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**BRYN – Y – GROES, GRESFORD, WREXHAM
- Arboricultural update.**

**PRELIMINARY TREE SURVEY IN CONTEMPLATION OF
DEVELOPMENT. ARBORICULTURAL IMPLICATION STUDY.
Draft method statement for arboricultural works.**

**5TH October 2004 - Updated 31st May 2005 –
Updated 14th January 2008**



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REPORT INTRODUCTION

Report compiled for: Mytton Homes

Site Address: Bryn y Groes, Gresford, Wrexham

Date of Inspection: August 2004, updated 31st May 2005 Updated by desktop 14th January 2007

Inspector name: Simon Brain *BA RFS Cert Arb Tech Cert Arb*

BRIEF:

PART 1

- A) Visit site and re-inspect existing vegetation.
- B) Update existing detailed tree survey of all standing trees on the site to the following specification:
 - Species name in Latin, estimated height, vigour, four figure crown spreads, age class, structural/physiological condition, condition key, general arboricultural comments and preliminary management recommendations.
 - Comments relating to the retention value of individual trees and tree groups within the delineated area to allow an assessment of development constraints.
 - Groups will be identified where the arboriculturalist considers the vegetation to be grouped is appropriate
 - All information is to comply with BS 5837 – 2005 A guide to trees in relation to construction and BS 3998 – Tree works.
- C) Update existing tree constraints plan in AutoCad (on previously supplied topographical drawing) detailing; tree references and root protection areas.

PART 2

C) Arboricultural Impact Study of the sites development proposals (SITE PLAN 3206-20-A(300)01B) to the following general specification:

- Assessment of proposed structure proximity and anticipated arboricultural implications.
- Assessment of special surfacing requirements
- Assessment of supervisory requirements and post construction issues such as shading impact and stand off distances from retained trees
- Wider protective measures
- Mitigation measures
- Drainage desk top study
- Draft construction method statement including methods of protection, timing of works and communication during construction.

Produce a full Tree Protection Plan detailing: Tree refs, colour coded retention values, final updated TPZ positions, special measure areas and general construction working notes.

THE TREES REFERRED TO IN THIS REPORT ARE LIVING ENTITIES AND ARE THEREFORE SUBJECT TO NATURAL PROCESSES. THEY WILL ALSO BE SUBJECT TO CHANGES IN THEIR NATURAL ENVIRONMENT CAUSED BY HUMAN ACTIVITIES AND WEATHER CONDITIONS. THEREFORE WE CAN NOT WHOLLY GUARANTEE THE CONDITION AND SAFETY OF THE TREES COMMENTED UPON BEYOND WHAT CAN REASONABLY BE ASSESSED FROM THE PROCEDURE USED. TREES HAVE NOT BEEN AERIALY INSPECTED. WE RECOMMEND REGULAR INSPECTIONS AND ADVICE ON THE FREQUENCY AND TYPE OF INSPECTION. WE WOULD RECOMMEND THAT RE INSPECTIONS ARE CARRIED OUT WITHIN ONE YEAR OR WITHIN SPECIFIC STIPULATED TIMESCALES. NO ASSESSMENT HAS BEEN MADE OF SOIL CONDITIONS AND THE IMPACT OF SOIL CONDITIONS ON TREE COVER / BUILT ENVIRONMENT. NO ASSESSMENT HAS BEEN MADE FOR UNDERGROUND SERVICES, PROPOSED OR EXISTING, UNLESS OTHERWISE STATED. THE CONTENTS OF THIS REPORT ARE VALID FOR ONE YEAR. THIS PERIOD OF VALIDITY MAYBE REDUCED IN CASE OF ANY CHANGE IN CONDITIONS TO, OR IN PROXIMITY TO, THE TREE. THE REPORT IS FOR THE SOLE USE OF THE CLIENT AND REFERS ONLY TO THOSE TREES REFERRED TO WITHIN, USE BY ANU OTHER PERSON(S) IN ATTEMPTING TO USE OT CONTENTS FOR ANY OTHER PURPOSE RENDERS THE REPORT INVALID FOR THAT PURPOSE.

REPORT INTRODUCTION

- 1.0.1 This report has been commissioned by Mytton Homes to determine an update of the existing preliminary tree condition survey in contemplation of development for Bryn y Groes, Gresford, Wrexham in accordance with BS5837: 2005 and current best practice. An Arboricultural Implication Assessment has been determined based on the Mc Cormick Architecture drawing number (SITE PLAN 3206-20-A(300)01B) and included within this report.
- 1.0.2 Each individual tree has been assessed with general regard to condition, health and amenity, development context, retention value and commented upon in the following manner:
- Tree Number, Species, Estimated height, estimated crown spread, Diameter at breast height, Vigour, Retention value, Arboricultural Condition and recommendations and priority key for implementation of Remedial works
- 1.0.3 Tree groups have been surveyed with the same assessment procedure as individuals and comments relate to species content, retention value, amenity value and have been provided with recommendations.
- 1.0.4 The trees have been given classified according to the “desirability to retain”. This rates the amenity conferred by each tree and is based on the assumption that development will occur on the site and having given consideration to the recommendations of this report and BS5837: 2005 – Table One.
- 1.0.5 To ascertain the overall condition of a given tree the survey sheets should be used in conjunction with the Condition key.
- 1.0.6 To ascertain the age class of a given tree the survey sheets should be used in conjunction with the age class key.
- 1.0.7 The trees on the site are subject to a general re-inspection schedule of six months from which a requirement for further monitoring or assessments will be judged.
- 1.0.8 Retained trees will require reasonably frequent monitoring during construction including monthly visits and specific timed visits when construction is occurring in the vicinity of such retained trees, as specified in the Arboricultural Implication Assessment (AIA) / Method Statement, regardless of ownership.

- 1.0.9 Recommendations have been provided for total exclusion zones within the vicinity of retained trees and indicated on the plan by a protective fence line (Tree Protection Zone) in order to de-mark areas of undisturbed ground within such TPZ's.
- 1.0.10 Those development proposals within or immediately adjacent to the Special Measure Areas (SMA'S) will require site supervision by a competent arborist.
- 1.0.11 Recommendations for further inspection and / or investigation have been provided such as aerial inspection, internal inspection or re-inspection due to difficulty on site whilst conducting Visual Tree Assessment (VTA). Therefore recommendations are conditional as and where stated due to the need for further investigation to confirm recommendation. Such investigations will need to be conducted as soon as possible in order to confirm the condition and wider assessments of trees within the site. Such assessment may alter final recommendations for retention of trees or the required protective measures included within this report.
- 1.0.12 A draft construction method statement is included within this report which must be finalised and approved by the LPA in writing before commencement. Formal provision will need to be made for on site supervision during construction by a client arborist and a timetable for such supervision will need to be confirmed within the final working construction method statement.
- 1.0.13 A specification for the breakout of hard surfaces has been provided within this report to advise the construction team of the required measures when operating within TPZ's. All operations of this type will need to be conducted under on site arborist supervision and in accordance with a final Method Statement.
- 1.0.14 The instance of Japanese Knotweed will require separate specialist advice with regard to management, methods of control and movement off site. The indicative locations of the plant have been plotted on the ATC tree constraints, supplementing the preliminary tree report. Deep dig excavation for removal of the plant is not possible in certain location due to the presence of tree roots within a protected zone. In such areas chemical control is likely to be required and specialist advice is required should "holding areas" be required in association with chemical control. Chemical control can take a number of years and the appointment of a separate specialist is required urgently. Details of management will need to be finalised in association with the arborist and formally submitted to the LPA within Method Statement format.
- 1.0.15 This report has not searched for the existence of statutory legislation applying to the site, such as TPO. The client is strongly advised to check for any such legislation and if present the findings to ATC.
- 1.0.16 The specified remedial work recommendation is regardless of development plans and is based on current tree condition. Therefore the start date for the implementation of remedial works is as specified and from the date of survey.

- 1.0.17 No assessment has been made of soil conditions/implications of soil conditions and root extent is indeterminate from this survey. We would urge that soil type is ascertained and tree related implications are assessed such as foundation type/depth in accordance with N.H.B.C. guidelines.
- 1.0.18 No information is available to assess any tree implications of service lines; we would recommend this information is assessed for tree significance. An extract from the National Joint Utilities Guidelines for planning of services has been included to inform the design team of this aspect of trees.
- 1.0.19 The survey boundaries have been taken from the supplied topographical drawing.

1.1 Tree Works

All tree pruning and felling identified within the pruning regime shall be Carried out in accordance with BS 3998 Recommendations for tree work and The International Society of Arboriculture's Tree Pruning Guideline 1995.

- 1.2 All tree work should be undertaken by a suitably qualified Arboricultural contractor. No works shall be carried out until permission has been granted by the relevant Local Planning Authority. The Forestry Authority should be contacted to check as to whether a Felling License is required.



Condition, Age, Vigour, Amenity and Retention value keys

CONDITION KEY

For the purposes of ascertaining the general overall arboricultural condition of the trees / compartments referred to in the survey sheets the following key should be used.

- 1.1 Those trees marked **“Good”** can generally be classed as having good overall structural and physiological condition. Most usually specimens in good / excellent condition. They generally have few and less significant arboricultural defects than those trees classed as “B” or “C”. They usually contribute significantly to the local or site amenity.
- 1.2 Those trees marked **“Moderate”** can generally be classed as having reasonable structural and physiological condition. They may contain smaller areas of included bark within either major or minor fork junctions. They may be subject to single or multiple fungal invasion, bacteria or virus. In the case of fungal invasion or bacteria the Latin name of the species has been stated. They may be subject to minor crown dieback, unusually pale or smaller foliage or have been subjected to outside influences such as restriction of rooting spread, vandalism or mechanical damage, but should be viewed as in generally good overall condition
- 1.3 Those trees marked **“Poor”** can generally be classed as having poor overall structural or physiological condition. They may contain large areas of included bark either within major or minor fork junctions. They may be subject to single or multiple fungal invasion, bacteria or virus. In the case of fungal invasion or bacteria the Latin name has been stated. They may contain splits or cracks throughout the branching structure. They may be subject to significant crown dieback or exhibit unusually pale or small foliage, be defoliated or dead. They may be subject to outside influences such as restriction of rooting spread, vandalism or mechanical damage and costly to retain.

AGE CLASS KEY

NP – Newly planted

Y - Young - Tree/shrub in first third of life expectancy

MM– Middle Mature – Tree in 2nd third of life expectancy

M – Mature in final third of life expectancy.

OM – Over Mature – Decline in physiological functions.

AMENITY VALUE CLASSIFICATIONS

H – Significant contribution to either local landscape, landscape within site or both. Tree cover in this category should be carefully managed to ensure that the contribution played by the tree within the landscape is not compromised.

M – Indicates that the tree provides some contribution to the local landscape or landscape within site. Consideration should be given to enhancing the landscape with planting if required and management should aim to further enhance the local landscape.

L – Indicates little, no or a negative contribution to the local landscape.

VIGOUR

N – Normal

L - Low

RETENTION VALUE KEY

The trees have been classified according to a desirability to retain. This rates the amenity conferred on each tree / tree group and is based on the assumption that development will occur and given consideration to the main report findings. The categories are as follows:

Table 1 - Cascade chart for tree quality assessment see pp 8.

TREES FOR REMOVAL			
Category and definition	Criteria		
Category R Those in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management	- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other R category trees (i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) - Trees that are dead or are showing signs of significant, immediate and irreversible overall decline - Trees infected with pathogens of significance to the health and/or safety of other trees nearby (e.g. Dutch Elm Disease) or very low quality trees suppressing adjacent trees of better quality NOTE: Habitat reinstatement may be appropriate (e.g. R category tree used as a bat roost: installation of bat box in nearby tree).		
TREES TO BE CONSIDERED FOR RETENTION			
Category and definition	Criteria - Subcategories		
	1. Mainly arboricultural values	2. Mainly landscape values	3. Mainly cultural values including conservation
Category A Those of high quality and value: in such a condition as to be able to make a substantial contribution (a minimum of 40 years is suggested)	Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance (e.g. avenues or other arboricultural features assessed as groups)	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)
Category B Those of moderate quality and value: those in such a condition as to make a significant contribution (a minimum of 20 years is suggested)	Trees that might be included in the high category, but are downgraded because of impaired condition (e.g. presence of remediable defects including unsympathetic past management and minor storm damage)	Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not, individually, essential components of formal or semi-formal arboricultural features (e.g. trees of moderate quality within an avenue that includes better, A category specimens) or trees situated mainly internally to the site, therefore individually having little visual impact on the wider locality	Trees with clearly identifiable conservation or other cultural benefits
Category C Those of low quality and value: 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 not qualifying in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value and/or trees offering low or only temporary screening benefit	Trees with very limited conservation or other cultural benefits
	NOTE: Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150mm should be considered for relocation		

ARBORICULTURAL SURVEY SHEETS

ARBORICULTURAL IMPLICATION ASSESSMENT (AIA)

Proposal

A proposal to develop land at the aforementioned site for residential purposes is due to be submitted to Wrexham Borough Council as a planning application. The current proposal is outlined on the McCormick Architecture drawing no. (SITE PLAN 3206-20-A (300)01B) and will require construction of dwelling, means of access, associated road network, footpath/cycle ways and areas of adopted woodland.

Survey methodology

The trees being a prominent feature of the site were inspected and all relevant parameters were measured and recorded. This site identification can be cross-referenced with the survey tables and survey drawings.

The trees have been classified according to a “desirability to retain”. This rates the amenity conferred by each tree and is based upon the assumption that development will occur on the site, having given consideration to the recommendations of this report and BS5837 2005 Table Two

Further repeat inspection of trees is recommended in the survey sheets and provision for these inspections will be required.

Site Description / Review

The existing site forms part of an isolated area of woodland within a semi rural/urban setting with a number of dominant trees within the site centre alongside a number of significant boundary and frontage trees. The retained trees, being a prominent feature of the site include a notable *Pinus nigra* (T No 565), open grown *Tilia x europea* row (T No 533, 534, T2), *Cedrus libani* (550) and 2 no. *Sequoia sempervirens* (549 and T9). Notable retained site frontage trees include T No's 504, 501, 505, 510, 506 and 511.

A significant area of Public Open Space (adopted woodland) has been determined in order to retain mature and notable specimens in and around the site as design features maintaining the considerable amenity these trees present to the local area. Much of the individual trees being a prominent feature of the central areas of the site are retained by means of public open space. Although a number of the frontage trees are of particular note in terms of the amenity they represent, a reasonable number will be lost for the access highway requirements applying to the site.

Because of the location of trees and topography of the site, it is currently partly secluded and there are limited public views into it from significant road networks. However, it is noted that post site clearance (particularly on the frontage) that a number of the trees retained within the proposed scheme will significantly increase in terms of their contribution to local amenity and landscape. As far as is practical the scheme has been designed to ensure the visual impact of retained trees within the site can be maintained within the areas of undisturbed ground, protected by fencing arrangements along with special measure areas, detailing engineering solutions for construction adjacent to retained trees.

A number of engineering design solutions have been incorporated into the current development proposal such as the use of elevated traffic/footway tables in areas designated as “SMA” areas, for example adjacent to T549, T9 and T565.

Specifications for construction and the use of special techniques such as no dig construction have been made for example T 521, T 570.

Some of the trees have little or no landscape or arboricultural significance and are largely recommended for removal to allow development or to maintain acceptable safety standards.

Preliminary protective measures for the retention of trees have been provided, further clarification of the means of construction will need to be assessed within a final method statement for construction duration. We recommend that the draft method statement presented in this report is used to support a tree protection related planning condition attached by the LPA to full planning permission detailing the provision of a final Method Statement for Arboricultural Works.

The Purpose of the report

The brief is as follows:

To survey all relevant trees, this by their presence, or likely presence, might materially impact on the development proposals.

