stemmed from 2.2m	10-20	None	C2
109	Prunus Padus (Bird Cherry)	6.0	100	1	1	1	1	Yng	2.2	Dieback started 10%, Canker S 1.8m	Co-dominant stems from 0.9m	10-20	None	C2
110	Prunus Padus (Bird Cherry)	4.5	50	1	1	1	1	Yng	-	Poor, leaning, wounds W 1.0m, dieback 60%	Leaning over path	<10	Fell, low	R
111	Prunus Padus (Bird Cherry)	5.0	50	2	2	2	2	Yng	2.4	Dieback 30%	Co-dominant stems from 0.2m	<10	None	R
112	Pinus sylvestris (Scots Pine)	8.5	300	4	3	4	4	Yng	2.4	Good, some needle browning	Single stem	20-40	None	A2
113	Pinus sylvestris (Scots Pine)	9.0	290	4	5	5	3	Yng	2.4	Good, some needle browning	Single stem	20-40	None	A2
114	Betula pendula (Silver Birch)	6.5	110	2	2	2	2	Yng	1.9	Good	Multi-stemmed from 1.7m	10-20	None	C2
115	Betula pendula (Silver Birch)	6.0	90	2	2	1	1	Yng	2.3	Good	Co-dominant stems from 1.6m	20-40	None	C2
116	Salix caprea (Goat Willow)	7.0	140	3	2	3	3	Yng	2.5	Good	Multi-stemmed from 1.6m	10-20	None	C2
117	Sorbus aria (var.) (White Willow variety)	5.0	90	2	2	2	2	Yng	2.0	Good	Multi-stemmed from 2.3m	20-40	None	C2
118	Sorbus aria (var.) (White Willow variety)	4.0	50	1	1	1	1	Yng	1.8	Good	Multi-stemmed from 1.2m	10-20	None	C2
119	Acer platanoides (Crimson King)	5.0	70	1	2	1	1	Yng	2.8	Fair, wounds on bark	Single stem	10-20	None	C2
120	Acer platanoides (Crimson King)	7.5	170	3	3	3	4	Yng	2.2	Good	Single stem	20-40	None	B2
121	Sorbus aria (var.) (White Willow variety)	3.5	50	1	1	1	1	Yng	1.4	Fair	Multi-stemmed from 1.3m	10-20	None	C2
122	Acer platanoides (Crimson King)	7.5	170	4	3	4	3	Yng	2.0	Fair, decay in union 1.3m	Co-dominant stems from 1.3	10-20	None	C2
123	Sorbus aria (var.) (White Willow variety)	4.5	50	2	1	2	2	Yng	1.5	Fair, suppressed by neighbour	Multi-stemmed from 1.3m	10-20	None	C2
124	Sorbus aria (var.) (White Willow variety)	4.0	100	2	2	2	2	Yng	1.8	Good	Single stem	20-40	None	C2
125	Fraxinus excelsior (Common Ash)	4.0	50	1	1	1	1	Yng		Good	Multi-stemmed from 0.6m	10-20	None	C2
126	Prunus Padus (Bird Cherry)	4.5	90	1	1	1	1	Yng	1.5	Fair, crown dieback	Multi-stemmed	10-20	None	C2
127	Crataegus monogyna (Common Hawthorn)	4.5	140	3	3	3	3	Yng	-	Good	Multi-stemmed group	20-40	None	C2
128	Prunus Padus (Bird Cherry)	8.0	90	3	2	3	1	Yng	-	Fair	Suppressed by neighbour	10-20	None	C2
129	Fraxinus excelsior (Common Ash)	11.0	250	4	4	3	3	Yng	1.6	Good, bark wound N 1.3m	Multi-stemmed from 2.2m	20-40	None	B2
130	Quercus robur (Common Oak)	9.0	240	1	2	4	3	Yng	2.1	Good	Unbalanced crown, all development on south side	20-40	None	B2
131	Fraxinus excelsior (Common Ash)	12.0	250	2	4	5	2	Yng	2.0	Good	Multi-stemmed from 2.2m	20-40	None	B2

KEY TO NOTATIONS USED:
STEM D = Stem diameter (mm) at 1.5m above ground level
C.C = Height of Crown Clearance (m)
R.C = Remaining Contribution (yrs)

Arf = Measurement around base (mm)

AGE CLASS:
Yng = Young
Mid = Middle aged
Mat = Mature
O/Mat = Over mature
D = Dead

Category Grading
A = High quality & value
B = Moderate quality & value
C = Low quality & value
R = In need of removal

NO	SPECIES	HEIGHT m	STEM D	BRANCH SPREAD m				AGE CLASS	C.C (m)	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	R. C.	PRELIMINARY MANAGEMENT	CATEGORY GRADING
				N	E	S	W							
132	Fraxinus excelsior (Common Ash)	11.5	230	1	1	4	3	Yng	2.2	Good, pruning stub with decay SW 1.9m	Unbalanced crown, suppressed by neighbour	10-20	None	C2
133	Quercus robur (Common Oak)	14.5	330	4	3	4	4	Yng	2.8	Good	Multi-stemmed from 3.0m	40+	None	A2
134	Fraxinus excelsior (Common Ash)	12.5	200	4	4	1	1	Yng	2.8	Good	Unbalanced crown, suppressed by neighbour	20-40	None	B2
135	Crataegus monogyna (Common Hawthorn)	5.5	90	2	1	1	1	Yng	-	Good	Fair, suppressed by neighbour	10-20	None	C2
136	Crataegus monogyna (Common Hawthorn)	6.0	70	2	2	1	2	Yng	1.4	Good	Multi-stemmed	20-40	None	C2
137	Crataegus monogyna (Common Hawthorn)	5.5	70	1	1	1	2	Yng	1.2	Good	Multi-stemmed	20-40	None	C2
138	Fraxinus excelsior (Common Ash)	7.5	100	3	1	-	2	Yng	-	Good	Poor, unbalanced crown, suppressed by neighbour	10-20	None	C2
139	Fraxinus excelsior (Common Ash)	13.5	250	3	4	5	2	Yng	3.0	Good, some dieback	Fair	20-40	None	B2
140	Fraxinus excelsior (Common Ash)	14.0	290	3	3	6	4	Yng	2.4	Good, deadwood <50mm	Multi-stemmed from 2.7m	20-40	None	B2
141	Fraxinus excelsior (Common Ash)	14.5	280	5	5	2	3	Mid	2.7	Good	Multi-stemmed from 2.4m	20-40	None	B2
142	Acer campestre (Field Maple)	6.0	100	5	3	1	1	Yng	2.9	Fair	Fair, suppressed by neighbour	10-20	None	C2
143	Acer campestre (Field Maple)	8.0	130	1	2	3	1	Yng	-	Good, dieback started	Fair, suppressed by neighbour	10-20	None	C2
144	Fraxinus excelsior (Common Ash)	13.0	170	4	2	3	3	Yng	-	Fair, part girdled by tree tie which has grown in	Fair, Single stem	20-40	None	B2
145	Crataegus monogyna (Common Hawthorn)	5.5	50	2	1	1	1	Yng	-	Good	Multi-stemmed	10-20	None	C2
146	Acer campestre (Field Maple)	6.0	55	3	1	1	1	Yng	-	Good	Multi-stemmed	20-40	None	C2
147	Fraxinus excelsior (Common Ash)	15.5	280	7	5	2	6	Yng	2.4	Good, pruning wounds occluding well	Major union at 1.4m with pronounced Mattheck ears	20-40	None	B2
148	Fraxinus excelsior (Common Ash)	14.5	250	5	2	5	4	Yng	1.9	Good	Single stem	20-40	None	A2
149	Cornus sp.	8.0	70	3	2	1	3	Yng	-	Good	Multi-stemmed	10-20	None	C2
150	Betula pendula (Silver Birch)	6.0	110	-	-	-	-	-	-	Dead	No crown, dead	0	Fell, low	R
151	Acer campestre (Field Maple)	9.0	130	3	1	1	3	Yng	2.0	Good	Co-dominant stems from 0.6m	20-40	None	C2
152	Acer campestre (Field Maple)	12.5	190	5	3	3	4	Yng	1.0	Good	Co-dominant stems from 0.7m	20-40	None	B2
153	Prunus Padus (Bird Cherry)	5.5	50	1	1	1	1	Yng	-	Fair	Suppressed by neighbour	<10	None	C2
154	Betula pendula (Silver Birch)	11.0	180	2	2	2	2	Yng	1.9	Fair, crown dieback 20%	Single stem	10-20	None	C2
155	Betula pendula (Silver Birch)	9.5	170	1	1	2	2	Yng	2.9	Poor, crown dieback 60%	Single stem	<10	None	C2
156	Fraxinus excelsior (Common Ash)	14.0	170	3	3	3	3	Yng	2.4	Good	Co-dominant stems	20-40	None	B2
157	Fraxinus excelsior (Common Ash)	14.0	180	3	2	4	2	Yng	2.3	Good, wound NE 1.1-1.7m	Single stem	20-40	None	B2

KEY TO NOTATIONS USED:
STEM D = Stem diameter (mm) at 1.5m above ground level
C.C = Height of Crown Clearance (m)
R.C = Remaining Contribution (yrs)

Arf = Measurement around base (mm)

AGE CLASS:
Yng = Young
Mid = Middle aged
Mat = Mature
O/Mat = Over mature
D = Dead

Category Grading
A = High quality & value
B = Moderate quality & value
C = Low quality & value
R = In need of removal