To prepare a clear set of report recommendations with supporting plans and tabulated data such as to facilitate proper consideration of landscape proposals.

To consider the development proposals and highlight key areas in which problems may occur, where “special measures” may be required or in which particular materials, methods and timescales apply.

Provision will need to be made for recommended further investigation.

Survey Data

Survey data is contained within survey sheets within this report and the tree numbers on the table cross-reference with those on the drawings supplied.

Technical Data

Various technical and other data that support this application are found in the rear of this report.

Analysis – Arboricultural Issues and Considerations

Demolition

In order to avoid any unnecessary damage, trees to be retained would be fenced off before any works are undertaken on site as specified in the ATC tree plan. In order to avoid damage to the retained trees it is recommended that access for demolition should be restricted so as to reduce the potential for direct damage during demolition. Demolition works should commence in such a manner that plant is excluded from the fenced areas that are protecting retained trees.

The protection of trees during construction should be the subject of a condition requiring a final Method Statement for Arboricultural Works to be submitted and approved in writing by the local planning authority before any work commences on site.

The location of protective fencing has been shown the Tree Protection Plan (TPP) to the rear of this report. This will need to be installed and approved by an arboriculturalist prior to commencement.

Site Clearance

Like demolition, clearance of the remaining vegetation growing within the site would only start once the protective fencing is in place to protect the trees to be retained.

Site frontage – Access arrangements

A number of trees are indicated in the survey sheets to be removed for development access:

Those retained trees shown on the TPP (501 505 510 506 511 and 521) will require the following protective measures:

- Install fencing as specified
- Remove existing wall by hand under arborist supervision within SMA area
- Re position fencing for access only under arborist supervision
- The new footpaths within the SMA areas will require the following specification:
 - Accord with Specification for surface treatment in the vicinity of retained trees (within appendix)
 - No dig policy for construction of footway
 - Use of load bearing geo textile to reduce dig requirement and bear introduced load, as detailed in special measure area.
 - Use of non fines infill
 - Use of porous finished wearing surface
 - Retain all roots >25mm
 - Arborist supervision throughout
 - Confirmation of construction detail will require finalising in Method Statement format

Areas of adopted Woodland

The following areas of the site are proposed areas of adopted woodland

A large central area of the site containing T No's 533, 534, 535, 1, 2, 550, 9, 549, 565, 567 and G19 is proposed to be adopted woodland.

This area is a designated area of Tree Protection, bounded by protective fencing. A number of areas are Special Measure Areas (SMA's). The following protective measures are required:

A - Initial protection and investigations:

- Position fencing as shown on TPP to include SMA around T9 and T549.
- Immediately undertake hand excavation of root collars for T9 and 549 to determine root presence and extent under supervision
- Re position fencing
- Confirm use of elevated traffic and footpath system in vicinity of T565, T549 and T9.
- Arborist to re confirm protective measures required.

B - For construction in SMA's the following method will apply:

- Accord with Specification for surface treatment in the vicinity of retained trees
- No dig policy for construction of footway/cycleway
- Use of load bearing geo textile to reduce dig requirement and bear introduced load, as detailed in special measure area.
- The design and use of an elevated traffic table within the special measures area will be required.
- Use of non fines infill
- Use of porous finished wearing surface
- Retain all roots >25mm
- Arborist supervision throughout
- Confirmation of construction detail will require finalising in Method Statement format

Areas of adopted Woodland

The Southern boundary of the site containing T No's 13, 14, 553, 16, 22, 21, 572, 570 etc is also proposed to be adopted woodland.

This area is a designated area of Tree Protection, bounded by protective fencing. A number of areas are Special Measure Areas (SMA's). The following protective measures are required:

A - For driveway construction in and adjacent to SMA's the following method will apply:

- Accord with Specification for surface treatment in the vicinity of retained trees
- No dig policy for construction of footway/cycleway
- Use of load bearing geo textile to reduce dig requirement and bear introduced load, as detailed in special measure area.
- The design and use of an elevated traffic table within the special measures area will be required.
- Use of non fines infill
- Use of porous finished wearing surface
- Retain all roots >25mm
- Arborist supervision throughout
- Confirmation of construction detail will require finalising in Method Statement format

General

Topography

Minor changes in level around the site may result in some re-grading of the site, but this should not result in any impact on the trees present (assuming adequate protective measures are implemented and supervised).

Tree Works

A number of tree works are required to install the development proposal as shown in the recommendations contained within the arboricultural survey sheets.

Protective measures

The proposed location of the protective fencing is as shown in the plan to the rear of this report on the Tree Protection Plan and requires checking at site level by the nominated arboricultural clerk of works prior to commencement.

A specification for protective fencing is contained within the rear of this report.

A record of protective measures taken on site should be produced in order to act as a benchmark for any future third party claims.

The trees on site are subject to a general re-inspection schedule of one year, from which a requirement for further monitoring will be judged.

Retained trees will require monitoring during construction on monthly cycles during development construction as detailed in the draft Method Statement for Arboricultural Works (8 - Supervisory arrangements)

A final Method Statement for Arboricultural Works will be required to update the existing draft statement contained within this report.

Tree roots can be damaged during construction in various ways and an extract of general advice has been provided within this report relating to how damage occurs.

Shading & post construction tree resentment

The design of the scheme has evolved since October 2004. Advice relating to tree constraints and resulting design change was sought and has been accommodated in conjunction with the arboricultural officer and throughout this period.

It is contended that a mosaic of shading will be produced on the site that shall not give rise to significant post construction tree resentment. Some units on the Northern boundary will experience some loss of evening sunlight in the late summer evenings due to the presence of trees whilst a significantly larger percentage of the units on the site will receive an interrupted or moderately high levels of sunlight filtration.

In order to reduce instances of nuisance the following facilitative pruning is required:

T533 Prune to provide 3m clearance from proposed unit.

T570 Prune overhang to West by 2m.

T566 Prune overhang to North by 1-2m

The management of the adopted woodland would be required post development for a significant period in order for the trees to be maintained and complaints about their size and potential over dominance to be assessed against prioritised and scheduled works. This work itself will have a significant bearing on the potential volume of post construction tree resentment on the site.

Conclusions

It is concluded that:

Some trees will be lost for the development proposal as detailed in the survey sheets whilst others need to be removed for their current condition to maintain acceptable safety standards.

The demolition and site clearance will require fencing to protect trees and areas of landscape and the supervision of a competent Arboriculturalist.

Protective fencing and signs will be required to control the site and to prevent damage to retained trees and areas of landscape.

A nominated arboricultural clerk of works is required to administer the recommendations contained within this report.

Recommendations

The techniques described for the retention of trees are the most up to date available and for the most part accord with BS5837 2005 “Trees in relation to construction” or are in advance of such requirements. However, the key to success is in the supervision of the recommendation implementation. This can be achieved by making them appropriately worded planning condition(s) which in turn allow proper enforcement of the recommendations.

We recommend a final Method Statement for Arboricultural Works associated with the following issues is produced:

ISSUE	METHOD STATEMENT
Access	Protection of all trees and timing of Works
Fencing	Erection of protective fencing during demolition and construction phases.
Felling and pruning	Schedule and Methods.
General	Phasing / Timing of Works.
Services	Review of proposal

It is recommended that if development is permitted then the permission should be conditional upon the submission and approval in writing of a Final Method Statement for Arboricultural Works. The first draft of the method statement is contained below.

DRAFT CONSTRUCTION METHOD STATEMENT FOR ARBORICULTURAL WORKS

From commencement of the development, the following methodology shall be implemented in the manner and sequence described.

SEQUENCE OF WORKS

- 1 Pre-contract site meeting
- 2 Arboricultural works
- 3 Tree protection
- 4 Main construction phase to practical completion
- 5 Hard surfacing construction
- 6 Removal of temporary fencing
- 7 Landscape works
- 8 Communication
- 9 Supervisory arrangements
- 10 Other matters

1 PRE CONTRACT SITE MEETING

To outline working methods in relation to trees prior to any demolition or construction activity on site, a site meeting of the following shall take place

- Client / Client's agent
- Main contractor
- Site Agent
- Consulting Arborist

2 ARBORICULTURAL WORKS

- a Before erection of the temporary fencing, all tree removal and pruning works shall be implemented in accordance with the Tree Work indicated within the arboricultural survey sheets
- b Before pruning of trees not standing on the development site, the tree owner or their authorised agents shall be notified of the proposed work and offered any material arising from the work
- c All tree stumps being within 6.0 metre of any retained tree shall be removed by mechanical stump grinder, such stumps shall not be excavated in their entirety by mechanical excavator
- d All arboricultural works shall conform to the recommendations of BS3998, British Standard Recommendations for Tree Work unless otherwise specified in the Tree Survey Schedule
- e All operatives shall be equipped with and use personal protective equipment in accordance with current directives of the Health and Safety Executive and industry codes of practice
- f Performance of all arboricultural operations and use of equipment shall be in accordance with current directives of the Health and Safety Executive and industry codes of practice
- g Wound sealants shall not be used on any tree
- h Systemic herbicides shall not be used in the poisoning the stumps of the felled trees

3 TREE PROTECTION

a Following completion of the tree removal and pruning operations, the main contractor shall install temporary fencing, ground protection to provide tree protection as detailed within the Tree protection plan.

B The consulting Arborist, before any demolition or construction works, site preparation, excavation or delivery of plant and materials shall inspect installation of the temporary fencing. Any damage occurring to protective fencing during the construction works shall be reported to the consulting Arborist and be made good by the main contractor. Confirmation of the erection of temporary fencing will be confirmed by the main contractor to the Local Authority and consulting arborist, in writing prior to construction commencement

c Any incursion into exclusion zones defined by the temporary protective fencing must be by prior arrangement, following consultation with the Local Planning Authority and client arboriculturalist.

D No excavated material shall be spread or otherwise placed within the tree protection areas.

E All temporary protective fencing shall:-

1. preclude all construction activity with the sole exception of specified arboricultural works and such works as have been agreed by all parties and to be carried out under supervision.
2. preclude the storage or tipping of all materials and substances, in addition toxic substances such as fuels, oils, additives, cement or any other deleterious substance within 5.0 metre of a temporary protective fence

4 MAIN CONSTRUCTION PHASE

a The consulting Arborist shall supervise excavation for installation of drainage or other services, where such excavation is located within a tree protection area

b All construction equipment and materials shall be stored within the area designated as the site compound for which the location of will be agreed with the LPA, clients agent, site agent and consulting arborist. Any deleterious substances, site huts and facilities shall be located within the site compound

d No fires shall be lit within 15.0 metres of any tree

e Any deliveries by self-loading crane shall be supervised by the Site Agent, positioning the vehicle in such a manner that retained trees are not at risk of damage

f Demolition of boundary walls or removal of hard surfaces shall be carried out by hand and all excavation shall comply with the guidance set out in NJUG regulations (1995)

5 REMOVAL OF TEMPORARY FENCING

- a Temporary protective fencing shall be removed only upon completion of the adjacent construction works and with the written consent of the Local Planning Authority approval

6 LANDSCAPE WORKS

- a Landscaping works will be implemented in accordance with a scheme approved by the Council and following removal of the temporary fencing
- b No rotovation of ground shall be carried out within any area designated as a tree protection area
- c Within any area designated as a tree protection area, up to 100mm depth of sandy topsoil can be spread to enable the establishment of grass or other vegetation. No other additions should be made without the Local Planning Authority consent

Temporary Protective Fencing shall:-

- 1 Be erected prior to any construction or demolition works, delivery of site accommodation or materials and remain for the duration of construction works;
- 2 preclude all construction activity with the sole exception of specified aboricultural works and such works as have been agreed by all parties and to be carried out under supervision;
- 3 be protected by temporary protective fencing and other measures as specified below and defined by area within the survey sheets;
- 4 preclude the storage or tipping of all materials and substances, in addition toxic substances such as fuels, oils, additives, cement or any other deleterious substance within 5.0 metre of an exclusion zone.

Any incursion into exclusion zones must be by prior arrangement, following consultation with the Local Planning Authority/ client arborist.

Temporary Protective Fencing

- 1 Temporary protective fencing shall be 2.3 metres high with a scaffold framework as indicated in BS 5837:2005 figure 2 and reproduced in the Appendix to this report - Specification for protective fencing
- 2 The fencing panels shall butt together and be fixed with 3 no. clamps to each joint
- 3 Each fence panel shall be supported by a 45⁰ strut of scaffold tube, from the top rail of the panel back into the exclusion zone
- 5 No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to tree roots when locating posts
- 6 A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT"(Fig. 1) shall be fixed to every 10m of protective fencing
- 7 The consulting Arborist shall direct erection of temporary protective fencing

7 Communication

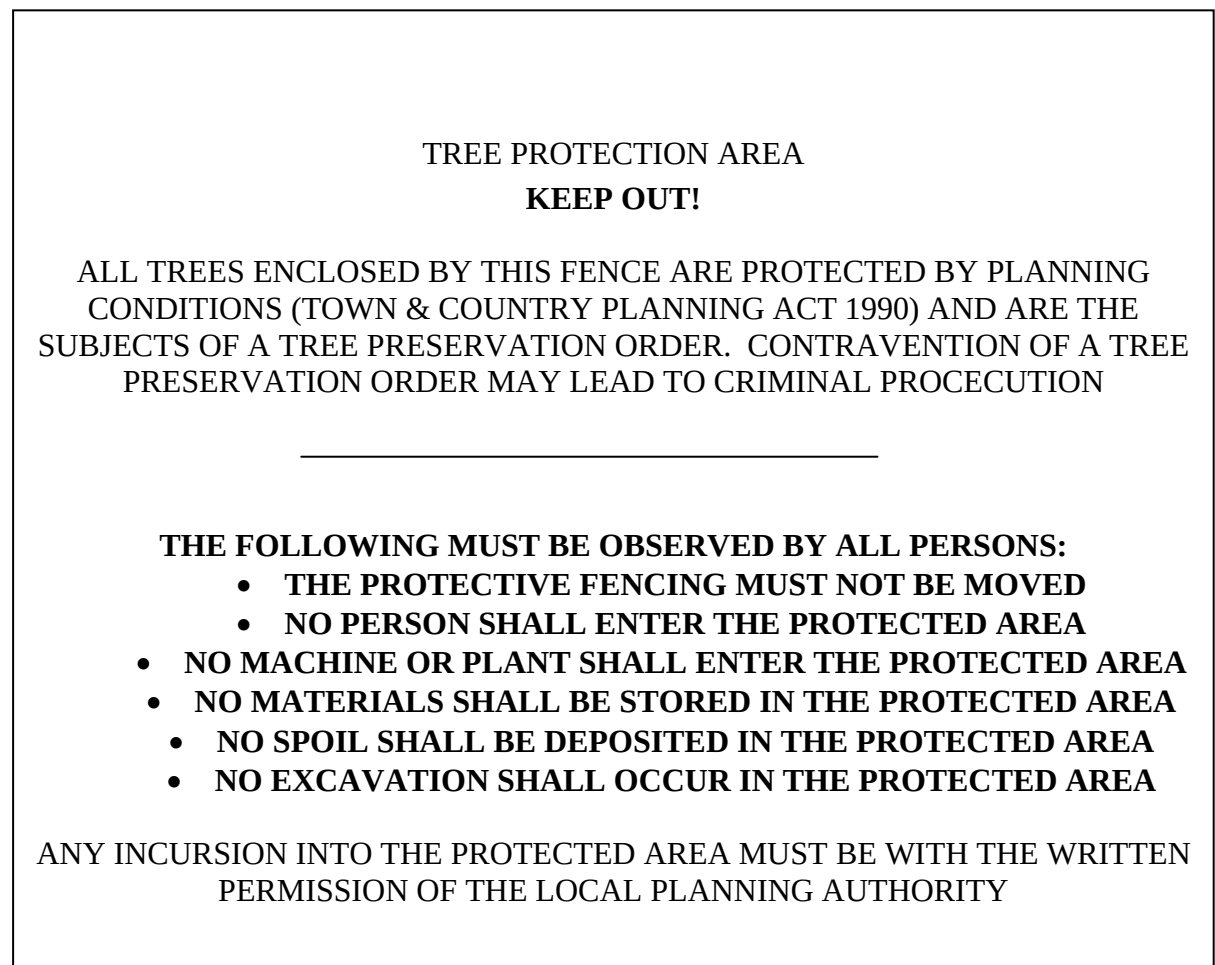
Visits by the consulting arboriculturalist will be scheduled.
Formal reports will be forwarded to the site agent, and client
A monthly summary will be forwarded to client

8 Supervisory arrangements

Recommended schedule for specific on site arboricultural supervision, including recommended scheduled monthly visits.