NO	SPECIES	HEIGHT m	STEM D	BRANCH SPREAD m				AGE CLASS	C.C (m)	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	R. C.	PRELIMINARY MANAGEMENT	CATEGORY GRADING
				N	E	S	W							
158	Acer campestre (Field Maple)	12.0	100	2	2	2	2	Yng	1.0	Good	Co-dominant stems	20-40	None	C2
159	Acer campestre (Field Maple)	12.0	180	3	3	4	3	Mid	-	Good	Multi-stemmed	20-40	None	B2
160	Prunus Padus (Bird Cherry)	6.0	120	1	1	1	1	Yng	1.4	Fair, some dieback	Multi-stemmed	10-20	None	C2
161	Crataegus monogyna (Common Hawthorn)	7.5	110	2	1	2	2	Yng	-	Good	Multi-stemmed	20-40	None	C2
162	Crataegus monogyna (Common Hawthorn)	9.0	160	1	5	4	3	Yng	-	Good	Co-dominant stems	20-40	None	B2
163	Fraxinus excelsior (Common Ash)	13.0	200	3	4	4	4	Yng	2.0	Thin crown, 70% normal cover	Co-dominant stems	10-20	None	C2
164	Acer campestre (Field Maple)	8.0	90	1	1	2	2	Yng	2.5	Good	Co-dominant stems	20-40	None	C2
165	Fraxinus excelsior (Common Ash)	14.0	170	4	4	4	3	Yng	3.2	Fair, dieback, minor deadwood <20mm	Co-dominant stems from 1.2m	20-40	None	C2
166	Fraxinus excelsior (Common Ash)	9.0	90	2	1	2	2	Yng	2.0	Fair, minor deadwood <10mm	Co-dominant stems. Suppressed by neighbour	20-40	None	C2
167	Fraxinus excelsior (Common Ash)	11.0	130	2	2	2	2	Yng	3.0	Good	Single stem	20-40	None	C2
168	Fraxinus excelsior (Common Ash)	11.0	150	2	2	2	2	Yng	2.0	Wound decay NE 0.7-2.0m	Co-dominant stems from 0.7m	<10	None	R
169	Fraxinus excelsior (Common Ash)	11.0	130	2	2	2	2	Yng	3.2	Fair, crown dieback 20%, minor deadwood <20mm	Single stem	20-40	None	C2
170	Acer campestre (Field Maple)	8.5	140	3	2	3	2	Yng	-	Good, very minor deadwood <10mm	Co-dominant stems from 0.2m	20-40	None	C2
171	Acer campestre (Field Maple)	7.5	80	3	2	2	2	Yng	-	Good	Multi-stemmed, suppressed by neighbour	20-40	None	C2
172	Acer campestre (Field Maple)	7.5	110	1	-	3	2	Yng	-	Good	Single stem, ivy clad	20-40	None	C2
173	Acer campestre (Field Maple)	8.0	140	2	-	1	2	Yng	-	Good	Ivy clad	20-40	None	C2
174	Salix caprea (Goat Willow)	7.5	120	2	2	1	3	Yng	-	Fair, crown dieback 20%, minor deadwood <15mm	Multi-stemmed	20-40	None	C2
175	Betula pendula (Silver Birch)	12.5	130	1	2	2	1	Yng	2.8	Fair	Single stem, crown suppressed by neighbour, severe bends in lower stem	10-20	None	C2
176	Betula pendula (Silver Birch)	9.5	80	1	1	1	1	Yng	4.0	Fair	Single stem, suppressed by neighbour	10-20	None	C2
177	Fraxinus excelsior (Common Ash)	9.0	110	2	2	3	2	Yng	2.8	Fair, dieback, minor deadwood <20mm	Co-dominant stems	20-40	None	C2
178	Betula pendula (Silver Birch)	11.0	140	1	1	1	1	Yng		Poor	Single stem, limb snapped off, stub has decay/bracket	<10	None	R
179	Fraxinus excelsior (Common Ash)	7.0	100	1	1	1	1	Yng	2.0	Poor, bark stripping in crown	Co-dominant stems from 0.4m. Poor crown, suppressed by neighbours	<10	None	R
180	Betula pendula (Silver Birch)	8.5	130	1	3	2	-	Yng	2.5	Good	Poor, suppressed by neighbour, ivy clad	10-20	None	C2
181	Fraxinus excelsior (Common Ash)	11.5	120	4	4	1	3	Yng	2.5	Fair, dieback, deadwood <50mm	Co-dominant stems from 1.1m	10-20	None	C2
182	Fraxinus excelsior (Common Ash)	11.5	120	1	3	4	3	Yng	3.0	Fair, dieback, deadwood <30mm	Single stem, ivy on lower stem	10-20	None	C2

KEY TO NOTATIONS USED:
STEM D = Stem diameter (mm) at 1.5m above ground level
C.C = Height of Crown Clearance (m)
R.C = Remaining Contribution (yrs)

Arf = Measurement around base (mm)

AGE CLASS:
Yng = Young
Mid = Middle aged
Mat = Mature
O/Mat = Over mature
D = Dead

Category Grading
A = High quality & value
B = Moderate quality & value
C = Low quality & value
R = In need of removal

NO	SPECIES	HEIGHT m	STEM D	BRANCH SPREAD m				AGE CLASS	C.C (m)	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	R. C.	PRELIMINARY MANAGEMENT	CATEGORY GRADING
				N	E	S	W							
183	Fraxinus excelsior (Common Ash)	10.5	170	2	1	2	2	Yng	3.5	Fair, dieback	Single stem, thin crown	10-20	None	C2
184	Acer campestre (Field Maple)	9.5	100	1	1	1	1	Yng	-	Good	Single stem	20-40	None	C2
185	Crataegus monogyna (Common Hawthorn)	6.0	90	2	1	1	1	Yng	-	Good	Co-dominant stems from 0.3m	20-40	None	C2
186	Fraxinus excelsior (Common Ash)	12.0	160	3	3	2	2	Yng	2.5	Good	Single stem, co-dominant stems from 2.2m. Ivy clad	20-40	None	B2
187	Crataegus monogyna (Common Hawthorn)	7.0	60	2	2	2	2	Yng	-	Good	Multi-stemmed	20-40	None	C2
188	Fraxinus excelsior (Common Ash)	12.0	110	2	2	3	2	Yng	2.8	Good	Co-dominant	20-40	None	C2
189	Alnus glutinosa (Common Alder)	7.0	110	1	1	1	1	Yng	2.3	Good	Single stem	20-40	None	C2
190	Prunus Padus (Bird Cherry)	8.0	80	1	1	1	2	Yng	-	Good	Multi-stemmed	20-40	None	C2
191	Crataegus monogyna (Common Hawthorn)	7.0	120	-	-	2	2	Yng	-	Good	Multi-stemmed,	20-40	None	C2
192	Fraxinus excelsior (Common Ash)	10.5	110	2	-	-	2	Yng	3.3	Good	Single stem, suppressed by neighbour	20-40	None	C2
193	Acer campestre (Field Maple)	7.0	140	3	3	1	1	Yng	-	Good	Multi-stemmed	20-40	None	C2
194	Fraxinus excelsior (Common Ash)	13.0	230	3	4	2	2	Yng	2.8	Good	Single stem, Co-dominant stems from 3.0, vertical cracks	10-20	None	C2
195	Fraxinus excelsior (Common Ash)	13.0	150	3	3	3	3	Yng	3.5	Good, Japanese Knot Weed adjacent	Co-dominant stems from 0.7m	20-40	Treatment of JKW with approved herbicide	C2
196	Fraxinus excelsior (Common Ash)	13.0	180	4	4	3	2	Yng	3.5	Good, minor wounds to stem	Single stem	20-40	None	B2
197	Fraxinus excelsior (Common Ash)	13.0	140	2	2	2	2	Yng	3.5	Good	Single stem	20-40	None	C2
198	Acer campestre (Field Maple)	7.5	140	2	1	1	3	Yng	-	Good	Co-dominant stems from 0.7m	20-40	None	C2
199	Fraxinus excelsior (Common Ash)	13.5	210	2	3	3	3	Yng	2.5	Good	Single stem	40+	None	A2
200	Crataegus monogyna (Common Hawthorn)	4.5	90	2	2	2	2	Yng	-	Good	Co-dominant stems	20-40	None	C2
201	Acer campestre (Field Maple)	7.5	120	2	2	3	3	Yng	-	Good	Co-dominant stems from 0.7m	20-40	None	C2
202	Prunus Padus (Bird Cherry)	7.5	80	1	1	2	1	Yng	1.5	Fair	Multi-stemmed	20-40	None	C2
203	Acer campestre (Field Maple)	6.0	70	2	2	1	1	Yng	-	Good	Multi-stemmed	20-40	None	C2
204	Acer campestre (Field Maple)	7.0	70	1	1	1	1	Yng	-	Good, Japanese Knot Weed adjacent	Single stem	20-40	Treatment of JKW with approved herbicide	C2
205	Quercus robur (Common Oak)	12.0	230	3	4	3	3	Mid	2.8	Fair, some dieback, very	Single stem, full but thin crown	40+	None	A2
206	Acer campestre (Field Maple)	6.5	100	1	1	1	1	Yng	-	Good, Japanese Knot Weed	Co-dominant stems from 0.9	20-40	Treatment of JKW with approved herbicide	C2
207	Fraxinus excelsior (Common Ash)	12.0	180	3	3	3	2	Yng	3.0	Fair, wound NW 0.9, minor deadwood <20mm	Single stem	20-40	None	B2
208	Fraxinus excelsior (Common Ash)	12.0	150	3	2	3	2	Yng	3.0	Fair, minor deadwood <25mm	Single stem	20-40	None	C2

KEY TO NOTATIONS USED:
STEM D = Stem diameter (mm) at 1.5m above ground level
C.C = Height of Crown Clearance (m)
R.C = Remaining Contribution (yrs)

Arf = Measurement around base (mm)

AGE CLASS:
Yng = Young
Mid = Middle aged
Mat = Mature
O/Mat = Over mature
D = Dead

Category Grading
A = High quality & value
B = Moderate quality & value
C = Low quality & value
R = In need of removal