Nature of construction	Vegetation affected	Supervisory requirement
Pre start meeting with demolition	Retained trees	Outline tree constraints
Protective fence installation	Retained trees	Inspect installed fencing arrangements
Access	T501,505, 510, 506, 511	Supervise excavations and re instatements in SMA areas
Access	T521	Supervise excavations and re instatements in SMA areas
Foot and cycle ways (elevated tables)	T565, 534, 538a, T8, 539, 1, 2, 9 , 549	Supervise excavations and re instatements in SMA areas Arrange contractor access to TPZ Supervise root collar investigations for 9 and 549. Traffic table installation monitoring T9, 549 and 565
Driveways	T570, 571, 572, 21, 22	Supervise excavations and re instatements in SMA areas
General	Retained trees	Planned monthly visits to site (monitoring)

Fig. 1. To be displayed on all protective fencing



10 Other matters

In order to avoid disturbance to the physical barrier forming the exclusion zone once it is installed, it is essential to consider, make allowance and plan for operations which will be undertaken in the vicinity of trees;

Intensity and nature of construction activity

Not yet known. The details are to be fully confirmed in final Method Statement.

Contractor's car parking arrangements

Not yet known. The details are to be fully confirmed in final Method Statement.

Phasing of the main build

Not yet known. The details are to be fully confirmed in final Method Statement.

Construction working space

Adequate space for the construction of plot and access has been made within the positioning of the protective barrier as shown on the ATC tree plan.

Availability of special construction materials for special measures areas

The manufacturer of a preferred load bearing geo textile and a porous finished wearing detail (eg pea gravel/porous tarmac) may be required. The site manager will be responsible for the provision of these materials

Space for crane delivery of materials, scaffolding etc

Details to be fully confirmed in final Method Statement. .

Temporary structures on the site

Huts, temporary storage, toilets and stores are to be fully confirmed in final Method Statement.

Cement mixing operations

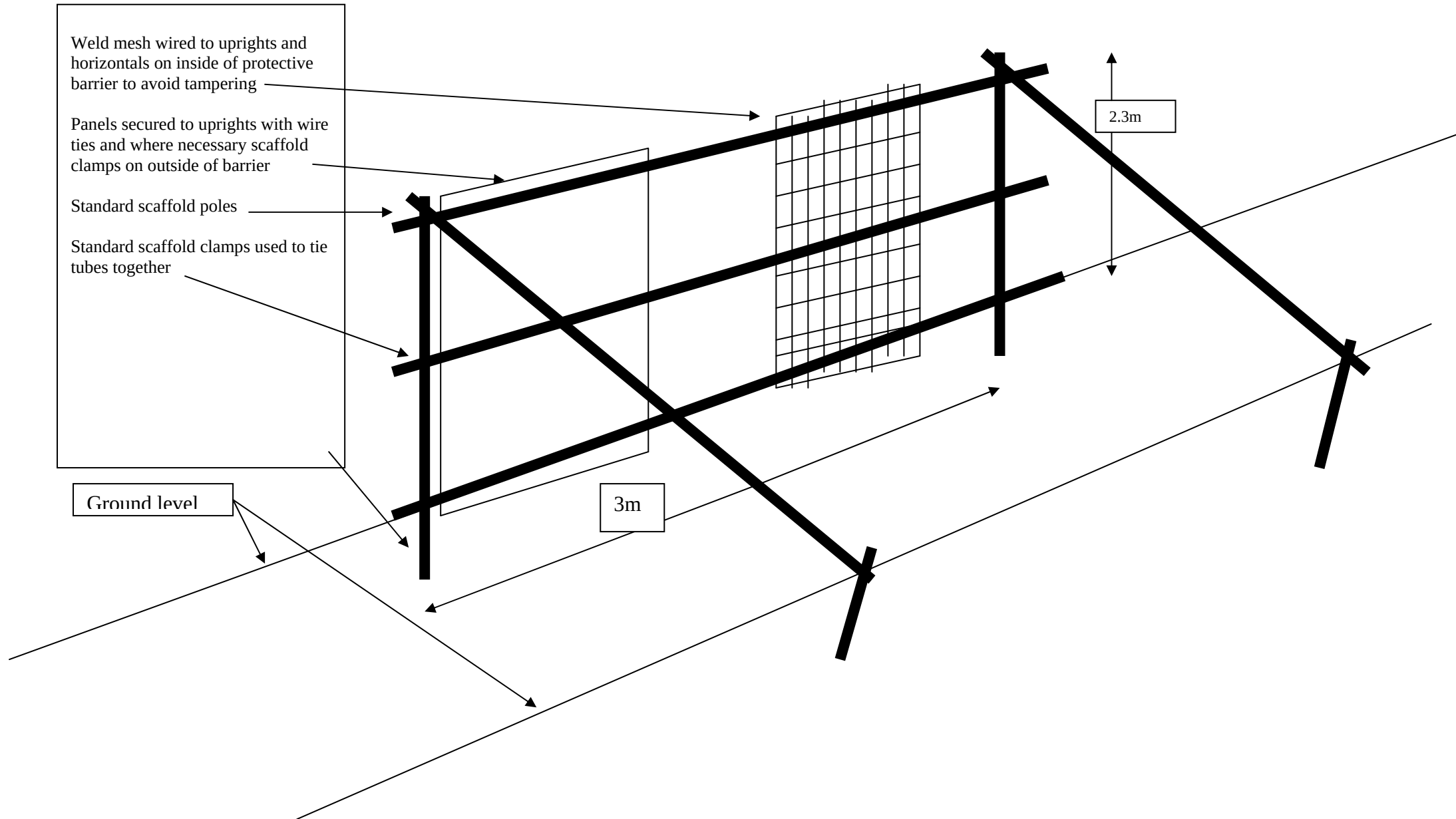
Details to be fully confirmed in final Method Statement.

Spillage of harmful substances into the exclusion zone

Should it be required, due to electric failure, there is a potential need to run a generator with bunded diesel tank, which will be inspected for spillages during the Monthly supervision of the works

Appendix One

PROTECTIVE BARRIER REQUIREMENTS – BS 5837: 2005 Trees in relation to construction.



Appendix Two



Specification for surface treatment in vicinity of retained trees

In areas where tree roots are likely to be found beneath existing bound surfaces, which must be broken out and then replaced, precautions must be taken to minimise disturbance. All operations for breakout of surfaces to be conducted on site arborist supervision, unless otherwise stated.

- Where possible, breaking-out shall be by hand, using pickaxes rather than pneumatic equipment.
- No machinery shall pass over the surface once broken-out.
- Where the roots are bound to arisings, the root shall be pruned by use of a sharp saw or secateurs.
- The newly exposed ground surface shall immediately be covered by at least 35mm of sharp sand or sandy topsoil.
- Protective fencing shall be realigned to surround the newly exposed surface until such time as the ground is finally re-surfaced.
- The maximum excavation depth under a no dig policy is 50mm. Any excavations in excess of this depth will require specific on site advice prior to commencement.
- On site watching brief by arborist throughout

Appendix Three

Trees & Construction

1. Construction close to trees can be enormously damaging and detrimental to the tree's health, often leading to their death and eventual removal.
Development of a site, including construction of access routes, driveways and parking areas can result in substantial root severance of trees. Traditional driveway construction (excavation and backfilling with a compatible load-bearing sub-base material) can seriously damage tree roots. Such damage occurs because of a lack of understanding that roots mainly grow outwards from a tree's trunk, near to the soil surface, rather than downwards.
2. The majority of tree roots are in the upper metre of soil and they may spread outwards, in any direction where soil conditions are suitable, to a distance of up to three times the tree's mature height.
3. Any disturbance of the ground within the root spread of a tree can damage its roots, which may severely injure the tree. If roots are damaged close to the trunk, the anchorage and stability of the tree can be adversely affected. If they are damaged anywhere along their length, all of the fine roots which they serve will be destroyed.
4. Damage to the fine roots by severance of a main root, or by compaction of alterations in levels, will prevent these fine roots from absorbing the water and nutrients which are essential for the well-being and growth of the tree. The tree may also be made unstable and pose a threat to the safety of people and property.
5. The effects of damage from different causes, for instance by successive excavations for different services, or by excavation in one part and compaction in another part of the system, will be cumulative.
6. If the root system is damaged, new roots must develop to sustain the tree. These may develop from the damaged root or by increased growth of other parts of the system. It may take years to replace all of the lost roots. Vigorous young trees are the most likely to be capable of rapid root regeneration, but mature trees find it very difficult to recover from major root damage. While roots may regenerate, they will not necessarily provide their original anchorage.
7. Trees with damage may not show any immediate symptoms. If the root system is capable of rapid regeneration, the tree may recover without any noticeable ill-effects, but usually the symptoms will take several years to develop. Such symptoms may range from only minor branch dieback to deterioration and ultimate death of the tree, dependent on the severity of damage and the ability of the roots to regenerate.

1. Most trees that have been growing undisturbed on a site for many years will have developed an extensive root system with the roots growing where the soil conditions are most favourable. There is a balance between the development of the crown (which demands water) and the roots (which supply it). Any sudden alteration in the soil conditions within the tree's rooting area (a circle of radius equal to the tree's height) will therefore upset this balance.
2. Root systems can be damaged by:

Repeated passage of machinery, which will squeeze the soil, closing up the pores causing compaction, especially in the upper levels, and so reducing the amount of oxygen available to roots and preventing them from growing through the soil. Surviving roots may then not be able to grow through the compacted soil. It is essential therefore that all but the immediate area of the development is protected from construction operations by fencing as recommended in BS5837.

Placing soil or other materials over the roots of a tree, which will impede air movement into and out of the soil and consequently reduce the availability of oxygen to the roots.

The severance of a root, for example by trenching, which will destroy all parts of the root beyond that point. Even roots less than 10mm in diameter may be serving the fine roots over a wide area. The larger the root served, the greater the impact on the tree.

Damage to the bark on the root. The bark protects the root from decay, and is also essential for further root growth. It is loosely attached and easily damaged. If damage to the bark extends around the whole circumference, the root beyond that point will be killed.

Alterations in soil level. Lowering the level will strip out the mass of roots near the surface. Raising the levels will have the same effect as soil compaction.

Appendix Four

Extract from National Joint Utilities Group Report

*Guidelines for the planning, installation and maintenance of utility services in proximity to trees

4 HOW TO AVOID DAMAGE TO TREES

4.1 This section gives general guidance on methods of work to minimise damage to trees which should be adopted by utilities. The local authority (or for privately owned trees, the owner or his adviser), should be informed about planned work at an early stage prior to commencement.

4.2 Wherever trees are present, precautions should be taken to minimise damage to the root system. As the shape of the root system is unpredictable, there should be careful control and supervision of any excavation, particularly if this involves digging through the surface 600mm where the majority of roots develop.

4.3 The precautions advocated in this section are applicable to any excavations or other works occurring within a distance from the tree equal to 4 times the circumference of the trunk (circumference measured around the trunk at a height of 1.5m above ground level; distance measured from centre of trunk to nearest part of any excavation or other work) (see figure 3). This area around the trunk is referred to as “the precautionary area” hereafter.

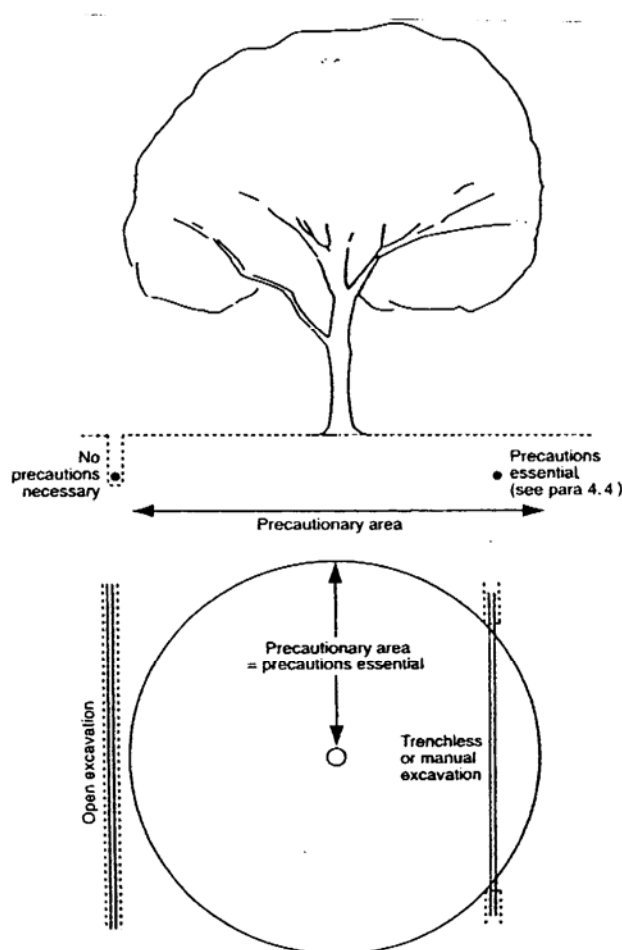


Figure 3

{Precautionary area (=4 x trunk circumference)}

4.4 Although, ideally, services should be diverted or re-aligned outside the precautionary area, it is recognised this will not often be practicable. Where works are required or the laying or maintenance of any service within the precautionary area, there are various techniques to minimise the damage. The appropriate method of laying will depend on the circumstances, such as:

- the scope of the works (one-off repair, or part of an extensive operation)
- degree of urgency (for restoration of supplies)
- knowledge of location of other services
- soil conditions
- amenity value of tree
- cost

Acceptable techniques in order of preference are:-

- 1) Trenchless - see section 4.5
- 2) Broken trench - hand-dug - see section 4.6
- 3) Continuous trench - hand dug - see section 4.7

Excavation of open trenches by machine is totally unacceptable within the precautionary area

4.5 Trenchless

4.5.1 Wherever possible trenchless techniques should be used. The pit excavations for starting and receiving the machinery should be located outside the precautionary area.

4.5.2 In order to avoid damage to roots by the mole, it is recommended that the depth of run should be below 600mm. Techniques involving external lubrication of the mole with materials other than water (e.g. oil, bentonite, etc.) should be avoided, unless precautions are taken to ensure that there is no contamination of the soil within 600mm of the surface within the precautionary area.

4.6 Broken Trench

4.6.1 This technique combines hand dug trench sections with trenchless techniques. If excavation is unavoidable, it should be limited to practical access and installation around/below the roots. The trench is excavated by hand with precautions taken as for continuous trench below. Open sections of the trench should only be long enough to allow access for linking to the next section. The length of sections will be determined by local conditions, especially soil texture and cohesiveness, as well as the practical needs for access. In all cases the open sections should be kept as short as possible.

4.9 Additional precautions near trees

4.9.1 Repeated movement of heavy mechanical plant (excavators etc.) should avoid the precautionary area except on existing hard surfaces, in order to prevent unnecessary compaction of the soil. This is particularly important on soils with a high proportion of clay. Spoil or building material must not be stored in the precautionary area.

- 4.9.2 Care should be taken to avoid damage to the trunk and branches from machinery. A tree must not be used as an end-stop for leaning paving slabs against after lifting, nor for security chaining of machinery. If the trunk or branches of a tree are damaged in any way, advice should be sought from the local authority arboriculturist. Any remedial surgery which is necessary should be carried out in accordance the British Standard 3998:1989, 'Recommendations for Tree Work'.

4.10 Special considerations when planning services

- 4.10.1 The potential for future conflict with trees can be reduced at the stage of initial planning approval by the appropriate alignment of services and the provisions for future tree and shrub planting. Appropriate and separate space should be provided for each. Local authorities should liaise with developers.
- 4.10.2 If planning requirements and site constraints dictate that trees (existing or to be planted) and services share the same area, consideration should be given to increasing the depth of services, if possible to a minimum of 600mm, and to laying the service in ducts which will resist root penetration but allow replacements to be laid without extensive excavation. As this may incur additional costs, allowance must be made for these costs and the responsibility for meeting them at the planning stage.
- 4.10.3 When laying new services or replacements, to avoid the risk of future direct damage, allowance should be made for future root growth.
- 4.10.4 Services laid in clay or peat should be constructed to tolerate movements associated with swelling or shrinking of the subsoil caused by root activity. Special precautions for differential movement should be incorporated where services join rigid structures founded at a different depth to the service.

Extract from Arboricultural Practice Note 12 "Through the trees to development".

Appendix Five

SITE MANAGER!

TREES – DO’S AND DON’T’S

How to assist in ensuring your site does not face potential prosecution under the Town and Country Planning Act.

DO’S

- Ensure that protective fencing is installed at the base of any vegetation to be retained prior to commencement of any works in the vicinity of retained vegetation.
- Do check that any remedial works applying to the removal or pruning of vegetation are fully authorised by the Local Planning Authority.
- Do check whether your site has been earmarked for on site supervision by a tree consultant, make yourself aware of the locations and make contact with the nominated tree consultant a minimum 2 weeks before work commencement to attend site and supervise the works.
- Assume when you arrive on site that fencing at the base of trees means you can not remove it without consent from Head Office.
- Do check your trees following high wind for any broken branches etc, record observations and report to either head office or a tree consultant if any areas of concern arise.

DONT’S

- Do not remove any protective fencing for any reason. Should you need to enter a protected area to implement works then telephone head office planning department or the nominated tree consultant. After which you will be given a day on which the removal of fencing can be supervised by a tree consultant. Under no circumstances remove this fencing without approval.
- Do not remove soil from the base of tree stems, if in doubt, call head office or the nominated tree consultant
- Do not remove trees mechanically!

Appendix Six

REPORT GLOSSARY

TREE WORK SPECIFICATIONS – TO BE CONDUCTED IN ACCORDANCE WITH BS 3998

CROWN REDUCTION

Involves only the outer part of crown i.e. the foliage bearing branches only and therefore a modest reduction in overall height and spread is achieved. The larger branches are left intact. A reduction may be expressed in terms of the % or meters of length to be removed. All pruning works should provide a finished cut from a lateral to produce a natural branch taper. It is not good practice to repeat a reduction on a mature tree for up to 2 – 3 years as photosynthetic capabilities are significantly altered in the first year after works.

A reduction is prescribed for safety and light filtration purposes where a given tree is to be retained. Removal of foliage bearing branches reduces the likelihood of wind blow or individual branch failure as the tree has less resistance to loading pressures such as the wind and is often enough to mitigate most reasonable hazards(D.Lonsdale 99 Tree Hazard Evaluation H.M.S.O.Press)..

NON-INVASIVE CABLE INSTALLATION

Occasionally hazards occur that require remedial works such as cable installation. Such hazards include forks that contain bark within the natural join and are therefore viewed as structural weak points. If the tree is to be retained a cable can be installed above the weak fork for supplementary support.

Large limbs can also require artificial support with cabling systems that are non – invasive to the tree i.e. the bark need not be pierced for installation.

It is standard practice to reduce the weight of the crown or limb if a need for cabling has been identified on the basis of safety and stabilisation.

CROWN THIN

A Crown Thin will not reduce the overall spread of the crown in the same way as a reduction. This operation concentrates on the removal of deadwood, branches that are crossing one another and diseased branches and should be viewed as corrective formative pruning.

POLLARDING

On mature trees this operation should be completed over a number of years by progressive removal of large limbs/main stem allowing for dormant buds under the bark to burst and provide foliage for photosynthesis. Pollarding can significantly increase the longevity of a given tree. Pollarding can induce individual branch drop at the pollard point. Pollarding is unsuitable on certain species of tree cover.

Topping is not a recognised pruning method and should be avoided at all costs.

Ideally pollarding should be done when the tree is young and was traditionally used as a method to produce firewood on grazed sites.

CROWN LIFT

Removal of lower branches to a specified height, of either whole or part of the branch back to the branch collar. There is no legally required limit at roadside but individual attention should be paid to each case.

FORMATIVE PRUNING

The removal of dead, damaged, weak, twin leaders or crossing branches to ensure the branch structure is defect free.

REDUCTION OF END LOADING

Applying to specific large lateral branches that are developing mechanical loadings and also the potential to fail under their own weight.

LIFE EXPECTANCY

An indicative assessment, assuming standard weather conditions, no physiological change, and re-inspections as and where stated

INCLUDED BARK

Areas of poor fork formation within the branching structure. Most usually a lack of normal woody tissue within a fork junction which can compromise structural stability within the tree as a whole. Most usually a crown thin can alleviate loading from outside agents such as wind on the identified weak point, some cases require removal of the tree on a safety basis.

MECHANICAL DAMAGE

Mechanical damage most usually takes the form of damage caused by outside agents such as man or machine. As a result of mechanical damage water and mineral transportation can be disrupted, in some cases this can lead to physiological decline or structural instability.

WOODLAND STRUCTURE

Assessment of vegetation levels with Shrub, Intermediate and Canopy layers.

FORK INCLUSION

Area of included bark within fork junction/s

HANGER

A branch that has completely broken off and is being supported by the crown.

OCCLUDED

A wound that has become completely sealed by callus tissue

RIBS

A protrusion of reactive wood growth that has formed over a crack or other anomaly

A.I.A.

Arboricultural Implication Assessment (A.I.A.) – required to examine impact of development proposals on tree cover in order to formulate tree protection measures

V.T.A.

Visual Tree Assessment – Examination of visual tree defects

DFG

Disturbance free ground

SPOROPHORE

Fruiting bodies of fungus such as Toadstool or Bracket fungi.

RESONANCE TEST

Use of hammer testing as a means to measure the resonance of timber against the normally anticipated resonance level in cases of suspected decay.

HUNG UP

A tree that is resting on an adjacent tree or structure.

PLANTERS

Timber edged structures at the base of trees that contain wood or bark chip.

PF

Protective fencing

EPICORMIC GROWTH

Shoots developing at the base of main stems. Often require removal to allow full stem VTA.

CROWN CLEAN

Cleaning out is defined as the removal of dead, dying or diseased branch wood, broken branches or stubs left from previous tree surgery operations together with all unwanted objects, which may include fungal fruit bodies, ivy and/or other climbing plants, nails, redundant cable bracing, rope swings, tree houses and wind-blown rubbish from the tree, and any such debris from any cavities within the tree.

Appendix Seven

ATC Tree Reference Plans
Tree and group location / retention value plans

- 1/1000 Overall site
- 1/500 extracts x4

Appendix Eight

ATC Tree Protection Plan (Retained trees)

Tree and group location, retention values, tree protection zones, special measure areas.

- 1/1000 Overall site
- 1/500 extracts x4

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations including tree work and further investigation recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
554	Acer pseudoplatanus	12	18	500	mm	l	Moderate – Poor. - Extensive ivy coverage - Heavily suppressed - Small and pale foliage	Unsuitable for retention due to condition. Remove and replace within wider landscape proposals	Unsuitable for retention due to condition. Remove and replace within wider landscape proposals	m	C2	n/a
555	Tilia x europea	16	25	600	mm	n	Moderate (conditional) - small cavity at base, no decay visible - crown deadwood present - Ivy on stem precluding VTA	Retain in POS subject to further investigation - Crown clean and aerially inspect - Remove ivy and re-inspect internally for decay presence	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA).	h	B2	11
556	Tilia x europea	16	25	600	mm	n	Moderate (conditional) - crown deadwood present - Epicormic growth on stem precluding VTA	Retain in POS subject to further inspection - Crown clean and aerially inspect - Remove epicormic and re-inspect.	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA).	h	B2	11
G16							Group sixteen contains three young – middle mature Acer pseudoplatanus. The remaining two stems are covered in ivy which will need removing to allow stem re-inspection.	Unsuitable for retention due to condition. Remove and replace within wider landscape proposals	Unsuitable for retention due to condition. Remove and replace within wider landscape proposals. The young tree on the South of the group exhibits crown dieback and will need to be removed and replaced.	l	C2	n/a
501	Tilia x europea	8	10	325	mm	n	Moderate (conditional). - Epicormic shooting at base. - Crown deadwood	Retain subject to further inspection. - Crown clean and remove epicormic. - Re-inspect lower stem for defects.	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA).	h	B2	9
502	Acer pseudoplatanus	8	16	275	mm	n	Poor - Poor overall form and condition	Unsuitable for retention. Remove and replace within wider landscape and woodland management / refurbishment proposals due to condition	Unsuitable for retention. Remove and replace within wider landscape and woodland management / refurbishment proposals due to condition	m	C2	n/a
503	Acer pseudoplatanus	8	16	225	mm	n	Poor - Poor overall form and condition	Unsuitable for retention. Remove and replace within wider landscape and woodland management / refurbishment proposals due to condition	Unsuitable for retention. Remove and replace within wider landscape and woodland management / refurbishment proposals due to condition	m	C2	n/a

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
504	Tilia x europea	11	20	350	mm	n	Good (conditional) - Epicormic shooting at base. - Crown deadwood	Retain subject to further investigation. - Crown clean and remove epicormic. - Re-inspect lower stem for defects.	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA).	h	B2	6
505	Ulmus spp	12	22	450	mm	n	Moderate (conditional) - Crown deadwood present - Ivy clad	Retain subject to further investigation. - Remove ivy throughout tree and re-inspect to allow full recommendation. - Crown clean. - Monitor closely for <i>Ophiostoma ulmi</i> .	Retain and protect. - Special Measure Area (SMA) applies. Boundary wall demolition and re instatement works require supervision. - Dismantle wall by hand in TPZ. - Retain all roots >25mm - Re position fencing under arborist supervision only	h	B2	9
506	Fagus sylvatica	9	16	450	mm	n	Moderate (conditional) - Crown deadwood present - Ivy clad	Retain subject to further investigation. - Remove ivy throughout tree and re-inspect to allow full recommendation. - Crown clean.	Retain and protect. - Special Measure Area (SMA) applies. Boundary wall demolition and re instatement works require supervision. - Dismantle wall by hand in TPZ. - Retain all roots >25mm - Re position fencing under arborist supervision only - Construct footpath within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous detail	h	B2	8
509	Pinus nigra	7	18	250	Mm	n	Moderate. - Suppressed canopy, poorly formed crown, limited available growing space. - Crown deadwood present - Ivy clad stem	Unsuitable for retention due to condition and form. Longer term amenity would be better served by removal of this tree in order to allow future development of retained trees within the vicinity.	Remove and replace within wider landscape and woodland management / refurbishment proposals Lost for condition and development.	m	C2	n/a
510	Acer pseudoplatanus	12	20	500	mm	n	Moderate (conditional) - Crown deadwood present - Ivy clad	Retain subject to further inspection. - Remove ivy throughout tree and re-inspect to allow full recommendation. - Crown clean.	Retain and protect. - Special Measure Area (SMA) applies. Boundary wall demolition and re instatement works require supervision. - Dismantle wall by hand in TPZ. - Retain all roots >25mm - Re position fencing under arborist supervision only	h	B2	9

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
511	Tilia x europea	10	25	Av 400	mm	n	Good (conditional) - Twin stem, possible fork inclusion Epicormic shooting at base.	Retain subject to further inspection. - Remove epicormic at base. - Crown clean.	Retain and protect. - Special Measure Area (SMA) applies. Boundary wall demolition and re instatement works require supervision. - Dismantle wall by hand in TPZ. - Retain all roots >25mm - Re position fencing under arborist supervision only - Construct footpath within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam	h	B2	n/a
512	Tilia x europea	10	25	400	mm	n	Good (conditional) - Epicormic shooting at base. - Minor crown deadwood	Lost for development access proposal Replace within wider landscape proposals	Lost for development access proposal Replace within wider landscape proposals	h	B2	n/a
513	Acer pseudoplatanus	11	22	425	mm	n	Moderate (conditional) - Ivy on stem precluding VTA	Lost for development access proposal Replace within wider landscape proposals	Lost for development access proposal Replace within wider landscape proposals	h	B2	n/a
514	Fagus sylvatica	11	17	300	mm	n	Moderate (conditional) - Poorly formed crown - Ivy on stem precluding VTA	Lost for development access proposal Replace within wider landscape proposals	Lost for development access proposal Replace within wider landscape proposals	h	B2	n/a
515	Acer pseudoplatanus	11	22	425	mm	n	Moderate (conditional) - Ivy on stem precluding VTA - Forks at 10m	Lost for development access proposal Replace within wider landscape proposals	Lost for development access proposal Replace within wider landscape proposals	h	B2	n/a
516	Tilia x europea	13	25	500	mm	n	Moderate – Good (conditional) - Crown deadwood present - Ivy on stem precluding VTA	Lost for development access proposal Replace within wider landscape proposals	Lost for development access proposal Replace within wider landscape proposals	h	B2	n/a
517	Tilia x europea	10	15	275	mm	n	Moderate - Crown deadwood present - Poorly formed crown - Ivy on stem precluding VTA	Lost for development access proposal Replace within wider landscape proposals	Lost for development access proposal Replace within wider landscape proposals	h	B2	n/a
518	Ulmus spp	10	15	250	mm	n	Moderate – Poor - Excessive lean toward busy target - Good growth potential therefore increased failure potential Poorly formed crown, suppressed tree	Lost for development access proposal Replace within wider landscape proposals	Lost for development access proposal Replace within wider landscape proposals	m	C2	n/a

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
519	Acer pseudoplatanus	6	8	125	y	n	Poor. - Poor overall form and condition	Lost for development access proposal Replace within wider landscape proposals	Lost for development access proposal Replace within wider landscape proposals	m	C2	n/a
520	Acer pseudoplatanus	15	20	550	mm	n	Poor. Hazard tree - Poor overall form and condition - Multi stem containing included bark - Decay at base	Lost due to existing condition. Replace within wider landscape proposals	Lost due to existing condition. Replace within wider landscape proposals	m	R	n/a
W1							Woodland One consists of Ulmus, Acer pseudoplatanus, Crataegus monogyna and Ilex regeneration located within woodland frontage area. Some trees are approaching 10m as would be anticipated in such an under managed understorey. Generally the form and condition of the regeneration is low and few trees are of arboricultural significance. Largely the regeneration will require removal for development access.	Lost for development access proposal Replace within wider landscape proposals	Lost for development access proposal Replace within wider landscape proposals	l	C2	n/a
521	Aesculus hippocastanum	18	28	850	mm	l	Good (conditional) - Notable individual - Crown deadwood, hangers and stubs. - Tested normally to resonance test at base - End loaded larger lateral limbs throughout crown	Retain subject to further investigation. - Crown clean and reduce canopy 5% - Aerially inspect - Re inspect in Spring Flush 2008 for signs of Phytophthora spp	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA). - Special Measure Area (SMA) applies. - Retain all roots >25mm - Construct footpath within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam	h	B1	12