NO	SPECIES	HEIGHT m	STEM D	BRANCH SPREAD m				AGE CLASS	C.C (m)	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	R. C.	PRELIMINARY MANAGEMENT	CATEGORY GRADING
				N	E	S	W							
209	Betula pendula (Silver Birch)	9.5	170	1	1	2	3	Yng	1.9	Good	Single stem	20-40	None	B2
210	Fraxinus excelsior (Common Ash)	10.0	130	2	1	2	2	Yng	3.0	Fair, minor deadwood <25mm	Single stem	20-40	None	C2
211	Crataegus monogyna (Common Hawthorn)	4.5	50	1	1	1	1	Yng	-	Good	Multi-stemmed, good	20-40	None	C2
212	Fraxinus excelsior (Common Ash)	10.0	130	2	1	2	3	Yng	1.7	Fair, dieback, minor deadwood <25mm	Single stem, thin crown	20-40	None	C2
213	Fraxinus excelsior (Common Ash)	10.5	160	2	2	2	3	Yng	2.2	Fair, dieback, minor deadwood <25mm	Single stem, thin crown	20-40	None	B2
214	Fraxinus excelsior (Common Ash)	9.5	110	2	2	2	2	Yng	2.3	Fair, dieback	Co-dominant stems from 0.3m	20-40	None	C2
215	Crataegus monogyna (Common Hawthorn)	5.0	50	2	2	2	2	Yng	-	Good	Multi-stemmed from 0.6m	20-40	None	C2
216	Acer campestre (Field Maple)	7.5	90	2	1	2	1	Yng	-	Good	Single stem	20-40	None	C2
217	Acer campestre (Field Maple)	5.5	70	1	1	1	1	Yng	-	Good	Multi-stemmed from 0.7m	20-40	None	C2
218	Fraxinus excelsior (Common Ash)	7.5	130	2	2	2	2	Yng	1.9	Good	Single stem	40+	None	C2
219	Acer campestre (Field Maple)	6.5	90	2	2	2	2	Yng	-	Good	Multi-stemmed from 0.3m	20-40	None	C2
220	Fraxinus excelsior (Common Ash)	6.5	70	1	1	2	2	Yng	-	Good	Co-dominant stems	20-40	None	C2
221	Acer campestre (Field Maple)	8.0	130	2	2	2	2	Yng	1.5	Good	Co-dominant stems from 1.7m	20-40	None	C2
222	Quercus robur (Common Oak)	8.0	110	2	2	2	2	Yng	-	Good	Single stem	40+	None	C2
223	Acer campestre (Field Maple)	8.0	140	3	3	3	3	Yng	-	Good	Multi-stemmed from 0.4m	20-40	None	C2
224	Quercus robur (Common Oak)	7.5	90	2	2	2	2	Yng	-	Good	Single stem	40+	None	C2
225	Crataegus monogyna (Common Hawthorn)	4.0	130	1	-	1	3	Yng	-	Good	Single stem	20-40	None	C2
226	Fraxinus excelsior (Common Ash)	9.0	150	2	2	3	2	Yng	-	Good	Co-dominant stems	20-40	None	C2
227	Prunus avium (Wild Cherry/Gean)	7.5	120	1	1	2	1	Yng	2.2	Poor, severe dieback, wound W.O 7m	Poor form	10-20	None	C2
228	Acer campestre (Field Maple)	6.5	120	2	2	2	2	Yng	-	Good	Poor form from union at 1.1m	10-20	None	C2
229	Crataegus monogyna (Common Hawthorn)	5.5	110	2	2	2	2	Yng	-	Good, Japanese Knot Weed	Multi-stemmed	20-40	Treatment of JKW with approved herbicide	C2
230	Tilia x europaea (Common Lime)	7.5	210	4	3	2	2	Yng	-	Good	Single stem, ivy clad	40+	Remove ivy	A2
231	Prunus Padus (Bird Cherry)	7.5	200	2	2	2	2	Yng	-	Fair	Single stem, ivy clad	20-40	None	B2
232	Fraxinus excelsior	14.0	250	4	4	2	1	Mid	2.0	Good, minor deadwood <25	Single stem, ivy clad	20-40	None	B2
233	Fraxinus excelsior	16.0	190	2	4	2	2	Mid	-	Good	Co-dominant stems from 1.1m	20-40	None	B2
234	Fraxinus excelsior	15.0	230	3	3	3	3	Mid	3.0	Good	Single stem, ivy clad	40+	None	A2
235	Acer campestre	8.0	130	2	2	2	2	Yng	-	Good	Single stem, suppressed by neighbour	20-40	None	C2
236	Fraxinus excelsior	12.5	130	2	2	2	2	Yng	3.0	Good	Co-dominant stems	20-40	None	C2
237	Fraxinus excelsior	12.0	150	2	1	1	1	Yng	3.5	Good	Single stem	20-40	None	C2
238	Salix alba	17.0	320	4	4	4	4	Mid	5.0	Good	Co-dominant stems from 1.2m, ivy clad	20-40	None	B2
239	Salix alba	17.0	270	3	4	3	3	Mat	-	Good	Multi-stemmed. 4 N from 0.2m	10-20	None	C2

KEY TO NOTATIONS USED:
STEM D = Stem diameter (mm) at 1.5m above ground level
C.C = Height of Crown Clearance (m)
R.C = Remaining Contribution (yrs)

Arf = Measurement around base (mm)

AGE CLASS:
Yng = Young
Mid = Middle aged
Mat = Mature
O/Mat = Over mature
D = Dead

Category Grading
A = High quality & value
B = Moderate quality & value
C = Low quality & value
R = In need of removal

NO	SPECIES	HEIGHT m	STEM D	BRANCH SPREAD m				AGE CLASS	C.C (m)	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	R. C.	PRELIMINARY MANAGEMENT	CATEGORY GRADING
				N	E	S	W							
240	Salix	16.0	170	1	1	1	1	Yng	3.0	Good	Single stem, narrow crown	20-40	None	B2
241	Fraxinus excelsior	13.0	190	3	3	3	3	Yng	-	Good	Single stem, co-dominant tree with neighbours	20-40	None	B2
242	Salix alba	11.0	160	1	2	1	-	Yng	2.5	Good	Single stem	10-20	None	B2
243	Fraxinus excelsior	11.0	180	3	4	3	2	Mid	2.0	Good, minor deadwood <20mm	Co-dominant stems from 0.2m, ivy clad	20-40	None	B2
244	Acer campestre	8.0	90	1	1	1	1	Yng	3.0	Good	Single stem, suppressed by neighbour	10-20	None	C2
245	Salix	12.5	170	2	2	3	2	Yng	2.8	Good	Single stem	20-40	None	B2
246	Fraxinus excelsior	12.5	130	3	3	1	2	Yng	4.0	Good	Single stem	20-40	None	C2
247	Salix	11.5	150	1	1	1	1	Yng	4.0	Poor, signs of decay in crown	Single stem and 2 dead stems	<10	None	R
248	Fraxinus excelsior	12.5	210	2	2	3	2	Yng	3.0	Good	Single stem, ivy clad	20-40	None	B2
249	Fraxinus excelsior	16.0	220	4	3	4	3	Mid	4.0	Good, some dieback	Co-dominant stems, ivy clad	20-40	None	B2
250	Fraxinus excelsior	9.0	140	-	2	1	1	Yng	4.5	Fair	Single stem, suppressed by neighbour, ivy clad	10-20	None	C2
251	Salix	13.0	220	2	3	1	1	Yng	4.0	Poor	Single stem, narrow crown, ivy clad	10-20	None	C2
252	Salix	7.0	120						-	Dead	Stem only, dead	<10	None	R
253	Acer campestre	9.5	130	3	3	1	2	Yng	-	Good	Multi-stemmed (3) from 0.4m	20-40	None	C2
254	Fraxinus excelsior	14.5	180	3	3	3	3	Yng	4.0	Good	Single stem	40+	None	B2
255	Salix	11.5	160	3	3	2	1	Yng	2.0	Poor, severe dieback on 2 stems	Multi-stemmed (4) from 0.1m	10-20	None	C2
256	Fraxinus excelsior	12.5	140	2	2	2	1	Yng	5.0	Good	Single stem	20-40	None	C2
257	Fraxinus excelsior	13.0	160	2	2	1	1	Yng	4.0	Poor, severe dieback, deadwood <30mm	Single stem	<10	None	R
258	Salix	13.0	160	3	3	2	2	Yng	3.0	Good	Multi-stemmed, ivy clad	10-20	None	C2
259	Salix	11.5	130	1	1	2	1	Yng	4.0	Fair	Co-dominant stems	10-20	None	C2
260	Fraxinus excelsior	11.5	170	1	4	4	2	Yng	4.0	Good	Single stem, ivy clad	20-40	None	B2
261	Crataegus monogyna	4.5	80	1	1	1	1	Yng	-	Good	Single stem	20-40	None	C2
262	Fraxinus excelsior	8.5	90	2	2	2	2	Yng	4.0	Good	Single stem	20-40	None	C2
263	Fraxinus excelsior	8.5	100	2	2	2	2	Yng	2.5	Good	Single stem	20-40	None	C2
264	Fraxinus excelsior	13.0	190	2	4	3	3	Yng	3.0	Good	Multi-stemmed, ivy clad	20-40	None	B2
265	Fraxinus excelsior	13.5	200	2	2	2	2	Yng	4.5	Fair, dieback, deadwood <40mm	Single stem, ivy clad	20-40	None	B2
266	Salix	13.0	240	2	2	2	2	Yng	3.0	Good	Co-dominant stems from 0.3m, ivy clad	10-20	None	C2
267	Salix	12.0	260	1	1	4	2	Yng	4.0	Good	Single stem, leaning to SW	20-40	None	B2
268	Fraxinus excelsior	12.0	160	2	2	3	3	Yng	3.3	Good	Single stem	20-40	None	B2
269	Fraxinus excelsior	12.0	160	1	3	2	1	Yng	4.0	Fair, some dieback, deadwood <15mm	Single stem	20-40	None	B2
270	Fraxinus excelsior	12.5	190	1	1	1	2	Yng	3.4	Fair, dieback, deadwood <40mm	Single stem, narrow crown	10-20	None	C2

KEY TO NOTATIONS USED:

STEM D = Stem diameter (mm) at 1.5m above ground level

C.C = Height of Crown Clearance (m)

R.C = Remaining Contribution (yrs)

Arf = Measurement around base (mm)

AGE CLASS:

Yng = Young

Mid = Middle aged

Mat = Mature

O/Mat = Over mature

D = Dead

Category Grading

A = High quality & value

B = Moderate quality & value

C = Low quality & value

R = In need of removal

NO	SPECIES	HEIGHT m	STEM D	BRANCH SPREAD m				AGE CLASS	C.C (m)	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	R. C.	PRELIMINARY MANAGEMENT	CATEGORY GRADING
				N	E	S	W							
271	Fraxinus excelsior	12.0	170	2	2	2	2	Yng	6.0	Fair, some dieback, deadwood <15mm	Single stem, ivy clad	10-20	None	C2
272	Fraxinus excelsior	12.0	150	1	2	2	3	Yng	2.0	Fair, some dieback, deadwood <15mm	Single stem	20-40	None	B2
273	Salix	14.5	180	2	1	4	6	Mid	3.0	Fair, some dieback	Multi-stemmed (8) from 0.4m	10-20	None	C2
274	Crataegus monogyna	7.0	140	1	1	1	2	Yng	1.0	Good	Single stem	20-40	None	C2
275	Salix	8.5	150	-	1	2	4	Yng	2.0	Fair	Leaning towards road	10-20	None	C2
276	Fraxinus excelsior	12.0	120	2	1	2	3	Yng	4.0	Good, minor dieback	Single stem, ivy clad	20-40	None	C2
277	Fraxinus excelsior	11.0	160	1	1	1	4	Yng	4.0	Good	Single stem with second minor stem	20-40	None	B2
278	Fraxinus excelsior	11.5	170	1	2	1	3	Yng	4.0	Poor, dieback in lower crown, deadwood <50mm	Co-dominant stems, poor form, narrow crown	10-20	None	C2
279	Fraxinus excelsior	13.0	130	2	2	4	4	Yng	4.0	Fair, dieback in lower crown, deadwood <50mm	Co-dominant stems, ivy clad	20-40	None	C2
280	Fraxinus excelsior	14.0	230	3	4	3	4	Yng	3.0	Fair, dieback in lower crown, deadwood <30mm	Single stem, ivy clad	20-40	None	B2
281	Quercus robur	7.0	80	1	1	1	2	Yng	4.0	Fair, shaded out in understorey	Single stem, ivy clad	10-20	None	C2
282	Fraxinus excelsior	13.0	230	2	3	3	3	Yng	4.0	Fair, dieback in lower crown, deadwood <30mm	Single stem, second smaller stem, ivy clad	20-40	None	B2
283	Fraxinus excelsior	13.0	120	1	4	2	1	Yng	6.0	Fair, dieback in lower crown, deadwood <30mm	Single stem, second smaller stem, ivy clad	20-40	None	C2
284	Fraxinus excelsior	13.0	190	3	4	4	3	Yng	6.0	Fair dieback in lower crown, deadwood <30mm	Co-dominant stems, ivy clad	20-40	None	B2
285	Fraxinus excelsior	8.0	170	1	1	1	1	-	-	Dead	2 stems	-	None	R
286	Fraxinus excelsior	13.0	170	1	2	4	2	Yng	5.0	Fair	Single stem, poor form, ivy clad	20-40	None	B2
287	Salix	11.0	220	1	1	1	1	Dead	9.0	Dead		-	Fell, low	R
288	Acer campestre	9.0	120	2	2	2	2	Yng	1.0	Good	Co-dominant stems from 0.3, ivy clad	10-20	None	C2
289	Salix	9.0	140	2	2	2	2	-	9.0	Dead	Multi-stemmed, ivy clad	-	Fell, low	R
290	Fraxinus excelsior	13.0	220	2	2	3	2	Yng	3.5	Fair, some dieback in lower crown, deadwood <25mm	Tall narrow crown, Single stem	20-40	None	B2
291	Salix	13.5	200	2	2	3	2	Mid	4.0	Poor, severe dieback	Multi-stemmed, narrow crown	<10	None	R
292	Salix	14.0	270	3	3	3	3	Mid	4.0	Good, minor dieback, lower crown <20mm	Single stem	10-20	None	C2
293	Crataegus monogyna	7.0	80	2	2	2	2	Yng	1.8	Good	Co-dominant stems from 0.5m	20-40	None	C2
294	Fraxinus excelsior	12.5	140	2	2	2	2	Yng	4.0	Fair	Single stem, narrow crown	20-40	None	C2
295	Acer campestre	9.5	110	2	2	2	2	Yng	4.0	Good	Multi-stemmed	20-40	None	C2
296	Salix	12.0	160	2	4	2	1	Yng	4.0	Poor, severe dieback, deadwood <75mm	Multi-stemmed, ivy clad	<10	Fell, low	R
297	Fraxinus excelsior	13.5	240	4	3	2	3	Mid	4.5	Good	Co-dominant stems from 1.8m	20-40	None	B2
298	Fraxinus excelsior	13.0	190	2	3	1	2	Mid	3.5	Fair, dieback in lower crown, deadwood <30mm	Co-dominant stems from 1.6m	20-40	None	B2
299	Fraxinus excelsior	13.0	170	4	3	2	2	Yng	4.0	Fair, dieback in lower crown, deadwood <30mm	Co-dominant stems from 0.4m	20-40	None	B2
300	Fraxinus excelsior	8.0	90	1	1	1	1	Yng	3.5	Fair	Poor, suppressed by neighbour	10-20	None	C2
301	Fraxinus excelsior	13.0	180	3	3	2	2	Yng	3.5	Good	Single stem, ivy clad	20-40	None	B2