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
522	Acer pseudoplatanus	13	16	350	mm	n	Poor. - Entirely suppressed canopy. - Poor overall form and condition	Remove and replace within wider landscape and woodland management / refurbishment proposals	Unsuitable for retention. Remove and replace within wider landscape and woodland management / refurbishment proposals due to condition	m	C2	n/a
523	Acer pseudoplatanus	8	14	275	y-mm	n	Poor - Twin stem exhibiting included bark - Poor overall form and condition - Ivy clad	Remove and replace within wider landscape and woodland management / refurbishment proposals	Unsuitable for retention. Remove and replace within wider landscape and woodland management / refurbishment proposals due to condition	l	C2	n/a
G1							Group One contains a middle mature Tilia x europea and approximately four regenerated Acer pseudoplatanus and Ulmus stems. The tilia spp is exhibiting <i>Utsulina deutsa</i> and associated decay at the base of the stem, it is also located on a raised soil mound which is eroding and exposing structural roots of the tree.	Remove and replace within wider landscape and woodland management / refurbishment proposals.	Unsuitable for retention. Remove and replace within wider landscape and woodland management / refurbishment proposals due to condition	m-l	C2	n/a
524	Acer pseudoplatanus	11	16	370	mm	n	Poor - Growing on raised soil mound - Poor overall form and condition - Ivy clad	Remove due to condition and to allow adjacent crown development within woodland frontage. Replace within wider landscape and woodland management / refurbishment proposals	Remove due to condition and to allow adjacent crown development within woodland frontage. Replace within wider landscape and woodland management / refurbishment proposals	l	C2	n/a
525	Tilia x europea	11	16	Av 200	mm	n	Moderate (conditional) - Twin stem. - Ivy on stem precluding VTA - Soil mounding at base	Lost for housing proposal Replace within wider landscape proposals	Lost for housing proposal Replace within wider landscape proposals	m	B2	n/a

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
526	Robinia pseudoacacia	12	16	380	mm	n	Moderate (conditional) - Ivy on stem precluding VTA - Crown deadwood present	Lost for housing proposal Replace within wider landscape proposals	Lost for housing proposal Replace within wider landscape proposals	m	C2	n/a
G2							Group two is located at the base of T No 526 and contains approximately 6-7 Acer pseudoplatanus stems and one deformed Robinia spp. Little arboricultural significance. Poor condition	Longer term amenity is better served by removal and replacement of these trees within wider woodland / landscape plans. Remove and replace.	Lost for housing proposal Replace within wider landscape proposals	m	C2	n/a
527	Robinia pseudoacacia	10	12	270	mm	n	Poor – Hazard tree - Extensive lean toward target, likely to fail	Remove and replace	Remove due to condition	l	R	n/a
528	Fraxinus excelsior	13	23	450	mm	n	Good (conditional) - - Ivy on stem precluding VTA - Crown deadwood present	Lost for housing proposal Replace within wider landscape proposals	Lost for housing proposal Replace within wider landscape proposals	m	B2	n/a
529	Robinia pseudoacacia	10	12	270	mm	n	Poor – Hazard tree - Extensive lean toward target, likely to fail	Remove and replace within wider landscape proposals	Remove and replace within wider landscape proposals due to existing condition	l	R	n/a
530	Acer pseudoplatanus	6	8	150	y	n	Poor. Unsuitable for retention	Remove and replace within wider landscape proposals	Remove and replace within wider landscape proposals due to existing condition	l	C2	n/a
531	Tilia x europea	17	26	1000 +	m	l	Moderate. - Large twin stem covered in ivy. - Thin crown, foliage size normal - Crown deadwood present	Retain within adopted woodland area subject to further inspection. - Remove ivy and re-inspect main fork. - Monitor in spring flush 2008.	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA).	h	B2	14
532	Acer pseudoplatanus	8	11	200	y	n	Poor. - Covered in ivy - Suppressed canopy	Remove and replace within wider landscape proposals	Remove and replace within wider landscape proposals due to existing condition	l	C2	n/a

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
533	Tilia x europea	18	30	750	mm	n	Good (conditional) - Crown deadwood present - Extensive epicormic growth - Crossing limbs - Open grown therefore increased amenity	Retain within POS subject to further inspection. - Remove epicormic growth and re-inspect stem. - Crown clean and aerially inspect - Prune to provide 3m clearance from proposed structure	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA). - Special Measure Area (SMA) applies. - Retain all roots >25mm - Construct footpath within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam	h	A2	11
534	Tilia x europea	20	30	750	mm	n	Good (conditional) - Crown deadwood present - Extensive epicormic growth - Open grown therefore increased amenity	Retain within POS subject to further inspection. - Remove epicormic growth and re-inspect stem. - Crown clean and aerially inspect	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA). - Special Measure Area (SMA) applies. - Retain all roots >25mm - Construct footpath within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam	h	A2	11
535	Tilia x europea	18	28	500	mm	n	Good (conditional) - Crown deadwood present - Extensive epicormic growth - Twin stem with visible fork inclusion	Retain within POS subject to further inspection. - Remove epicormic growth and re-inspect stem. - Crown clean and aerially inspect	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA). - Special Measure Area (SMA) applies. - Retain all roots >25mm - Construct footpath within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam	m	B2	9
536	Acer pseudoplatanus	12	17	Av 250	y	n	Poor. - Drawn specimen - Poor overall form and condition	Remove and replace within wider landscape proposals	Remove and replace within wider landscape proposals due to existing condition	l	C2	n/a
537	Robinia pseudoacacia	8	10	Av 250	mm	l	Poor - Fused with adjacent Fraxinus spp stem of same size. Both trees are in poor form and condition.	Remove and replace within wider landscape proposals	Remove and replace within wider landscape proposals due to existing condition	l	C2	n/a

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
G3							Group three contains a young and a middle mature Acer platanoides. The larger specimen exhibits crossing branches and will require crown cleaning and formative pruning. Retain within POS.	The smaller tree is in poor form and condition and will need to be removed and replaced.	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP).	m	C2	8m
G4							Group four contains two middle mature Fraxinus excelsior, average diameter 600mm) in reasonable overall condition (conditional- upon removal of ivy on stem and re-inspection) Retain within POS.	Retain subject to removal of ivy and re inspection for defects - Crown clean	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP).	m	C2	7m
538	Tilia x europea	10	14	275	mm	n	Moderate. - Poor crown asymmetry. - Crown deadwood present	Retain within POS - Crown clean	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA). - Special Measure Area (SMA) applies. - Retain all roots >25mm - Construct footpath within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam	m	B2	6
538a	Tilia x europea	10	14	275	mm	n	Moderate. - Poor crown asymmetry. - Crown deadwood present	Retain within POS - Crown clean	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA). - Special Measure Area (SMA) applies. - Retain all roots >25mm - Construct footpath within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam - Arborist to supervise throughout	m	B2	6
G5							Group five contains three middle mature Aesculus hippocastaneum stems average diameter 300mm. Localised decay at base on most Southerly stem, ivy on stems. Remove ivy (further investigation of decay extent and for stem VTA is required for full management recommendations).	There are two young, heavily suppressed Acer platanoides and a dead Sorbus acuparia that are unsuitable for retention and will require removal and replacement. Given the presence of decay shortening the groups longer term safety and therefore contribution to amenity it will require removal and replacement within landscape proposals	Remove and replace within landscape plans due to existing condition	l	C2	n/a

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
539	Tilia x europea	12	18	400	mm	n	Moderate (conditional) - Crown deadwood present - Epicormic growth at base - Located adjacent to soil mounding	Retain in POS, subject to further inspection - Remove epicormic growth and re-inspect stem. - Crown clean and aerially inspect There are a number of suppressed Acer pseudoplatanus regeneration stems in the vicinity of T No 539 that will require removal and replacement	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA). - Special Measure Area (SMA) applies. - Retain all roots >25mm - Construct footpath within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam - Arborist to supervise throughout	m	B2	9
T1	Tilia x europea	12	22	550	mm	n	Good. - Open grown therefore increased amenity - Crown deadwood present - Epicormic precluding VTA	Retain in POS subject to further inspection. - Remove epicormic growth and re-inspect stem. - Crown clean and aerially inspect	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA). - Special Measure Area (SMA) applies. - Retain all roots >25mm - Construct footpath within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam - Arborist to supervise throughout	m	B2	11
T2	Tilia x europea	12	22	600	mm	n	Good. - Open grown therefore increased amenity - Crown deadwood present - Epicormic precluding VTA	Retain in POS subject to further inspection - Remove epicormic growth and re-inspect stem. - Crown clean and aerially inspect There are a number of young Acer pseudoplatanus at the base of the stems of T1 + T2 which will need to be removed.	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA). - Special Measure Area (SMA) applies. - Retain all roots >25mm - Construct footpath/cycleway within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam - Arborist to supervise throughout	h	A2	11
T3	Tilia x europea	12	22	500	mm	n	Good. - Open grown therefore increased amenity - Crown deadwood present - Epicormic precluding VTA	Retain in POS subject to further inspection - Remove epicormic growth and re-inspect stem. - Crown clean and aerially inspect Prune to provide 3m clearance from proposed structure	Removed for development	h	A2	n/a

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
T4	Prunus spp	7	8	150	mm	n	Poor. - Poor overall form and condition	Remove and replace	Lost due to condition	l	C2	n/a
541	Acer pseudoplatanus	8	12	270	mm	n	Moderate.	Lost for housing proposal, replace within landscape plan	Lost for housing proposal, replace within landscape plan	m	C2	n/a
542	Acer pseudoplatanus	12	16	Av 275	mm	n	Moderate. - Twin stem, no signs of inclusion.	Lost for housing proposal, replace within landscape plan	Lost for housing proposal, replace within landscape plan	m	C2	n/a
G6							Contains four no. young stems of Tilia x europea and a standing dead stem.	Remove dead stem and retain the remaining stems.	Lost for housing proposal, replace within landscape plan	m	C2	n/a
T5	Acer platanoides	13	18	400	mm	n	Moderate (conditional) - Covered in ivy - Non native	Lost for housing proposal, replace within landscape plan	Lost for housing proposal, replace within landscape plan	m	C2	n/a
543	Fagus sylvatica	15	20	750	mm	l	Poor. - Decay at base, structurally unsound.	Remove due to condition	Remove due to condition	m	R	n/a
544	Fagus sylvatica	15	20	750	mm	l	Moderate - Crown deadwood present - Hangers - Thin and asymmetric crown	Lost for housing proposal, replace within landscape plan	Lost for housing proposal, replace within landscape plan	m	B2	n/a
545	Ulmus spp	16	19	700	mm	n	Good. - Minor previous limb failures - Stubs and deadwood present - Notable individual	Lost for housing proposals	Lost for housing proposal, replace within landscape plan	m-h	B2	11
T6	Tilia x europea	12	18	400	mm	n	Good (conditional) - Epicormic at base precluding stem VTA. - Twin stem at 7m	Lost for housing proposal, replace within landscape plan	Lost for housing proposal, replace within landscape plan	m	B2	n/a

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
G7							Contains a number of young – middle mature Aesculus hippocastaneum, Acer pseudoplatanus, Acer platanoides and Ulmus climax vegetation with a sparse under storey of Crataegus monogyna and Ilex spp. The young Ulmus and the Aesculus hippocastaneum located on the rear boundary will develop and should be retained and protected via protective fencing installed at 6m radius from stems. Remaining vegetation is generally in poor condition and form and longer term amenity would be better served by its removal and replacement with more suitable and sustainable species within a woodland refurbishment plan.	Lost for housing proposal, replace within landscape plan	Lost for housing proposal, replace within landscape plan	m	C2	n/a
G8							Consists of middle mature Fraxinus excelsior (Poor overall form and condition) a middle mature Prunus spp (Poor overall form and condition) and a number of young regenerating Acer pseudoplatanus stems. Longer term amenity would be better served by removal and replacement with more suitable and sustainable species within a woodland refurbishment plan.	Remove due to condition	Remove due to condition	l	C2	n/a
T7	Tilia x europea	8	13	Av 275	mm	n	Moderate – Poor. - Twin stem. - Ivy clad	Lost for housing proposal, replace within landscape plan	Lost for housing proposal, replace within landscape plan	m	B2	n/a
546	Acer pseudoplatanus	18	24	850	mm-m	l	Moderate (conditional) - Crown deadwood - Ivy clad	Lost for housing proposal, replace within landscape plan	Lost for housing proposal, replace within landscape plan	h	B2	n/a
T 7A	Acer pseudoplatanus	8	9	250	Y	N	Moderate - Ivy clad	Remove and replace within wider landscape plans	Remove and replace within wider landscape plans	l	C2	n/a

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
T8	Tilia x europea	10	18	350	mm	n	Good (conditional) - Crown deadwood present - Epicormic shooting at base of stem	Crown clean and remove ivy and re inspect	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA). - Special Measure Area (SMA) applies. - Retain all roots >25mm - Construct footpath within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam - Arborist to supervise throughout	m	B2	n/a
G9							Contains young Fraxinus excelsior and Acer pseudoplatanus regeneration of little merit.	Remove and replace.	Remove and replace.	l	C2	n/a
547	Tilia x europea	18	25	750	mm	n	Good (conditional) - Ivy clad - Twin stem - Crown deadwood present - Epicormic shooting at base of stem	Retain subject to further inspection. - Remove ivy/epicormic and re-inspect - Crown clean and aerially inspect main fork.	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA). - Special Measure Area (SMA) applies. - Retain all roots >25mm - Construct footpath within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam - Arborist to supervise throughout	m	B2	n/a
548	Fagus sylvatica	15	23	600	mm	n	Moderate (conditional) -ivy clad - Crown deadwood present - Rubbish at babes precluding VTA	Retain subject to further inspection. - Remove ivy/epicormic and re-inspect - Crown clean and aerially inspect main fork.	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA).	m	B2	n/a
549	Sequoia sempervirens	6	25	850	mm	n	Good. - crown deadwood, hangers and stubs - Ivy on stem Slight lean, no signs of root plate movement	Retain, within POS - Crown clean and aerially inspect - Re-inspect when ivy removed for full management recommendation	Retain and protect. Refer to TPP and AIA for protective measures. Adjacent to SMA. - Hand excavate root collar area within area shown as SMA under arborist supervision. - Reposition TPZ (as shown on TPP) only following root collar excavation. - Retain roots >25mm - Arborist to supervise throughout - Consider use of elevated traffic table within 9m of tree stem to reduce dig requirements	h	B2	11

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
550	Cedrus libani	18	23	800	mm	n	Moderate. - Extensive deadwood present - End loaded lower laterals - Located adjacent to disused site furniture - Ivy on stem	Retain, within POS - Crown clean and aerially inspect - Remove ivy and re-inspect from ground level for full management recommendations - Full method statement required for demolition/site preparation stage	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA).	h	B2	11
T9	Sequoia sempervirens	8	27	900	mm	n	Good. - crown deadwood, hangers and stubs - Ivy on stem - Rubbish at base of stem precluding full VTA.	Retain within POS, subject to re-inspection - Crown clean and aerially inspect - Re-inspect when ivy / rubbish (by hand) removed for full management recommendation.	Retain and protect. Refer to TPP and AIA for protective measures. Adjacent to SMA. - - Hand excavate root collar area within area shown as SMA under arborist supervision. - Reposition TPZ (as shown on TPP) only following root collar excavation. - Retain roots >25mm - Arborist to supervise throughout - Construct footpath/cycleway within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam - Consider use of elevated cyclepath table within 9m of tree stem to reduce dig requirements	h	B2	12
G10							Group ten contains young regeneration including Fraxinus excelsior, Acer pseudoplatanus, Laburnham spp and Crataegus monogyna. Poor overall form and condition. Little significance.	Remove and replace within landscape proposals.	Remove and replace within landscape proposals.	l	C2	n/a
T10	Acer pseudoplatanus	8	10	275	mm	n	Poor. - Exhibiting crown dieback - Poor form	Remove and replace within wider landscape proposals	Remove and replace within landscape proposals.	l	C2	n/a
551	Araucaria araucana	7	12	320	mm	n	Moderate (conditional) - Stem damage covered by spoil at base of stem. - Resin bleeding from stem - Minor crown deadwood	Lost for development. Replace within landscape plan	Lost for development. Replace within landscape plan	m-h	C2	n/a
G11							Contains three young – middle mature Acer pseudoplatanus in poor overall condition and form. Little individual significance.	Remove and replace within wider landscape proposals.	Remove and replace within wider landscape proposals.	l	C2	n/a

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
G12							Contains one young Crataegus monogyna and one middle mature Tilia x europea (extensive epicormic at base of stem will require removal for further inspection) and two middle mature Fraxinus excelsior. Ground spoil heaps at base. Remove ivy from all stems and re-inspect. Adjacent to Japanese knotweed growth. Full arboricultural method statement for necessary ground works required. There are various species regenerating either on or around the existing building that will require removal including Betula pendula, Dogwood, Fraxinus excelsior and Acer pseudoplatanus. Full arboricultural method statement for demolition of buildings in vicinity of retained trees required. The group is lost for development	Lost for development. Replace within landscape plan	Lost for development. Replace within landscape plan	l	C2	n/a
T11	Acer pseudoplatanus	8	10	300	mm	n	Poor. - Poor asymmetry and form due to clearance for utility pruning.	Remove and replace within wider landscape proposals.	Remove and replace within wider landscape proposals.	l	C2	n/a
552	Tilia x europea	10	16	450	mm	n	Moderate (conditional) - ivy clad - twin stem, minor fork inclusion	Remove for development.	Remove for development.	m	B2	n/a
G13							Contains two middle mature Fraxinus excelsior and two Acer platanoides in poor condition and form located on soil slope adjacent to road and existing boundary/retaining wall, both exhibiting unusually small and pale foliage and 20% tip dieback. Limited life expectancy. Unsuitable for longer term retention.	Remove and replace within wider landscape proposals.	Remove and replace within wider landscape proposals.	l	C2	n/a
T12	Fagus sylvatica	10	15	700	om	l	Dead. Hazard tree	Remove immediately	Remove for condition	l	R	n/a
T13	Quercus robur	18	20	850	m	n	Good. - Crown deadwood present	Retain - Crown clean and aerially inspect	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA	m	B2	11

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
T14	Quercus robur	20	24	900	m	n	Good (conditional) - Crown deadwood present - Ivy clad, hangers and deadwood	Retain Crown clean and aerially inspect	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA)	m	B2	n/a
G14							Contains Acer pseudoplatanus regeneration of little merit or significance.	Remove and replace within wider landscape proposals.	Remove and replace within wider landscape proposals.	l	C2	n/a
553	Tilia x europea	16	27	900	mm	n	Good (conditional) - Ivy clad - Twin stem at 6m, possible inclusion.	Retain Crown clean and aerially inspect	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA)	h	A2	n/a
T15	Acer platanoides	7	9	Av 100	y	n	Poor. - Multi stem containing included bark. - Poor form and condition	Remove and replace within wider landscape proposals.	Remove and replace within wider landscape proposals.	m-l	C2	n/a
T16	Tilia x europea	13	25	700	mm	n	Moderate (conditional) - Ivy clad - Twin stem from 3m, possible inclusion - Thin crown. - Crown deadwood present - Adjacent to Japanese knotweed	Retain subject to further inspection - Remove ivy and re-inspect stem. - Monitor in spring flush 2008. - Crown clean and aerially inspect main fork. - Full method statement required	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA)	m	B2	11
G15							Group fifteen consists of three young – middle mature pseudoplatanus in poor overall form and condition, ivy clad. Unsuitable for retention.	Remove and replace within wider landscape proposals.	Remove and replace within wider landscape proposals.	l	C2	n/a
557	Acer pseudoplatanus	9	16	425	mm	n	Moderate (conditional) - Extensive ivy coverage precluding VTA - Poor overall form and condition.	Remove and replace within wider landscape proposals	Remove and replace with more suitable and sustainable species within landscape proposals	m	C2	n/a

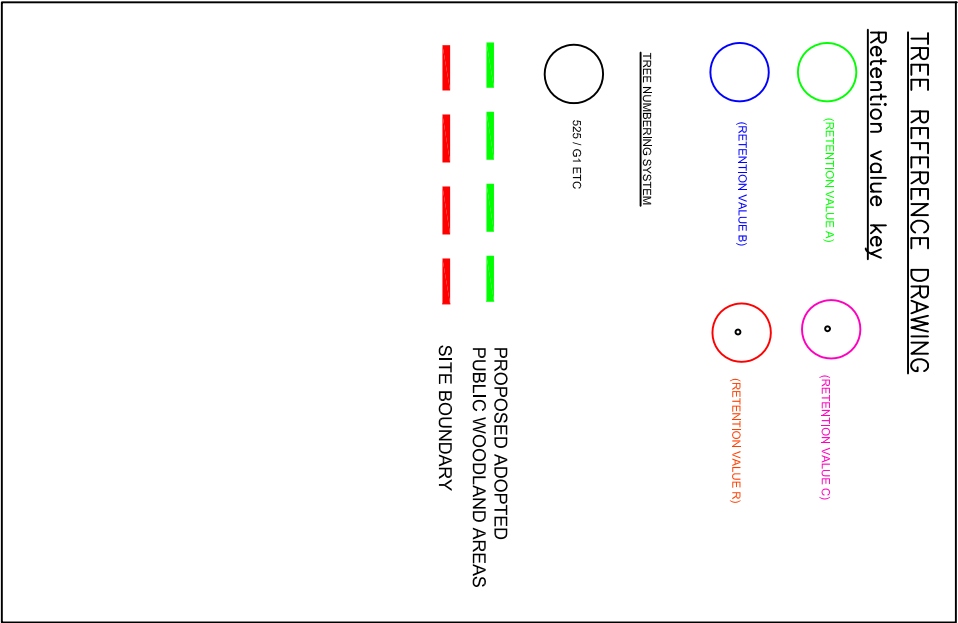
Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
558	Acer pseudoplatanus	4	10	200	mm	n	Poor. - Heavily suppressed. - Ivy clad	Remove and replace with more suitable and sustainable species within landscape proposals	Remove and replace with more suitable and sustainable species within landscape proposals	l	C2	n/a
559	Aesculus hippocastanum	15	28	800	mm	n	Moderate (conditional) - crown deadwood present - End loaded laterals overhanging adjacent property.	Lost for development	Lost for development	h	B2	n/a
560	Tilia x europea	15	25	450	mm	n	Good (conditional) - Crown deadwood present - Epicormic growth precluding stem VTA	Lost for development	Lost for development	h	B2	n/a
561	Acer pseudoplatanus	18	20	425	mm	n	Moderate. - Ivy precluding full VTA. - Crown deadwood - Open grown therefore increased amenity	Retain or remove	Lost for development	h	B2	n/a
562	Aesculus hippocastanum	18	28	850	mm	n	Moderate. - Slight lean. - Crown deadwood present - End loaded lateral limbs - Short life expectancy	Retain or remove	Lost for development and condition	h	C2	n/a
G17							Group seventeen contains approximately ten Acer pseudoplatanus stem varying from young to middle mature with an average trunk diameter of 250mm. A number of trees are either twin or multi stemmed specimens, some of which exhibit structural weaknesses as defined by included bark. Almost all stems are covered in ivy. Little individual merit, some group amenity. Some areas of crown dieback exist. Generally in poor overall form and condition.	Remove and replace within wider landscape proposals with more suitable and sustainable species.	Remove and replace within wider landscape proposals with more suitable and sustainable species.	l	C2	n/a

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
563	Acer pseudoplatanus	7	20	425	mm	n	Moderate. - Edge tree therefore poor crown Asymmetry - Ivy clad - Suppressed canopy	Unsuitable for retention due to condition and within context of proposed development. Remove and replace with more suitable and sustainable species	Unsuitable for retention due to condition and within context of proposed development. Remove and replace with more suitable and sustainable species	m	C2	n/a
564	Acer pseudoplatanus	18	24	Av 450	mm	n	Moderate – poor. - Multi stem containing included bark - Part of continuous canopy with T No 563	Unsuitable for retention due to condition and within context of proposed development. Remove and replace with more suitable and sustainable species	Unsuitable for retention due to condition and within context of proposed development. Remove and replace with more suitable and sustainable species	m	C2	n/a
565	Pinus nigra	22	30	1200	m	n	Moderate. - Crown deadwood, hangers and stubs present - Large end loaded limb extending to form Southern crown - Metal fence at base of stem.	Retain, within POS - Crown clean and aerially inspect for defects. - Remove metal fence under method statement - Reduce end loaded branches, in line with aerial inspection results - Remove Acer regeneration at base	Retain and protect. Refer to TPP and AIA for protective measures. Adjacent to SMA. - Construct footpath/cycleway within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam - Consider use of elevated cycle path table within 12m of tree stem to reduce dig requirements - Retain roots >25mm - Arborist to supervise throughout	h	A1	13
G18							Group eighteen contains Acer pseudoplatanus regeneration that is unsuitable for retention.	Remove and replace within wider landscape proposals.	Remove and replace within wider landscape proposals.	l	C2	n/a
566	Acer pseudoplatanus	12	20	700	mm	n	Good (conditional) - Twin stem, no signs of inclusion - Poor asymmetry, part of sheltered group - Crown deadwood present - Ivy clad	Retain subject to further inspection and AIA review - Crown clean and remove ivy to allow full management recommendation - Prune overhang to West by 1-2m	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA)	m	C2	11

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
567	Fagus sylvatica	18	25	1000 +	mm	n	Good. - Single straight stem - Minor crown deadwood - Within group shelter	Retain subject to further inspection and AIA review - Crown clean and aerially inspect for defects - Re-inspect in Spring flush 2008.	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA)	h	B2	12
G19							Group nineteen contains three middle mature – mature Tilia x europea within group shelter within adjacent trees. Reasonable overall condition. Some epicormic shooting at base which will require removal to allow full stem VTA. Average diameter is 600mm, heights range from 20m+. Re-inspect stems after epicormic removal.	There are some crossing branches and deadwood that require removing via crown cleaning. Aerial inspection and re inspect stem following epicormic removal	Retain and protect within Tree Protection Zone (TPZ) as shown on Tree Protection plan (TPP). Refer to Arboricultural Implication Assessment (AIA)	m	B2	10
568	Acer pseudoplatanus	13	17	400	mm	N	Moderate – Poor - Stem damage and bark necrosis - Suppressed edge tree - Poor form and condition	Unsuitable for retention due to condition. Remove and replace within wider landscape proposals.	Unsuitable for retention due to condition. Remove and replace within wider landscape proposals.	m	C2	n/a
569	Acer pseudoplatanus	20	26	900	mm	n	Good (conditional) - Multi stem - Ivy on stem precluding stem VTA. - Crown deadwood	Lost for development	Lost for development	h	B2	n/a
W2							Woodland two consists of sparse Betula pendula, Aesculus hippocastanum, Acer pseudoplatanus, Quercus robur and Fraxinus excelsior regeneration.	Unsuitable for retention. Remove and replace within wider landscape proposals.	Unsuitable for retention. Remove and replace within wider landscape proposals.	l	C2	n/a
570	Quercus robur	18	25	1300	mm	n	Moderate. - Crown deadwood, hanger and stubs - Previous limb failures - Hazard beam cracking in lateral extending over site. - Japanese knotweed located outside canopy	Retain within adopted woodland area - Crown clean and reduce end loading on damaged branch by 25% of current length. Prune overhang to West by 2m - Aerially inspect for defects - Method statement required for weed removal/existing pond treatment.	Retain and protect. Refer to TPP and AIA for protective measures. Adjacent to SMA. - Construct driveway within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam - Retain roots >25mm - Arborist to supervise throughout	H	B2	12