KEY TO NOTATIONS USED:
STEM D = Stem diameter (mm) at 1.5m above ground level
C.C = Height of Crown Clearance (m)
R.C = Remaining Contribution (yrs)

Arf = Measurement around base (mm)

AGE CLASS:
Yng = Young
Mid = Middle aged
Mat = Mature
O/Mat = Over mature
D = Dead

Category Grading
A = High quality & value
B = Moderate quality & value
C = Low quality & value
R = In need of removal

NO	SPECIES	HEIGHT m	STEM D	BRANCH SPREAD m				AGE CLASS	C.C (m)	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	R. C.	PRELIMINARY MANAGEMENT	CATEGORY GRADING
				N	E	S	W							
302	Fraxinus excelsior	13.5	150	2	3	2	2	Yng	3.5	Fair, dieback in lower crown, deadwood <25mm	Co-dominant stems from 0.3m, ivy clad	20-40	None	C2
303	Salix	14.5	270	4	3	3	2	Mid		Good	Multi-stemmed (6)	20-40	None	B2
304	Salix	16.0	300	3	3	4	2	Mat	3.0	Good	Multi-stemmed (5)	10-20	None	C2
305	Fraxinus excelsior	14.5	180	5	4	3	4	Mid	3.5	Good	Co-dominant stems, ivy clad	20-40	None	B2
306	Fraxinus excelsior	13.0	240	3	2	1	1	Mid	3.0	Good	Single stem, ivy clad	20-40	None	B2
307	Fraxinus excelsior	12.0	190	2	2	1	2	Mid	2.0	Poor	Multistemmed (4) from 0.2m, suppressed by neighbour	10-20	None	C2
308	Acer campestre	8.5	160	3	3	3	4	Mid	3.0	Good	Multi-stemmed (3)	20-40	None	B2
309	Salix	14.0	250	3	3	3	3	Mid	4.5	Fair, dieback, deadwood <25mm	Multi-stemmed (3)	10-20	None	C2
310	Prunus padus	5.5	100	2	2	2	2	Yng	1.2	Poor	Co-dominant stems, suppressed by neighbour	10-20	None	C2
311	Fraxinus excelsior	13.5	270	3	3	3	4	Mid	4.5	Fair, dieback in lower crown, deadwood <60mm	Single stem, full crown, ivy clad	40+	None	A2
312	Crataegus monogyna	7.5	120	2	2	2	2	Yng	1.5	Good	Co-dominant stems from 0.6m , ivy clad	20-40	None	C2
313	Salix	14.5	220	2	2	2	2	Mid	5.0	Fair	Co-dominant stems from 0.2m, ivy clad	20-40	None	B2
314	Salix	12.0	180	2	3	2	3	Mat	-	Poor, severe dieback, top of tree dead on one of stems	Co-dominant stems, ivy clad	<10	None	R
315	Fraxinus excelsior	13.0	180	3	3	4	4	Yng	3.0	Fair, dieback, deadwood <50mm	Co-dominant stems, ivy clad	20-40	None	B2
316	Quercus robur	9.5	190	1	-	2	2	Yng	4.0	Poor	Poor form, unbalanced crown, suppressed by neighbour ivy clad	10-20	None	C2
317	Fraxinus excelsior	13.5	170	3	3	4	6	Mid	4.0	Good	Co-dominant stems from 0.9m	20-40	None	B2
318	Fraxinus excelsior	13.0	250	2	3	4	4	Mid	2.5	Poor, dieback, deadwood <60mm	Single stem, ivy clad	10-20	None	C2
319	Acer campestre	10.0	140	2	2	2	2	Yng	2.0	Good	Single stem	20-40	None	C2
320	Fraxinus excelsior	13.5	170	2	2	2	3	Yng	3.0	Fair, dieback in lower crown, deadwood <50mm	Co-dominant stems, ivy clad	20-40	None	B2
321	Fraxinus excelsior	14.0	220	3	3	3	3	Mid	5.0	Good, some dieback in lower crown deadwood <30mm	Single stem, ivy clad	40+	None	A2
322	Fraxinus excelsior	14.0	200	3	3	3	3	Mid	6.0	Good, some dieback in lower crown deadwood <30mm	Single stem, narrow, small crown, ivy clad	20-40	None	B2
323	Tilia x europaea	6.5	90	2	2	2	2	Yng	1.8	Good	Poor form, suppressed by neighbour	20-40	None	C2
324	Fraxinus excelsior	13.0	200	3	3	4	3	Yng	4.0	Fair, some dieback in lower crown deadwood <30mm	Single stem, reasonable crown	40+	None	A2
325	Fraxinus excelsior	13.0	180	3	3	3	3	Yng	5.0	Fair, some dieback in lower crown deadwood <30mm	Single stem (second stem suppressed)	20-40	None	B2
326	Acer campestre	8.0	80	2	2	2	2	Yng	2.0	Fair	Multi-stemmed (3) , suppressed by neighbour	<10	None	R
327	Fraxinus excelsior	12.0	160	3	2	3	2	Yng	4.5	Good	Single stem	20-40	None	B2
328	Salix	13.0	240	3	3	2	2	Mid	5.0	Poor, dieback in lower crown, deadwood <50mm	Co-dominant stems from 0.6m, ivy clad	10-20	None	C2
329	Fraxinus excelsior	11.0	100	1	1	1	1	-	-	Dead		<10	Fell, low	R
330	Fraxinus excelsior	13.5	210	4	4	3	3	Mid	6.0	Good, dieback in lower crown, deadwood <20mm	Single stem, ivy lower stem to 4m	40+	None	A2
331	Crataegus monogyna	6.0	80	2	2	2	2	Yng	-	Fair	Co-dominant stems 0.5m	20-40	None	C2
332	Fraxinus excelsior	13.0	210	2	2	2	3	Mid	5.0	Fair, dieback in lower crown, deadwood <40mm	Single stem, narrow crown, ivy clad to 10m	20-40	None	B2

KEY TO NOTATIONS USED:
STEM D = Stem diameter (mm) at 1.5m above ground level
C.C = Height of Crown Clearance (m)
R.C = Remaining Contribution (yrs)

Arf = Measurement around base (mm)

AGE CLASS:
Yng = Young
Mid = Middle aged
Mat = Mature
O/Mat = Over mature
D = Dead

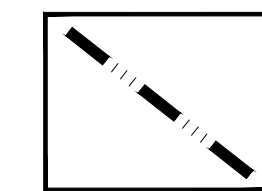
Category Grading
A = High quality & value
B = Moderate quality & value
C = Low quality & value
R = In need of removal

NO	SPECIES	HEIGHT m	STEM D	BRANCH SPREAD m				AGE CLASS	C.C (m)	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	R. C.	PRELIMINARY MANAGEMENT	CATEGORY GRADING
				N	E	S	W							
333	Fraxinus excelsior	13.0	190	3	3	4	3	Mid	6.0	Fair, dieback in lower crown, deadwood <40mm	Co-dominant	20-40	None	B2
334	Salix	14.0	230	3	3	2	3	Mid	6.0	Fair	Co-dominant stems, ivy clad	20-40	None	B2
335	Acer campestre	7.5	130	2	1	2	2	Yng	4.0	Fair	Single stem, , suppressed by neighbour	10-20	None	C2
336	Fraxinus excelsior	13.0	230	4	3	4	3	Mid	4.5	Good, dieback in lower crown, deadwood <30mm	Single stem, reasonable crown, ivy clad to 4m	40+	None	A2
337	Crataegus monogyna	5.0	70	2	2	2	2	Yng	-	Fair	Co-dominant stems,	20-40	None	C2
338	Fraxinus excelsior	11.5	190	3	2	4	3	Mid	4.0	Fair dieback in lower crown, deadwood <50mm	Co-dominant stems, ivy clad	20-40	None	B2
339	Acer campestre	7.0	100	2	1	2	3	Yng	3.0	Fair	Co-dominant stems, suppressed by neighbour ivy clad	10-20	None	C2
340	Fraxinus excelsior	12.0	220	3	3	4	4	Mid	4.0	Good, dieback starting	Single stem, good crown	40+	None	A2
341	Fraxinus excelsior	11.5	210	2	3	3	3	Mid	2.5	Poor, dieback, deadwood <40mm	Thin crown due to dieback	10-20	None	C2
342	Fraxinus excelsior	13.0	200	1	3	4	4	Mid	2.5	Fair, dieback in lower crown, deadwood <20mm	Co-dominant stems, self-grafted at 3m	20-40	None	C2
343	Fraxinus excelsior	13.5	190	4	3	4	3	Mid	4.0	Fair, dieback in lower crown, deadwood <25mm	Co-dominant stems, ivy clad	20-40	None	B2
344	Acer campestre	10.0	190	3	3	3	4	Mid	2.0	Good	Co-dominant stems, ivy clad	20-40	None	B2
345	Crataegus monogyna	4.5	50	2	2	2	2	Yng	-	Good	Multi-stemmed, , ivy clad	20-40	None	C2
346	Fraxinus excelsior	10.5	130	2	3	1	1	Mid	4.0	Fair, dieback throughout, deadwood <20mm	Co-dominant stems, ivy clad	20-40	None	C2
347	Fraxinus excelsior	7.0	100	1	1	1	1		-	Dead		<10	Fell, low	R
348	Fraxinus excelsior	12.0	190	1	3	2	3	Yng	-	Fair, dieback throughout, deadwood <20mm	Co-dominant stems, ivy clad	20-40	None	B2
349	Acer campestre	7.5	160	3	3	4	4	Yng	1.5	Good	Single stem, wide crown	20-40	None	B2
350	Salix	12.5	150	3	1	2	4	Mid	4.0	Fair, dieback, deadwood <20mm	Multi-stemmed, tall, narrow crown	10-20	None	C2
351	Salix	12.0	150	2	1	2	2	Mid	3.0	Fair	Single stem	10-20	None	C2
352	Fraxinus excelsior	11.0	150	2	2	2	3	Mid	2.5	Fair, dieback, deadwood <30mm	Multi-stemmed, self-grafting 1.6m	10-20	None	C2
353	Fraxinus excelsior	8.5	150	1	2	4	2	Mid	4.0	Fair, some dieback	Co-dominant stems, poor crown development and structure	20-40	None	C2
354	Fraxinus excelsior	13.0	190	4	3	3	3	Mid	3.5	Fair, dieback severe in lower crown, deadwood <70mm	Co-dominant stems from 1.5m	10-20	None	C2
355	Fraxinus excelsior	11.5	150	2	1	3	4	Mid	2.5	Fair, dieback in lower crown, deadwood <30mm	Single stem, reasonable crown but unbalanced	20-40	None	C2
356	Fraxinus excelsior	11.0	170	1	1	3	4	Mid	3.0	Fair, dieback in lowe crown, deadwood <30mm	Co-dominant stems from 0.9m, suppressed by neighbour	10-20	None	C2
357	Group - Mixed Woodland overstorey: Acer campestre understorey: Acer campestre	10-14	100-200							Good				C2
		6-9	50-110							Good				

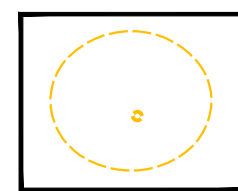
Appendix 2

Tree Protection Plans / Protective Fencing Specification

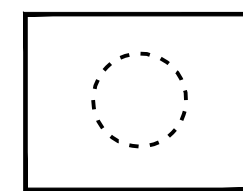
Tree Survey and Tree Categorisation carried out in accordance with: **BS 5837:2012 "Trees in relation to design, demolition and construction. Recommendations"** please see AAA Tree survey drawing & associated tree survey schedule.



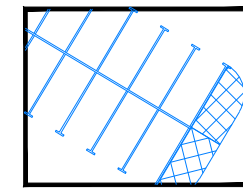
01



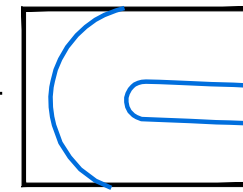
Trees to be retained



Trees to be removed;
to accommodate S278 works as
agreed with HCC



Proposed site layout



Proposed ramp structure

Refer to AAA Tree Survey Schedule Ref: AAA ref 779 : 15/12/09 & 779B : 1.2.3/09/10. (see key below).

Tree Species

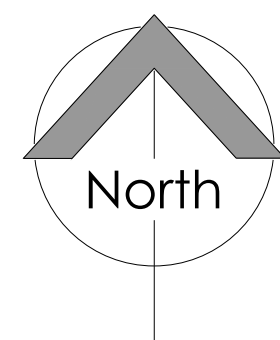
Key	Name	Common Name
Ac	Acer compostre	Field Maple
Ag	Alnus glutinosa	Common Alder
Ap	Acer platanoides 'Crimson King'	Norway Maple 'Crimson King'
Bk	Betula pendula	Silver Birch
Ca	Corylus avellana	Common Hazel
Cb	Carpinus betulus	Hornbeam
Cm	Crataegus monogyna	Common Hawthorn
Csp	Cornus species	Dogwood species
Fe	Fraxinus excelsior	Common Ash
fs	Fagus sylvatica	Common Beech
Md	Malus domestica	Apple
Pa	Prunus avium	Wild Cherry / Gean

Notes:

- Drawing to be read in conjunction with Arboricultural Report for details of Arboricultural impact assessment, tree protection plan & method statements

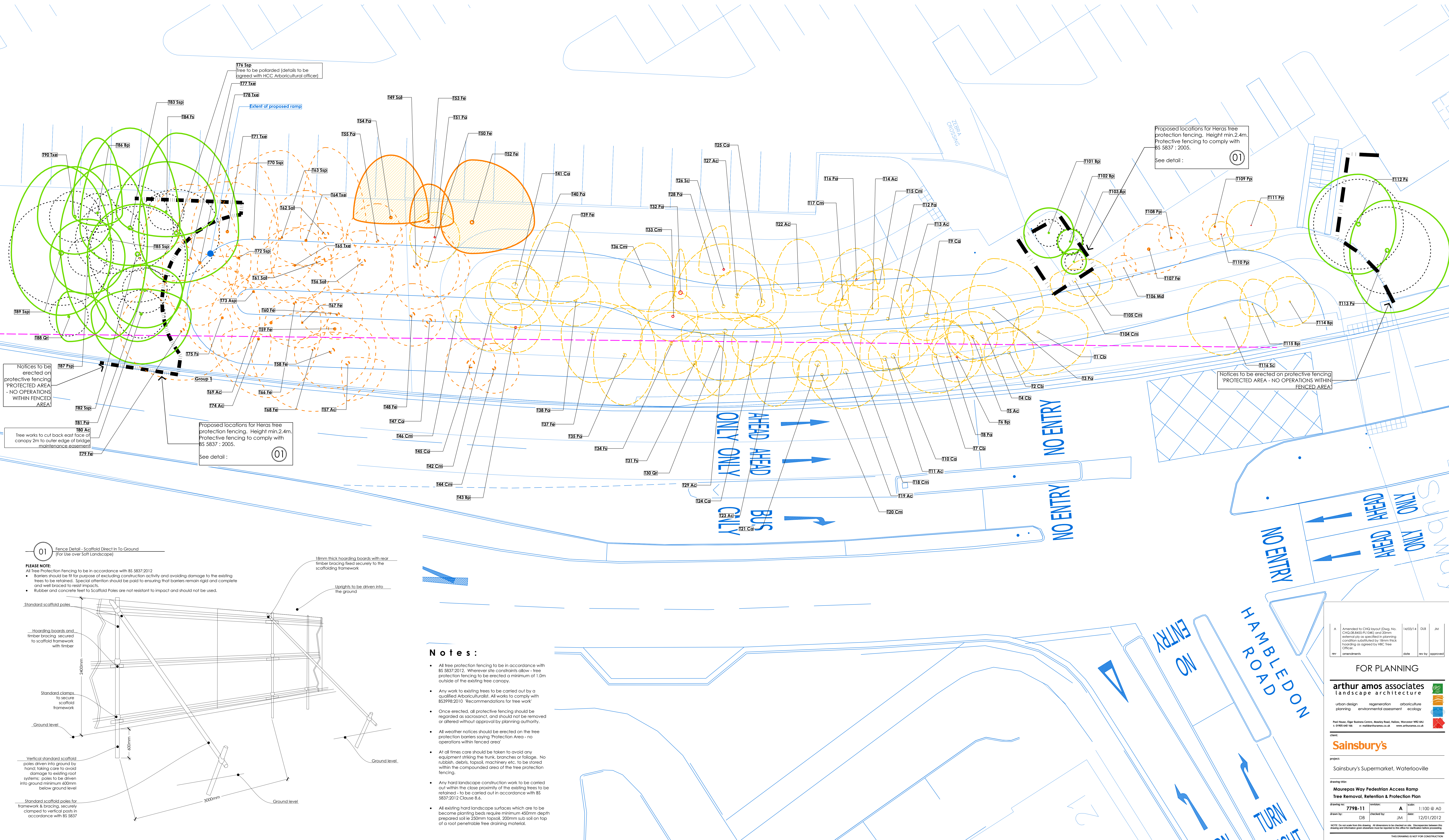
Tree species continued

Tree species continued...		
Pp	Prunus padus	Bird Cherry
Ps	Pinus sylvestris	Scots Pine
Qr	Quercus robur	Common Oak
Sal	Salix alba	White Willow
SalV	Sorbus aria variety	Whitebeam
Sc	Salix caprea	Goat Willow
Ssp	Salix species	Willow species
Txe	Tilia x europaea	Common Lime



Note:
To be read with AAA dwgs no's:

- 779B-10
- 779B-12
- 779B-13
- 779B-15



Tree Survey and Tree Categorisation carried out in accordance with: BS 5837:2012 "Trees in relation to design, demolition and construction. Recommendations" please see AAA Tree survey drawing & associated tree survey schedule.

- Refer to AAA Tree Survey Schedule Ref: AAA ref 779 : 15/12/09 & 7798 : 1.2.3/09/10. (see key below).