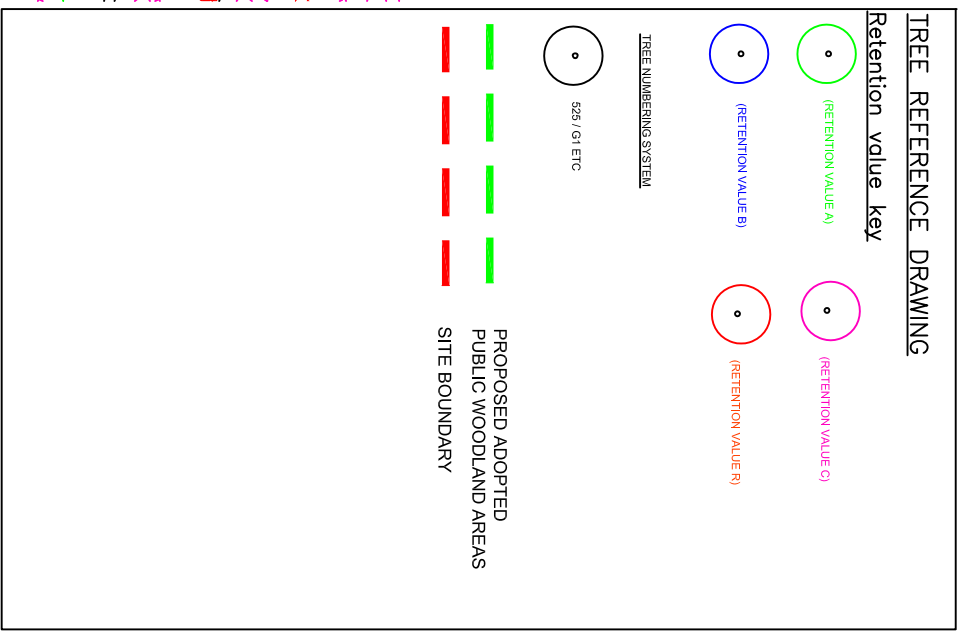
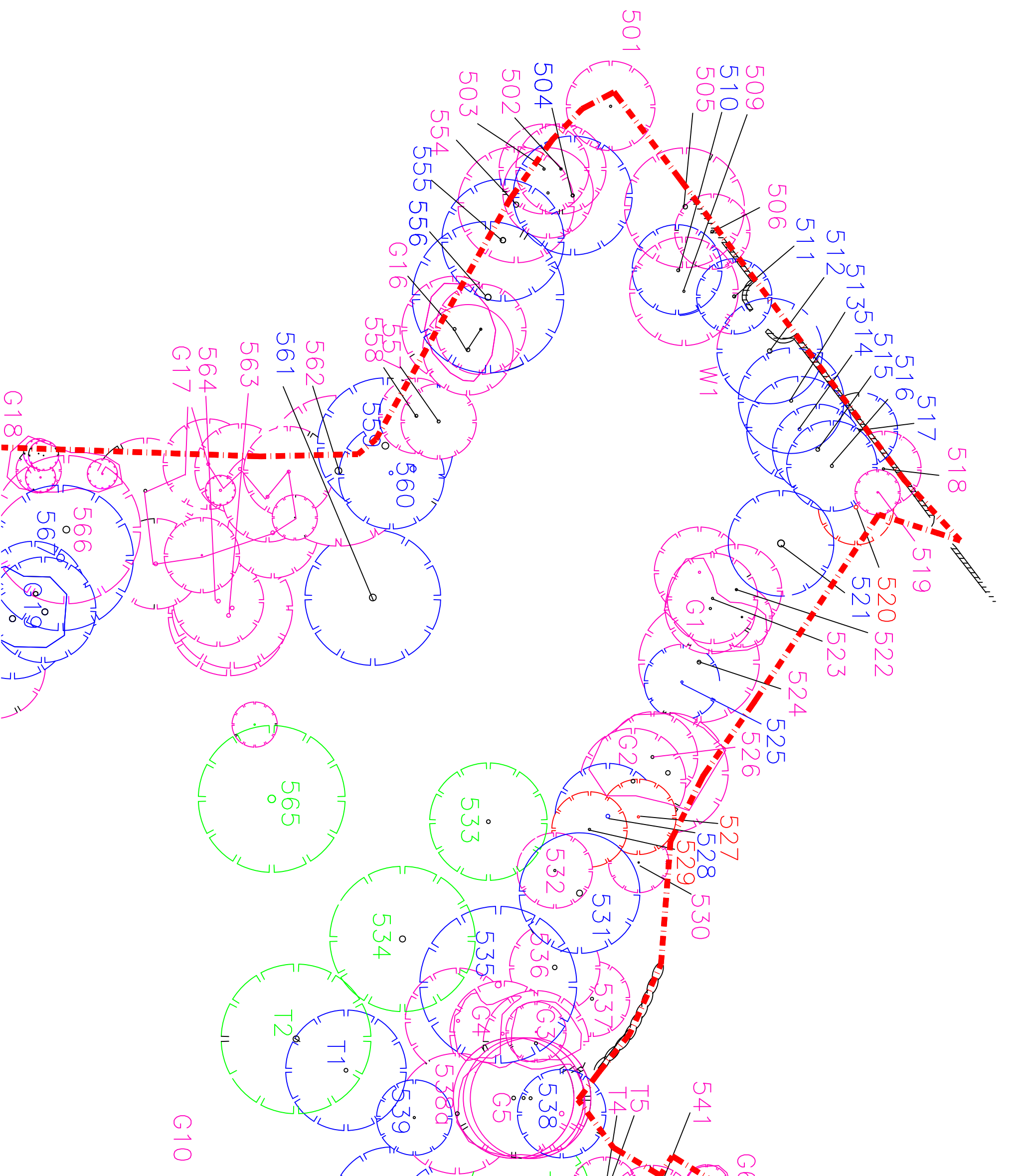
Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
G20							Group twenty consists of three/four Robinia pseudoacacia and two young Acer pseudoplatanus alongside a Crataegus monogyna understorey. Boundary clarification required. The Robinia dominate the group but are beginning to collapse, the Southerly most stem is windblown and the suppressed nature of the remaining Robinia stems is likely to lead to individual failure toward the site on this open boundary. Unsuitable for retention.	Remove and replace within wider landscape proposals	Remove and replace within wider landscape proposals	1	C2	n/a
W3							Woodland Three is the central areas of the site and consists primarily of regenerating Salix caprea, Acer pseudoplatanus, Fraxinus excelsior and occasional areas of Japanese knotweed. Unsuitable for retention, remove and replace. Method statement for knotweed removal.	Remove and replace within wider landscape proposals	Remove and replace within wider landscape proposals	1	C2	n/a
T17	Acer pseudoplatanus	10	12	350	mm	n	Good. - Outside site. - Overhanging	Retain and protect - Prune overhang as and when necessary	Retain and protect within TPZ Prune overhang as and when necessary	1	C2	6
T18	Aesculus hippocastanum	12	15	1100	m	l	Moderate. - Crown deadwood present - Approaching over maturity	Retain and protect - Crown clean	Retain and protect. Refer to TPP and AIA for protective measures. Adjacent to SMA. - Construct driveway within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam - Retain roots >25mm - Arborist to supervise throughout	m	B2	n/a
571	Pinus nigra	8	19	450	mm	n	Moderate (conditional) - Some stem damage, covered in spoil. - Crown deadwood	Retain subject to further investigation -Remove spoil immediately at base by hand under arborist supervision for full management recommendation - Crown clean, if retained	Retain and protect. Refer to TPP and AIA for protective measures. Adjacent to SMA. - Construct driveway within SMA under “no dig” policy (max excavation 100mm), - use of load bearing geo textile and porous tar macadam - Retain roots >25mm - Arborist to supervise throughout	m	B2	9

Tree / group No. on plan	Species	Crown spread in m	HT in m	Trunk diameter at 1.5m in mm	Age class	Vigour	Condition and comments	Preliminary management recommendations	Recommendations following JAN 08 AIA review	Amenity value	Retention key	Protective fence distance in m from stem
T19	Acer pseudoplatanus	7	8	200	y	n	Good	Retain - No works required	Retain and protect. Refer to TPP and AIA for protective measures	m	C2	6
572	Quercus robur	15	19	850	mm	n	Good. - `Stubs, deadwood and small previous limb failures evident. - Small cavity at base	Retain - Crown clean - Monitor in spring flush 2008	Retain and protect. Refer to TPP and AIA for protective measures. Adjacent to SMA. - Construct driveway within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam - Retain roots >25mm - Arborist to supervise throughout	h	B2	11
T20	Acer pseudoplatanus	7	8	200	y	n	Poor overall form and condition	Remove for condition	Remove for condition	m	C2	n/a
T21	Quercus robur	15	17	850	mm	n	Good. - `Stubs, deadwood and small previous limb failures evident.	Retain and protect - Crown clean - Monitor in spring flush 2008	Retain and protect. Refer to TPP and AIA for protective measures. Adjacent to SMA. - Construct driveway within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam - Retain roots >25mm - Arborist to supervise throughout	h	B2	11
T22	Aesculus hippocastanum	13	14	Av 400	mm	n	Moderate (conditional) - Boundary tree - Check ownership - Multi stem - Crown deadwood	Retain subject to further inspection - Crown thin 10% and clean	Retain and protect. Refer to TPP and AIA for protective measures. Adjacent to SMA. - Construct driveway within SMA under “no dig” policy (max excavation 100mm), use of load bearing geo textile and porous tar macadam - Retain roots >25mm - Arborist to supervise throughout	m	B2	11
G22							Contains one young damaged Acer pseudoplatanus of little merit or significance and Crataegus monogyna.	Remove and replace.	Remove and replace.	L	C2	n/a
T23	Aesculus hippocastanum	16	18	800	mm	n	Poor. - Cavity on stem - Deadwood - Bark necrosis - Off site	Remove - Alert landowner.	Remove - Alert landowner.	m	R	Install PF on boundary line



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TR-01



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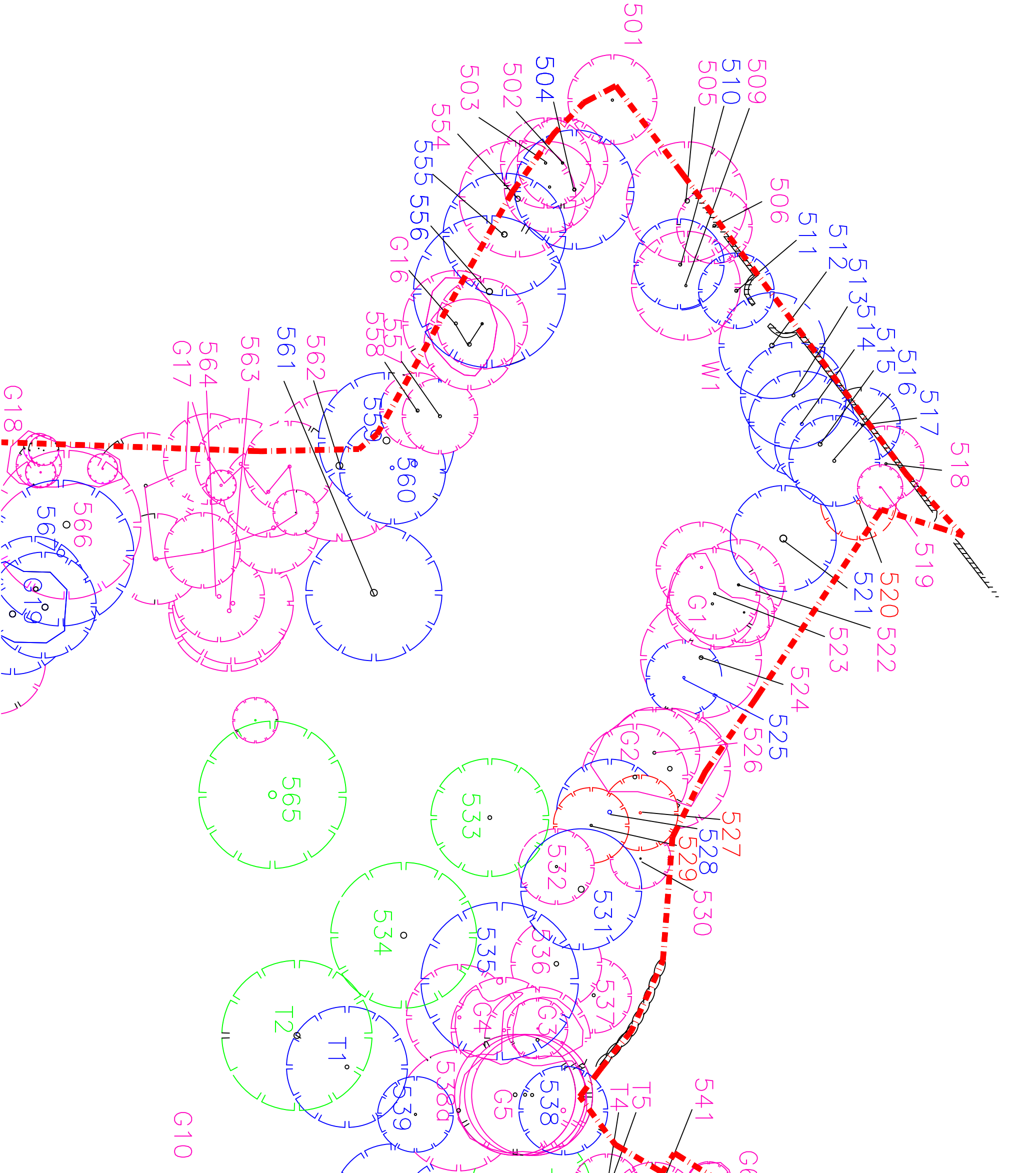
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TREE REFERENCE PLAN

Drawn By: Date: Scale

SB JAN 2008 1/500

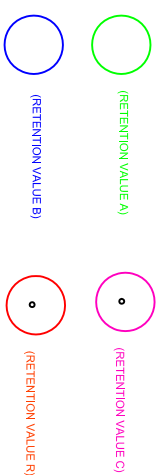
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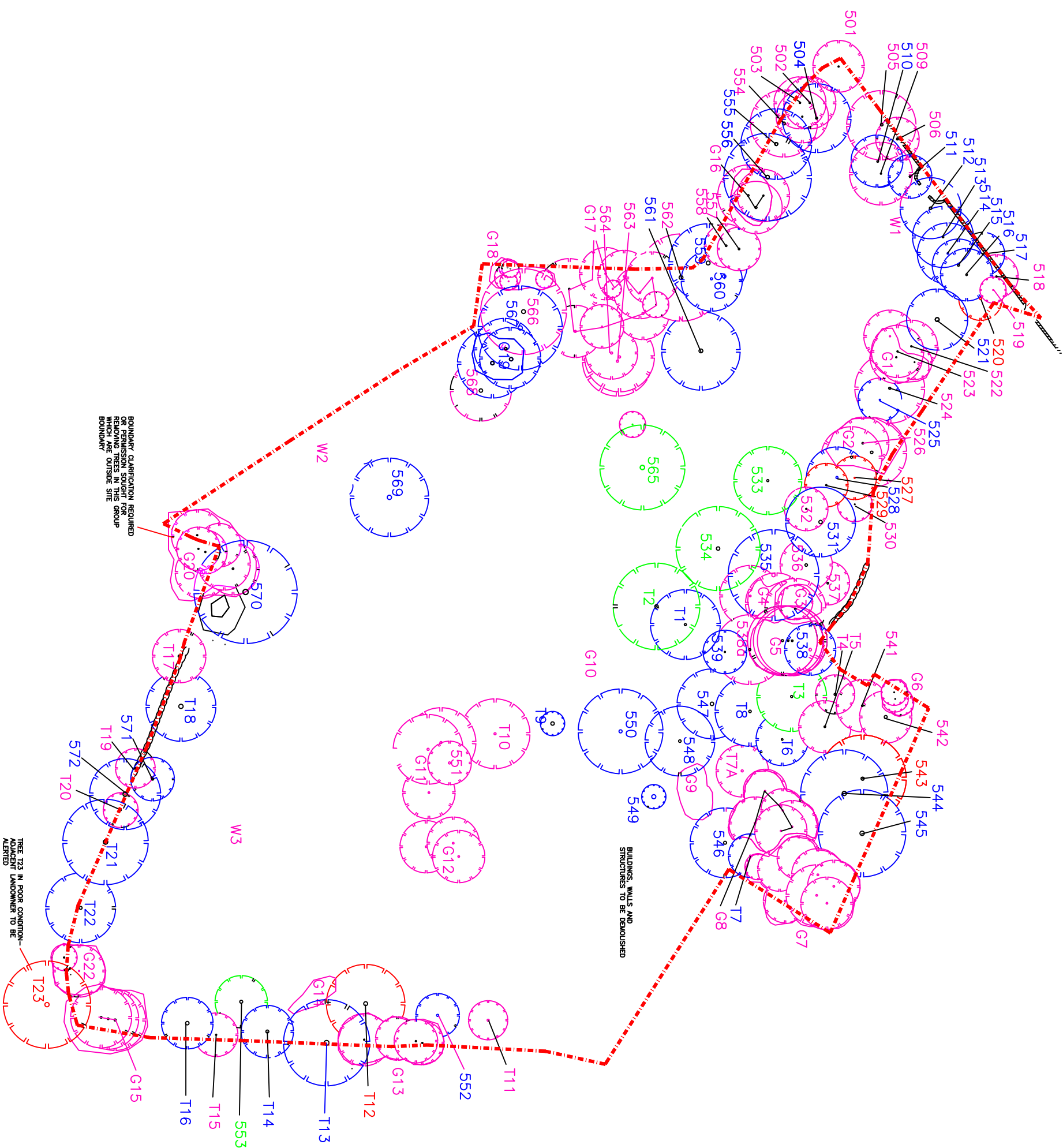
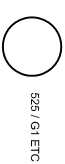
TREE REFERENCE DRAWING			
Retention value key			
	(RETENTION VALUE A)		(RETENTION VALUE C)
	(RETENTION VALUE B)		(RETENTION VALUE R)
TREE NUMBERING SYSTEM			
	G25 / G1 ETC		
	PROPOSED ADOPTED PUBLIC WOODLAND AREAS		
	SITE BOUNDARY		

TREE REFERENCE DRAWING

Retention value key



TREE NUMBERING SYSTEM



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TREE REFERENCE PLAN

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Dwg No: **TR-01** Revision:

TREE PROTECTION PLAN (RETAINED TREES)

Retention value key

RPA's (Root Protection Areas) & TPZ's (Tree Protection Zones)

Provisional Tree Protection Zones (TPZs) have been identified and are based on the anticipated arbovirological constraints arising from: Root Protection Areas (RPAs) and post construction tree resettlement issues that are anticipated post construction. Such issues are based on assessment of future growth potential and shading / over dominance of retained trees to the new development proposals.

The extent of provisional TPZs has been indicated on plan as detailed below.



Designated areas exist where Special Measures will be required during construction

SPECIAL MEASURE AREA
(SMA). Refer to AIA and draft
aboriginal method statement
for details of recommended
construction.