Tree Groups	
Key	Species
Group1	Various including: <i>Salix</i> ssp. <i>Fraxinus</i> ssp. <i>Betula</i> ssp. <i>Tilia</i> ssp. <i>Crataegus</i> ssp.
Group 357	Group - Mixed Woodland. Overstorey: <i>Acer campestre</i> ; <i>Fraxinus excelsior</i> ; <i>Salix alba</i> Understorey: <i>Acer campestre</i> ; <i>Crataegus monogyna</i> ; <i>Prunus spinosa</i>

- Drawing to be read in conjunction with Arboricultural Report for details of Arboricultural impact assessment, tree protection plan & method statements

B	Amended to CHQ layout [Dwg. No. CHQ.08.8455 - PL104 K]	25/02/14	D/LB	JM
A	20mm external ply as specified in the planning condition substituted by 18mm thick boarding as agreed by H&C free Officer, & drawing status changed	28/11/13	D/LB	JM
rev	amendments	date	rev by	approved

arthur amos associates
landscape architecture

urban design regeneration arboriculture
planning environmental assessment ecology

Pool House, Elgar Business Centre, Massey Road, Hallow, Worcester W12 6NU
t: 01905 642 566 e: mail@thearmos.co.uk www.thearmos.co.uk

client:

Sainsbury's

project:

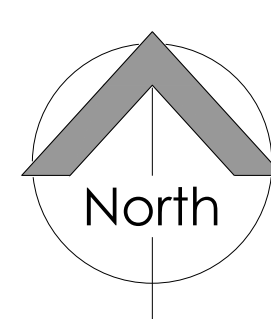
Sainsbury's Supermarket, Waterlooville

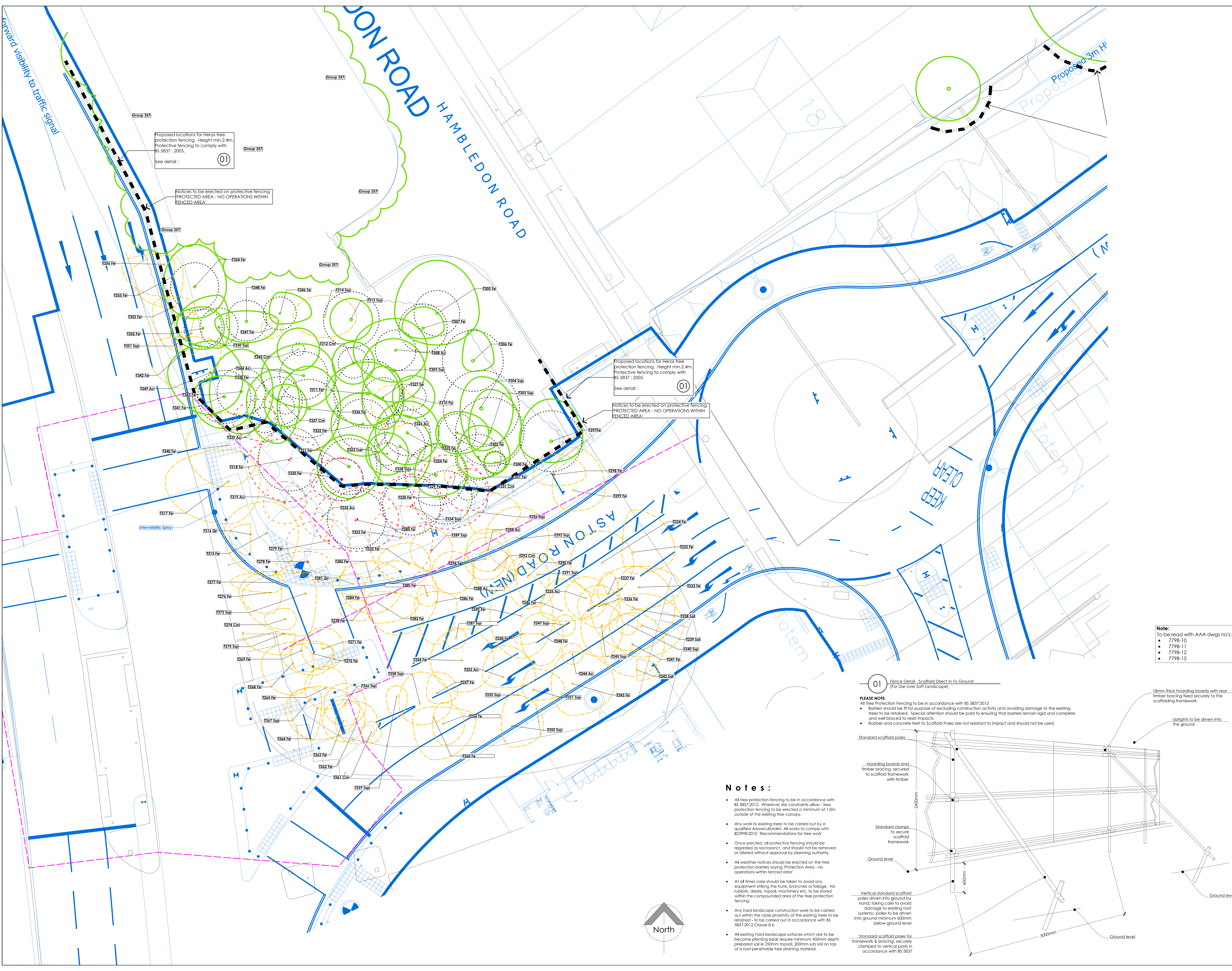
drawing title:

PFS Tree Removal, Retention & Protection Plan

drawing no:	7798-12	revision:	B	scale:	1:100 @ A0
drawn by:	DB	checked by:	JM	date:	12/01/2012

NOTE: Do not scale from this drawing. All dimensions to be checked on site. Discrepancies between this drawing and information given elsewhere must be reported to the office for clarification before proceeding.





Legend

Tree Survey and Tree Categorisation carried out in accordance with: BS 5837:2012 'Trees in relation to design, demolition and construction. Recommendations' please see A&A Tree survey drawing & associated tree survey schedule.

Refer to AAA Tree Survey Schedule Ref: AAA ref 779 : 15/12/09 & 7798 : 1.2.3/09/10. (see key below).

Tree Species		
Key	Name	Common Name
Ac	Acer campestre	Field Maple
Al	Alnus glutinosa	Common Alder
ApCK	Acer platanoides 'Crimson King'	Norway Maple 'Crimson King'
Bp	Betula pendula	Silver Birch
Ca	Corylus avellana	Common Hazel
Cb	Corpinus betulus	Hornbeam
Cm	Crataegus monogyna	Common Hawthorn
Cip	Cornus species	Dogwood species
Fe	Fraxinus excelsior	Common Ash
Fr	Fagus sylvatica	Common Beech
Mal	Malus domestica	Apple
Pa	Prunus avium	Wild Cherry / Gean
Pp	Prunus padus	Bird Cherry
Ps	Pinus sylvestris	Scots Pine
Qr	Quercus robur	Common Oak
Sal	Salix alba	White Willow
Salv	Sorbus aria variety	Whitebeam
Sc	Salix caprea	Goat Willow
Ssp	Salix species	Willow species
Tee	Tilia x europaea	Common Lime

Tree Groups		
Key	Species	
Group1	Various including: Salix spp., Fraxinus spp., Betula spp., Tilia spp., Crataegus spp.	
Group 357	Group - Mixed Woodland, Overstorey: Acer campestre; Fraxinus excelsior; Salix alba Understorey: Acer campestre; Crataegus monogyna; Prunus spinosa	

Notes:

- Drawing to be read in conjunction with Arboricultural Report for details of Arboricultural Impact assessment, tree protection plan & method statements

Rev	Description	Date	By	App'd
D	Amended to CHD layout (Dwg. No. CHD/04/04/01) and 20mm external ply as specified in planning condition substituted by 18mm thick hoarding as agreed by HEC Tree Officer.	14/03/14	DB	JAM
C	Amended to M8 dwg no. 203/WWLE/2.2/11	06/08/12	DB	JAM
B	Amended to M8 dwg no. 203/WWLE/2.2/10	13/02/12	DB	JAM
A	Amended to M8 dwg no. 14851/2002A	03/02/12	DB	JAM
rev	amendments	date	rev by	approved

FOR PLANNING

arthur amos associates
landscape architecture

urban design regeneration arboriculture planning environmental assessment ecology

Paul Hearn, CEng, Planning Consultant, Member Royal Institute, Member NRS, MAI
t: 01905 644 166 e: paul@arthuramos.co.uk www.arthuramos.co.uk

client:
Sainsbury's

project:
Sainsbury's Supermarket, Waterlooville

drawing title:
Aston Road Tree Removal, Retention & Protection Plan

drawing no: **7798-13** revision: **D** scale: **1:100 @ A0**
drawn by: **DB** checked by: **JAM** date: **12/01/2012**

NOTE: The red outline indicates the boundary of the proposed development. All dimensions to be checked on site. Dimensions shown on drawing and information given elsewhere must be repeated in this office for verification before proceeding.

THIS DRAWING IS NOT FOR CONSTRUCTION

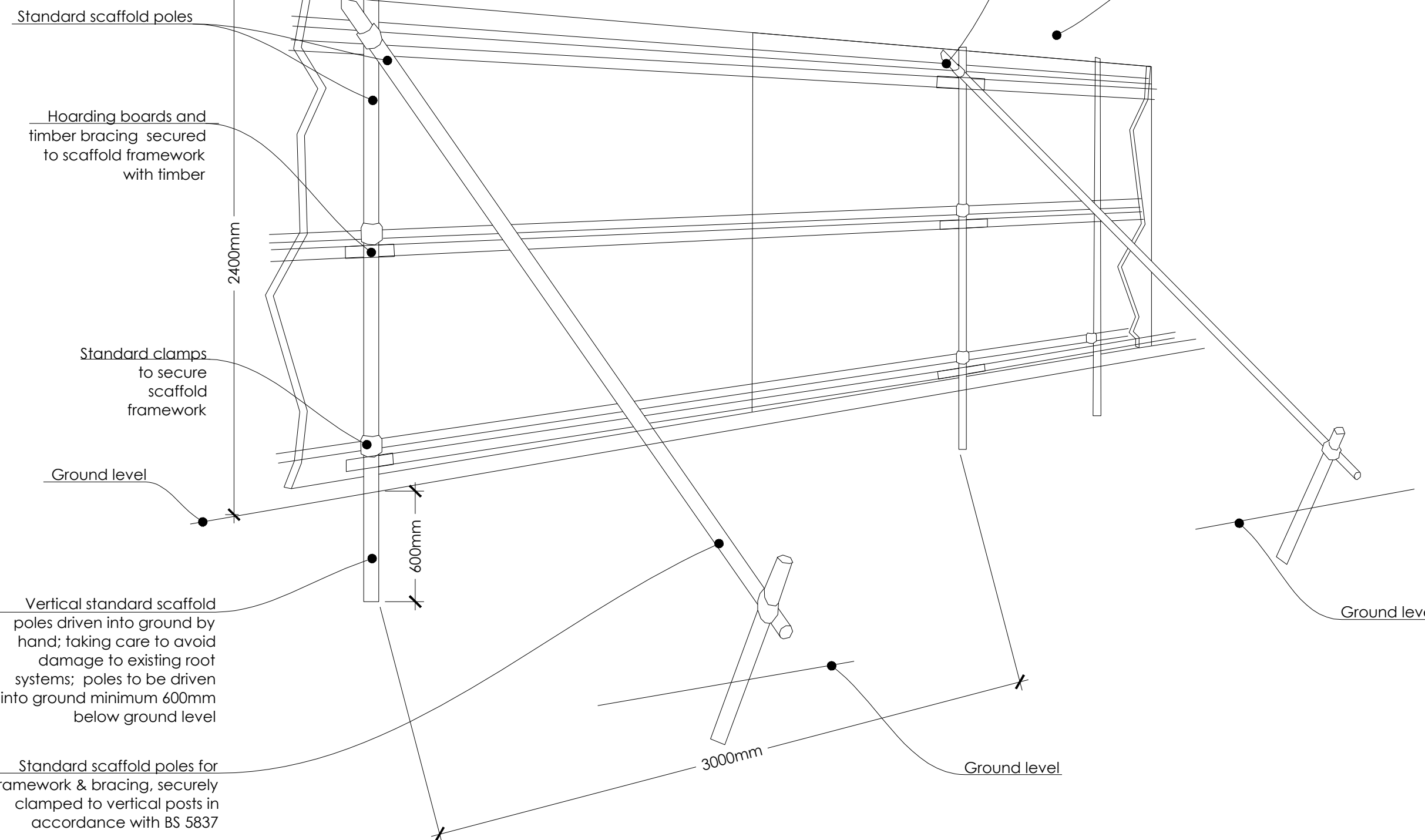
Notes:

- All tree protection fencing to be in accordance with BS 5837:2012
- All tree Protection Fencing to be fit for purpose of excluding construction activity and avoiding damage to the existing trees to be retained. Special attention should be paid to ensuring that barriers remain rigid and complete and well braced to resist impacts.
- Rubber and concrete feet to Scaffold Poles are not resistant to impact and should not be used.
- Any work to existing trees to be carried out by a qualified Arboriculturalist. All works to comply with BS3998:2010 'Recommendations for tree work'
- Once erected, all protective fencing should be regarded as sacrosanct, and should not be removed or altered without approval by planning authority.
- All weather notices should be erected on the tree protection barriers saying 'Protection Area - no operations within fenced area'
- At all times care should be taken to avoid any equipment striking the trunk, branches or foliage. No rubbish, debris, topsoil, machinery etc. to be stored within the compounded area of the tree protection fencing.
- Any hard landscape construction work to be carried out within the close proximity of the existing trees to be retained - to be carried out in accordance with BS 5837:2012 Clause 8.6.
- All existing hard landscape surfaces which are to be become planting beds require minimum 450mm depth prepared soil ie 250mm topsoil, 200mm sub soil on top of a root penetrable free draining material.

01 Fence Detail - Scaffold Direct In To Ground (For Use over Soft Landscapes)

PLEASE NOTE:

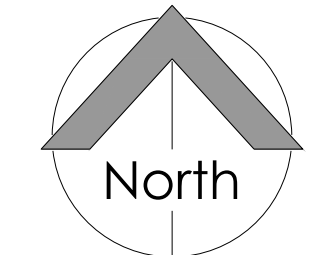
- All tree Protection Fencing to be in accordance with BS 5837:2012
- Barriers should be fit for purpose of excluding construction activity and avoiding damage to the existing trees to be retained. Special attention should be paid to ensuring that barriers remain rigid and complete and well braced to resist impacts.
- Rubber and concrete feet to Scaffold Poles are not resistant to impact and should not be used.



Note:
To be read with AAA dwgs no's:
• 7798-10
• 7798-11
• 7798-12
• 7798-15

18mm thick hoarding boards with rear timber bracing fixed securely to the scaffolding framework

Uprights to be driven into the ground



Oakwood Ltd

Legend

Tree Survey and Tree Categorisation carried out in accordance with: BS 5837:2012 'Trees in relation to design, demolition and construction. Recommendations' please see AAA Tree survey drawing & associated tree survey schedule.

Tree reference number & species to be read in conjunction with Tree Survey Schedule AAA ref 779 : 15/12/09 & 779B : 1.2.3/09/10, (see key below).

Trees to be retained

Trees approved to be removed:
Under planning permission: APP/10/00793

Trees Surveyed as Group (To be read in conjunction with AAA Tree Survey Schedule AAA ref 779 : 15/12/09 & 779B : 1.2.3/09/10, (see key below).

Group Trees to be retained.

Group Trees to be removed.

Theoretical Root Protection Area: calculated using formula in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction. Recommendations'

Proposed locations for tree protection fencing: Height min. 2m. Protective fencing to comply with BS 5837 : 2012

Detail tag: refer to tree protection details adjacent

Existing site layout

Proposed site layout

Proposed intervisibility splay

Refer to AAA Tree Survey Schedule Ref: AAA ref 779 : 15/12/09 & 779B : 1.2.3/09/10, (see key below).

Tree Species

Key

Key	Name	Common Name
Ac	Acer campestre	Field Maple
Al	Alnus glutinosa	Common Alder
Ag	Acer platanoides 'Crimson King'	Norway Maple 'Crimson King'
ApCK	...	...
Bp	Betula pendula	Silver Birch
Ca	Corylus avellana	Common Hazel
Cb	Carpinus betulus	Hornbeam
Cm	Crataegus monogyna	Common Hawthorn
Cp	Cornus species	Dogwood species
Fr	Fraxinus excelsior	Common Ash
Ma	Malus domestica	Common Brambling
Md	Malus domestica	Apple
Pa	Prunus avium	Wild Cherry / Gean
Pp	Prunus padus	Bird Cherry
Ps	Pinus sylvestris	Scots Pine
Qr	Quercus robur	Common Oak
Sal	Salix alba	White Willow
Salv	Salix alba variety	White Willow
Sc	Salix caprea	Goat Willow
Sp	Salix species	Willow species
Tee	Tilia x europaea	Common Lime

Tree Groups

Key

Group1

Group S37

Notes:

Drawing to be read in conjunction with Arboricultural Report for details of Arboricultural Impact assessment, tree protection plan & method statements

FOR PLANNING

arthur amos associates
landscape architecture

urban design regeneration arboriculture
planning environmental assessment ecology

Paul Hoad, Roger Hoad, Heather Hoad, Helen, Vanessa Hoad, Neil Hoad
1, 01905 645 166 e: paul@arthuramos.co.uk www.arthuramos.co.uk

client:

Sainsbury's

project:

Sainsbury's Supermarket, Waterloooville

drawing title:

No 18 Hambleton Road
Tree Retention & Protection Plan

drawing no: 779B-15 revision: C scale: 1:100 @ A0

drawn by: DB checked by: JM date: 13/02/2012

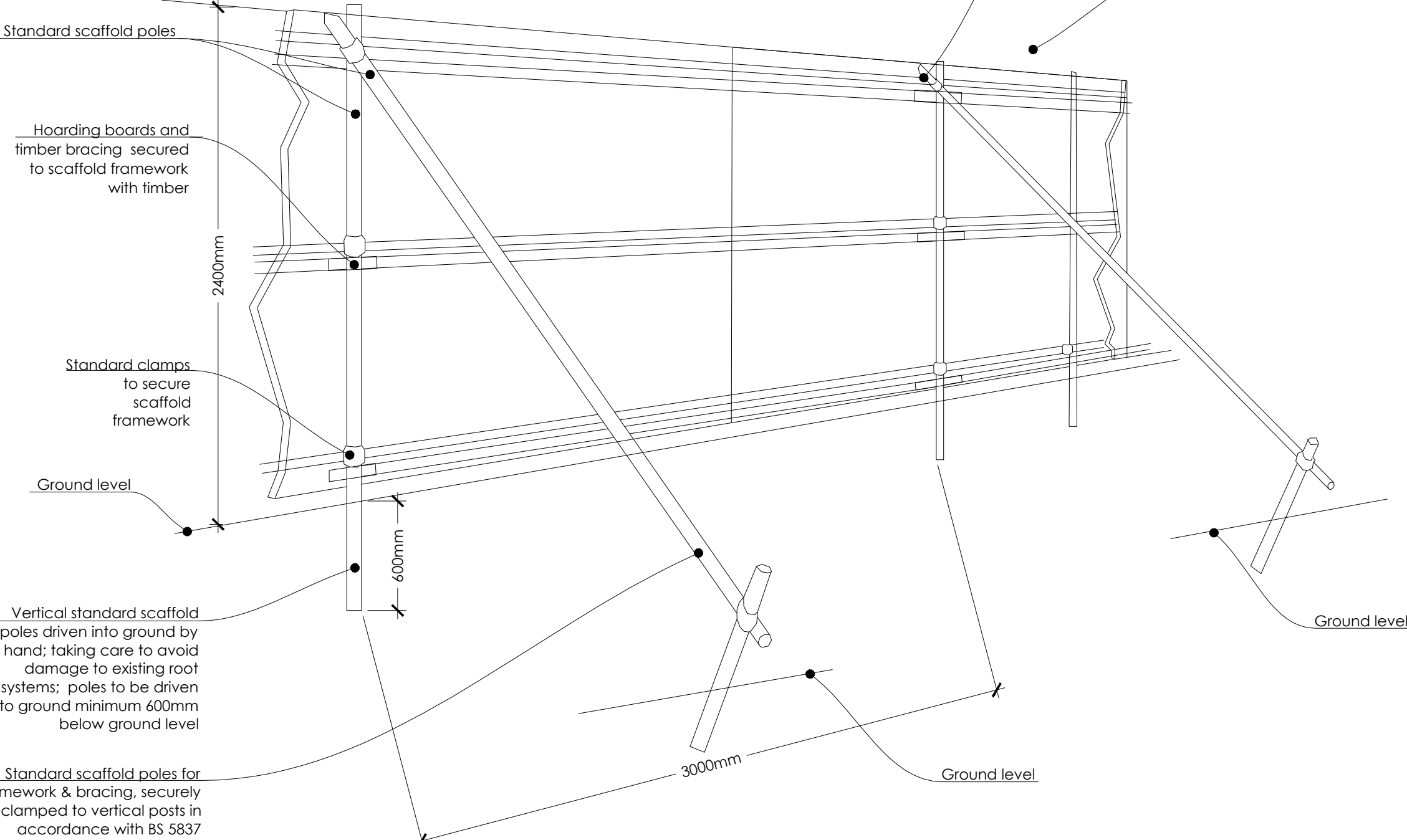
NOTE: The red outline indicates the boundary of the proposed development. All dimensions to the boundary of the proposed development must be reported to the client for verification before proceeding. Drawing and construction given shall remain the responsibility of the client for verification before proceeding.

THIS DRAWING IS NOT FOR CONSTRUCTION

Note:
To be read with AAA dwgs no's:
• 779B-10
• 779B-11
• 779B-12
• 779B-13

01 Fence Detail - Scaffold Direct in To Ground
(For Use over Soft Landscape)

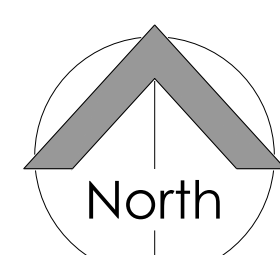
PLEASE NOTE:
All Tree Protection Fencing to be in accordance with BS 5837:2012
• Barriers should be fit for purpose of excluding construction activity and avoiding damage to the existing trees to be retained. Special attention should be paid to ensuring that barriers remain rigid and complete and well braced to resist impacts.
• Rubber and concrete feet to Scaffold Poles are not resistant to impact and should not be used.