PROPOSED ADOPTED
PUBLIC WOODLAND AREAS



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Project: Bryn y Groes Hall Gresford

Detail:

TREE PROTECTION PLAN

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TR-01

TREE PROTECTION PLAN (RETAINED TREES)

Retention value key



RPA's (Root Protection Areas) & TPZ's (Tree Protection Zones)

Provisional Tree Protection Zones (TPZ's) have been identified and are based on the anticipated arboricultural constraints arising from: Root Protection Areas (RPAs) and post construction tree resentment issues that are anticipated post construction. Such issues are based on assessment of future growth potential and shading / over dominance of retained trees to the new development proposals.

The extent of provisional TPZ's has been indicated on plan as detailed below.

TREE PROTECTION ZONE (TPZ)

Designated areas exist where Special Measures will be required during construction



SPECIAL MEASURE AREA (SMA). Refer to AIA and draft arboricultural method statement for details of recommended construction.

PROPOSED ADOPTED PUBLIC WOODLAND AREAS

SITE BOUNDARY

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TREE PROTECTION PLAN

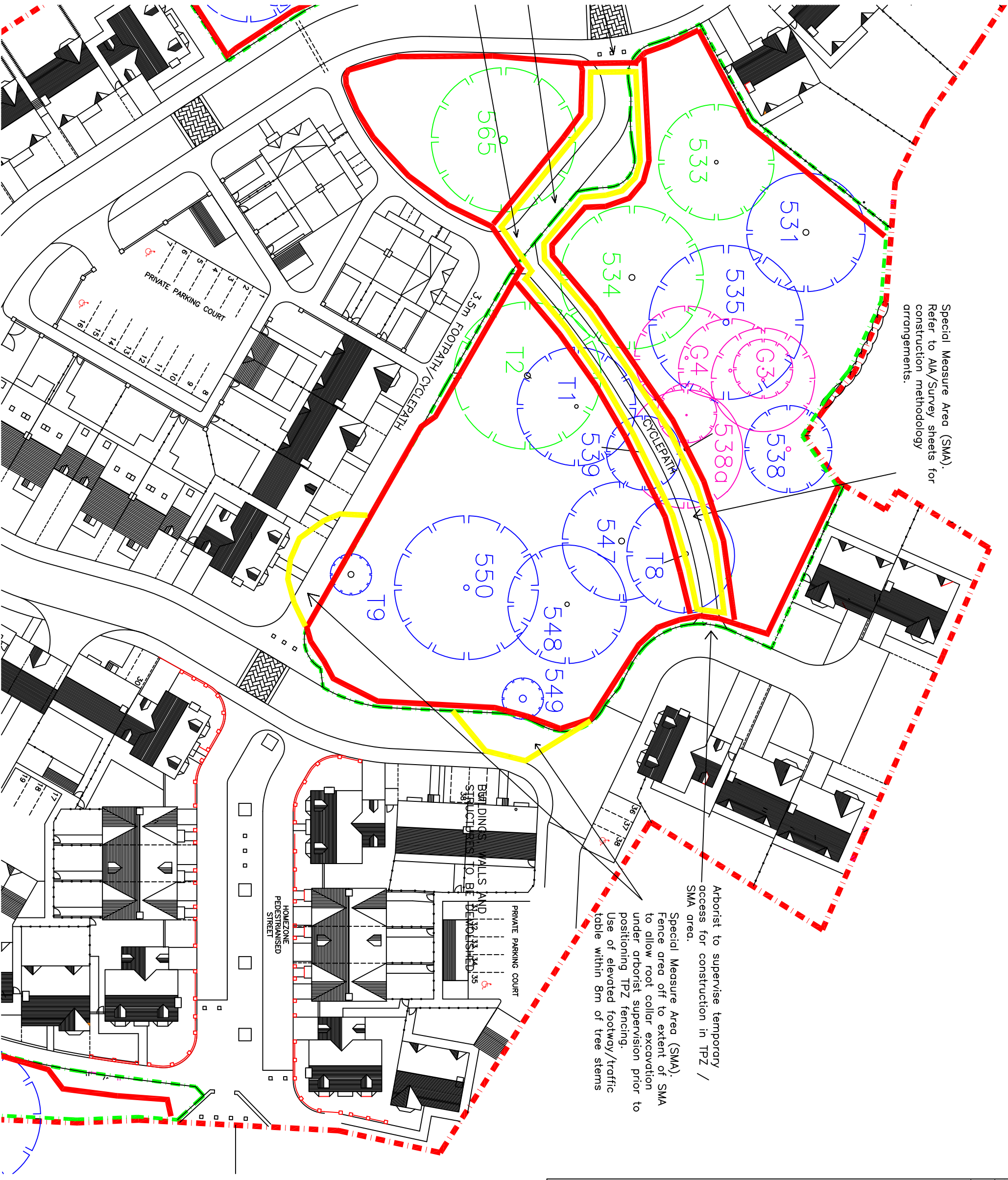
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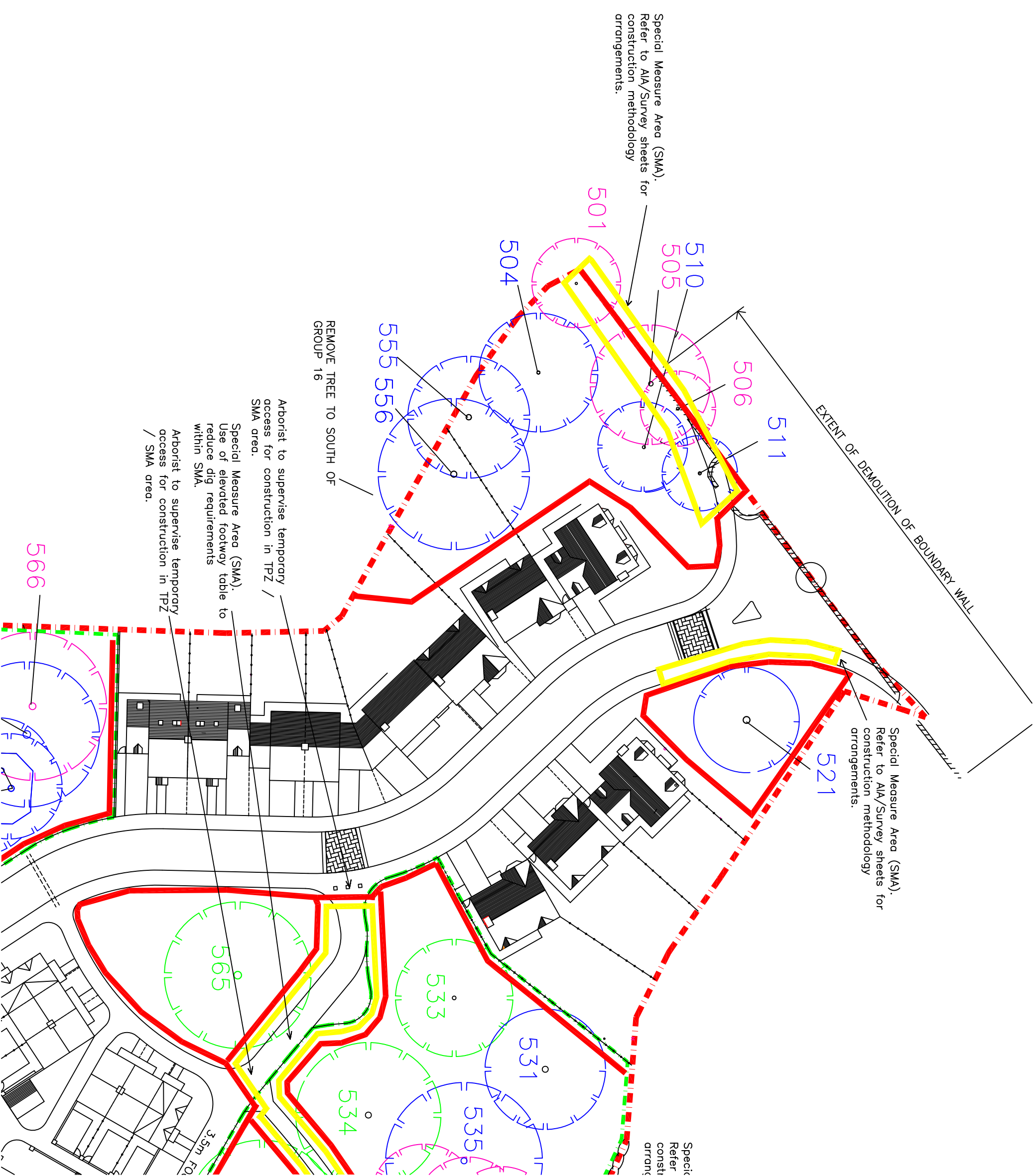
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Special Measure Area (SMA).
Refer to AIA/Survey sheets for
construction methodology
arrangements.

Arborist to supervise temporary
access for construction in TPZ /
SMA area.

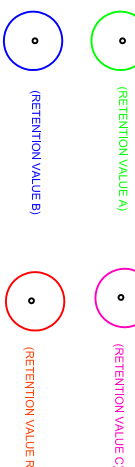
Special Measure Area (SMA).
Fence area off to extent of SMA
to allow root collar excavation
under arborist supervision prior to
positioning TPZ fencing.
Use of elevated footway/traffic
table within 8m of tree stems





TREE PROTECTION PLAN (RETAINED TREES)

Retention value key



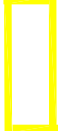
RPA's (Root Protection Areas) & TPZ's (Tree Protection Zones)

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The extent of provisional TPZ's has been indicated on plan as detailed below.

TREE PROTECTION ZONE (TPZ)

Designated areas exist where Special Measures will be required during construction



SPECIAL MEASURE AREA (SMA). Refer to AIA and draft arboricultural method statement for details of recommended construction.

PROPOSED ADOPTED PUBLIC WOODLAND AREAS
SITE BOUNDARY

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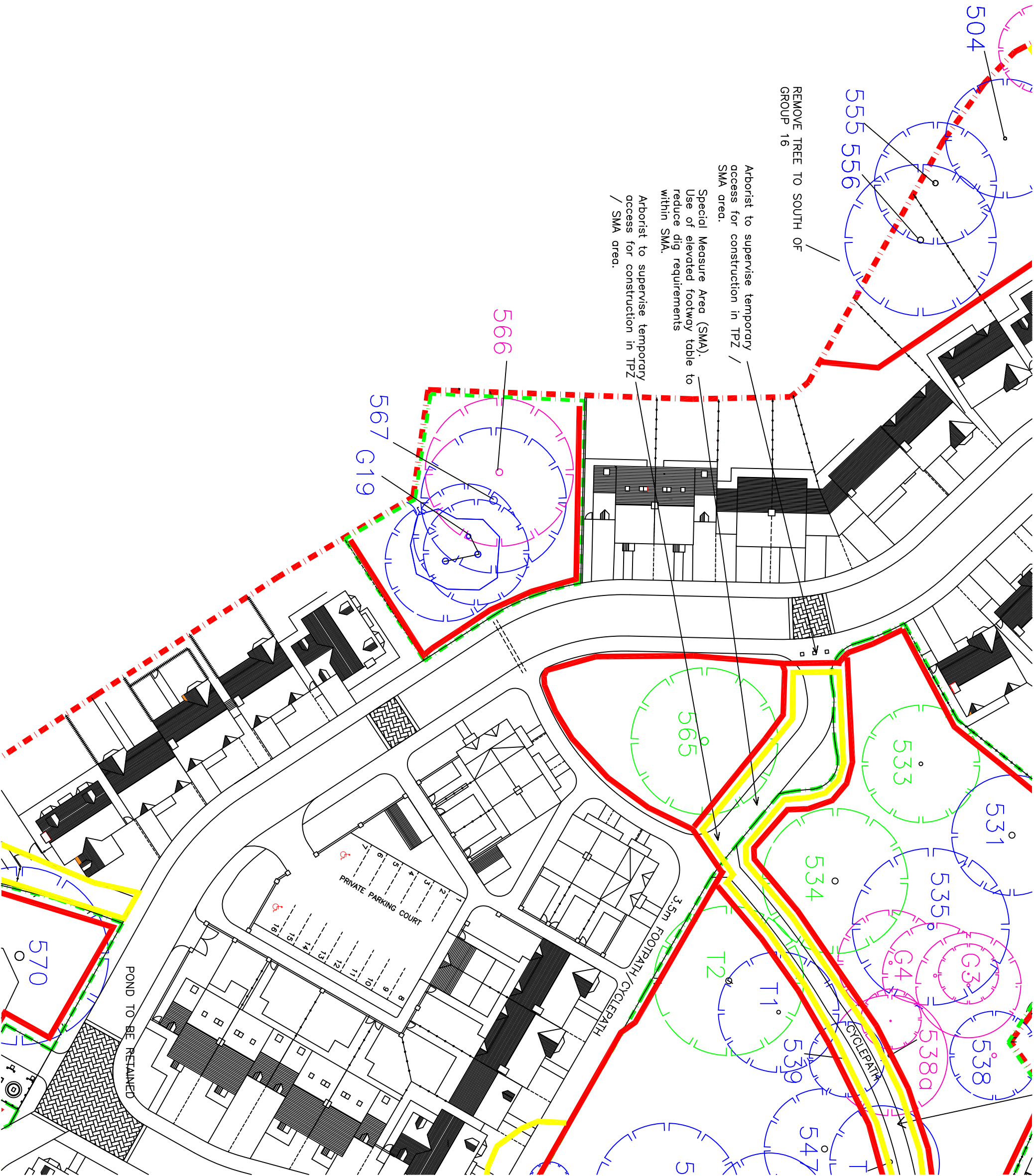
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TREE PROTECTION PLAN

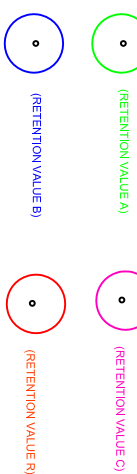
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TREE PROTECTION PLAN (RETAINED TREES)

Retention value key



RPA's (Root Protection Areas) & TPZ's (Tree Protection Zones)

Provisional Tree Protection Zones (TPZ's) have been identified and are based on the anticipated arboricultural constraints arising from: Root Protection Areas (RPAs) and post construction tree resentment issues that are anticipated post construction. Such issues are based on assessment of future growth potential and shading / over dominance of retained trees to the new development proposals.

The extent of provisional TPZ's has been indicated on plan as detailed below.



Designated areas exist where Special Measures will be required during construction

SPECIAL MEASURE AREA (SMA). Refer to AIA and draft arboricultural method statement for details of recommended construction.



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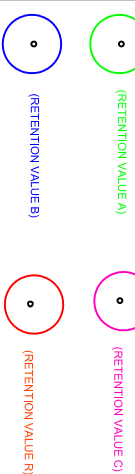
TREE PROTECTION PLAN

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TREE PROTECTION PLAN (RETAINED TREES)

Retention value key



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Provisional Tree Protection Zones (TPZ's) have been identified and are based on the anticipated arboricultural constraints arising from: Root Protection Areas (RPAs) and post construction tree resentment issues that are anticipated post construction. Such issues are based on assessment of future growth potential and shading / over dominance of retained trees to the new development proposals.

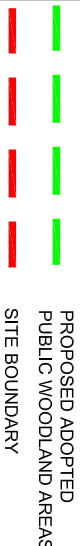
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Designated areas exist where Special Measures will be required during construction



SPECIAL MEASURE AREA (SMA). Refer to AIA and draft arboricultural method statement for details of recommended construction.



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ATION REQUIRED
IGHT FOR
THIS GROUP
SITE

BOUNDARY CLARIFICATION REQUIRED
OR PERMISSION SOUGHT FOR
REMOVING TREES IN THIS GROUP
WHICH ARE OUTSIDE SITE
BOUNDARY

TREE T23 IN POOR CONDITION-
ADJACENT LANDOWNER TO BE
ALERTED