Notes:

- All tree protection fencing to be in accordance with BS 5837:2012. Wherever site constraints allow - tree protection fencing to be erected a minimum of 1.0m outside of the existing tree canopy.
- Any work to existing trees to be carried out by a qualified Arboriculturalist. All works to comply with BS3998:2010 'Recommendations for tree work'
- Once erected, all protective fencing should be regarded as sacrosanct, and should not be removed or altered without approval by planning authority.
- All weather notices should be erected on the tree protection barriers saying 'Protection Area - no operations within fenced area'
- At all times care should be taken to avoid any equipment striking the trunk, branches or foliage. No rubbish, debris, topsoil, machinery etc. to be stored within the compounded area of the tree protection fencing.
- Any hard landscape construction work to be carried out within the close proximity of the existing trees to be retained - to be carried out in accordance with BS 5837:2012 Clause 8.6.
- All existing hard landscape surfaces which are to be become planting beds require minimum 450mm depth prepared soil to 250mm topsoil, 200mm sub soil on top of a root penetrable free draining material.

0 2 4 8 12
Metres



Appendix 3

Work Method Statements

3.1 Work Method Statement: Tree Removal

- 1) Carry out all works to trees in accordance with the relevant recommendations of BS 3998:2010 and Forestry and Arboriculture Training and Safety Council Safety Guides.
- 2) Tree work must be carried out by an Arboricultural Association or similar approved contractor.
- 3) Work involving chain saws must be carried out by holders of a Certificate of Competence.
- 4) Contractor to allow for meeting Hampshire County Council Arboriculture Officer and Arboricultural Consultant on site to mark out and agree trees to be removed prior to works commencing.
- 5) Check for above ground services in the vicinity of the trees before commencing works.
- 6) Within the Root Protection Area of adjoining trees or close to underground services or structures, tree stumps should not be dug or pulled out; but are to be ground out.
- 7) Where canopies of trees to be removed overlap with canopies of trees to be retained, care should be taken when felling trees to avoid damage to retained trees and branches.
- 8) Avoid damage to neighbouring trees, plants and property/structures.
- 9) Take down large trees carefully using chainsaw or bow saw; heavy branches should be removed in sections, and where necessary should be lowered with ropes to avoid damage to surroundings.
- 10) Ensure machinery is properly maintained, and check for oil leaks before use.
- 11) Remove all arisings from the site to contractors licensed tip. Chippings should not be spread on site.

3.2 Work Method Statement: Tree Works

General

- 1) Carry out all works to trees in accordance with the relevant recommendations of BS 3998:2010 and Forestry and Arboriculture Training and Safety Council Safety Guides.
- 2) Tree work must be carried out by an Arboricultural Association or similar approved contractor.
- 3) Work involving chain saws must be carried out by holders of a Certificate of Competence.
- 4) Do not use chain saws on branches of less than 50 mm diameter.
- 5) When using hand saws, cut in one continuous operation to form a smooth surface.
- 6) Do not use anvil type secateurs.
- 7) Remove branches without damaging or tearing the retained wood.
- 8) Keep wounds as small as possible. Cut back to sound wood to leave a smooth angled wound which allows water to drain from the exposed tissue.
- 9) Wherever possible, avoid creating branch stumps by cutting back to a fork or stem.

Crown Lifting

- 10) Remove branches to given height above ground level as directed by the representative of the Local Planning Authority on site.
- 11) Remove whole branches back to the stem. Branch sections shall be cut back to lateral or sub-lateral buds or branches without leaving stumps.

Pedestrian Access Ramp development facilitation pruning

- 12) Cut back branches to point as directed by the Arboricultural Consultant and Hampshire County Council Arboriculture Officer on site.
- 13) Branch sections shall be cut back neatly to lateral or sub-lateral buds or branch collar without leaving snags or torn bark.

3.3 Work Method Statement: Removal of Shrubs and Groundcover Vegetation

- 14) Advice should be sought from the arboricultural consultant to determine the most suitable method for removal of understory or ground cover vegetation.
- 15) Where required, ground cover vegetation shall be killed using an appropriate contact herbicide. Persistent and soil acting herbicides should be avoided within RPAs.
- 16) Shrubs and other ground vegetation may be removed by screening or other methods which avoid digging or grubbing out. Loose organic matter shall be removed.
- 17) Under no circumstances shall existing levels be reduced or skimmed.

3.4 Work Method Statement: Treatment of Japanese Knotweed

- 1) During clearance, demolition and construction operations any Japanese knotweed growth identified within the RPA of retained trees should be treated with Glyphosate herbicide as part of ongoing treatment (refer to AAA Landscape Management Plan).
- 2) Japanese knotweed rhizomes identified within the RPA of retained trees shall not be dug out.
- 3) Works in vicinity of the area colonised by Japanese knotweed, including tree works, tree removals, movement of vehicles and soil excavation/movement, should be carried out in accordance with Environment Agency guidelines to avoid spreading Japanese knotweed and other parts of the site becoming contaminated with Japanese knotweed.

3.5 Work Method Statement:

Demolition & Removal of Walling and Hard Surfacing

- 1) Hand held tools or appropriate machinery should be used (under arboricultural supervision) to remove walling and hard surfaces adjacent to trees.
- 2) In accordance with Planning Condition 9, wall and surfacing demolition works and excavations within the crown spread of the trees shall be carried out by hand and under the supervision of a representative of the Local Planning Authority.
- 3) Exposed roots, should be wrapped in dry, clean hessian sacking and protected from excessive temperature changes. Roots smaller than 25 mm diameter may be pruned back, preferably to a side branch. Roots larger than 25 mm should only be severed following agreement from a representative of the Local Planning Authority (in accordance with Planning Condition 9).
- 4) Prior to backfilling, any hessian wrapping should be removed and retained roots surrounded with sharp sand or other loose granular fill, before soil or other material is replaced. Fill material should be free of contaminants and other foreign objects potentially injurious to tree roots.
- 5) Plant and vehicles engaged in demolition works should operate outside the RPA, or run on a temporary surface designed to protect the underlying soil structure. Where ground protection is required, it should be installed prior to trafficking of the ground by site traffic.

3.6 Work Method Statement: Ground Cultivation, Grass Seeding & Planting

- 1) Carry out all ground preparation, topsoiling and seeding works in accordance with the relevant recommendations of BS 4428:1989 Code of practice for general landscape operations (excluding hard surfaces).
- 2) Carry out all works within the vicinity of trees in accordance with the relevant recommendations of BS 3998:2010 Recommendations for tree work.

- 3) Changes of ground level within the RPA of retained trees to be avoided. Under no circumstances shall existing levels be reduced or skimmed.
- 1) Tractor mounted rotovation or other heavy mechanical equipment shall not be used within the RPA of retained trees. Cultivation and planting works to be carried out by hand with great care to avoid damage to retained tree roots.
- 2) No vehicle or plant access within the RPA of retained trees to avoid ground compaction.
- 3) Cultivation and planting works to be carried out by hand with great care to avoid damage to retained tree roots.
- 4) Soil drainage shall remain unchanged.
- 5) Herbicides for use in the vicinity of retained trees should be appropriate for the type of vegetation to be killed. Care to be taken to avoid damaging effects on retained trees.

3.7 Work Method Statement:

Construction Works

- 1) Excavations undertaken within RPA's should be carried out by hand, to avoid damaging larger roots. Exposed roots, should be wrapped in dry, clean hessian sacking and protected from excessive temperature changes. Roots smaller than 25 mm diameter may be pruned back, preferably to a side branch. Roots larger than 25 mm should only be severed following consultation with an arboriculturalist. Prior to backfilling, any hessian wrapping should be removed and retained roots surrounded with sharp sand or other loose granular fill, before soil or other material is replaced. Fill material should be free of contaminants and other foreign objects potentially injurious to tree roots.

Hard surface construction

- 2) Under no circumstances shall existing levels be reduced or skimmed. Soil levels should not be reduced in preparation for new hard surfacing. Only loose organic matter may be removed and any new surfaces established only above former levels.
- 3) New surfaces may be established above former levels. Levels over existing hard surfaces may be raised by overlaying with an inert granular fill. Suitable materials include, no-fines gravel, washed aggregate, or cobbles. If necessary load suspension layers such as cellular confinement systems may be used to contain fill materials.
- 4) It may be necessary to install a load suspension layer such as a cellular confinement system. Arboricultural advice should be sought before raising levels more than 150mm.
- 5) Where hard surface construction cannot be avoided within root protection areas, a no dig design should be used. The structure of the hard surface should be designed to avoid localized compaction. A cellular confinement system may be incorporated into the sub-base, to act as a load suspension layer.
- 6) Where paths and other structures have to be placed near to trees, their design and construction should allow for future growth. Roots below structures may be bridged and sufficient space left for their future growth.
- 7) Soil drainage shall remain unchanged. The design shall allow for future growth, and soil and water table changes arising from it.

Underground and above ground services

- 8) Trenching may sever surface roots and change soil hydrology particular care is therefore required when planning and installing underground services near to trees. It may be preferable to employ no-dig techniques. Where possible, services should be kept together and laid using trenchless installation techniques. The routes of services passing through RPA's, should be planned in consultation with an arboriculturalist. Levels and access space needed for

installing services should be considered at the planning stage and addressed in arboricultural method statements (AMS).

- 9) Above ground services should be routed to avoid detrimental and repetitive pruning. Due regard should be given to the current and future sizes of affected trees.
- 10) The advice of an arboriculturalist should be sought where redundant underground structures are present within RPA's. Where practical it is preferable to seal these structures off and leave them insitu.

Erection of Fencing

- 11) Fence support post locations should be planned to minimise the number of support posts within the tree RPA.
- 12) Fence support posts within RPA's should be driven into the ground or inserted into holes excavated by hand using an auger, to minimise excavation area and minimise potential damage to tree roots. No mechanical driving machinery to be used within TPZ to avoid damage to tree canopy and ground compaction in RPA.
- 13) Fill material should be sharp sand rammed by hand to secure post into position. Hole free of contaminants and other foreign objects potentially injurious to tree roots.
- 14) Construction of fence / installation of fencing panels to avoid damage to overhead tree canopy.

3.8 Work Method Statement:

Works within TPZ and RPA of Retained TPO Tree

- 1) The protective fencing to be erected 1m outside the canopy spread of the oak tree in the rear garden of No 18 Hambledon Road shall only be removed to enable breaking out of existing hard surfacing and subsequent topsoiling works within the TPZ/RPA of the tree.
- 2) The contractor shall give the Local Authority Tree Officer and Contract Administrator five days notice before undertaking any work within the breached TPZ area.
- 3) The fencing shall be removed immediately before works are due to commence, and re-erected immediately upon completion of works on the TPZ boundaries as shown on AAA Dwg No. 779B-15 Tree Retention & Protection Plan.
- 4) In accordance with Planning Condition 9, surfacing demolition works and excavations within the crown spread of the tree shall be carried out by hand and under the supervision of a representative of the Local Planning Authority.
- 5) Refer to the following Work Method Statements for removal of existing hard surfacing, topsoiling and fence construction:

3.5 Demolition & Removal of Walling and Hard Surfacing

3.6 Ground Cultivation, Grass Seeding & Planting

3.7 Construction Works