ARBORICULTURAL SURVEY

SITE: GLOUNTHAUNE, CO. CORK
CLIENT: GREENWAY LANDSCAPES

CONTENTS

SUMMARY

Dermot Casey Tree Care was requested by Greenway Landscapes to undertake a pre-development arboricultural survey and report to support the proposed residential development at Glounthaune, Co. Cork

The trees within the footprint of the site and within proximity to the proposed development were assessed independently.

The information contained within this report is in accordance with British Standard *BS 5837: 2012 Trees in relation to Design, Demolition and Construction – Recommendations* and provides information on the protection of the trees during the development phase.

The report should be read in conjunction with the drawings provided indicating the tree locations and their protection zones.

The report will provide guidance in regard to the constraint's trees may place on the development and arboriculture factors to be considered during the construction works of the proposed development.

The report contains an Arboricultural Impact Assessment and an Arboricultural Method Statement that details the protection needed for trees to be retained during the development phase.

87 trees, both individual and in groups were assessed as part of this report in accordance with BS 5837.

1.0 INTRODUCTION

SCOPE OF THE REPORT

The purpose of the report is to provide the appropriate information needed for the proposed development without having a negative impact on the trees located within or adjacent to the development. It also gives re-assurance that the health and consideration of the trees is an integral part of the proposed development.
The report will provide an Arboricultural Impact Assessment (AIA) based on BS 5837 to evaluate the direct and indirect effects the proposed development will have on the trees, both within the footprint of the proposed layout and within the exclusion zone required for construction plant machinery and works. Any trees outside this exclusion zone but whose root systems may enter it will also be assessed. Where there are impacts from the new development on trees this report will recommend, where it is possible, mitigating measures to be taken to try and ensure the protection of any important Category A or B trees. Where trees will have to be removed due to the constraints of the development or as a result of the findings in the survey potential mitigation measures will also be proposed. These protection considerations must be in accordance with Section 7 of BS 5837 (*Demolition and construction in proximity to existing trees*). This report should be read in conjunction with the Tree Survey Data located on P.26 and the attached Tree Constraints Plan Drawing Ref: *DWG TCP GLOUNTHAUNE 1* and
Tree Root Protection Plan – Ref: *DWG TPP GLOUNTHAUNE 2*

As part of this report an Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP) in accordance with BS 5837 are provided. The AMS and TPP will outline the methodologies and specifications needed for the implementation of any tree protection measures with important consideration been given to the root protection area. Any disturbance of the root protection area whether below ground or above ground during the development phase is likely to have a negative impact on the trees with the potential to making them unsafe structures and therefore unsuitable for retention post development.

SITE DESCRIPTION AND TREE ASSESSMENT

The proposed residential development is situated between the Terrace and the L3004. It is on a steep slope that rises from the southern boundary to meet the northern boundary. There are private dwellings adjacent to the northwest and northeast of the site. A local landmark is Fitzpatricks shop which is located on the L3004 and the site is directly behind. The site has been neglected in recent years and has become very overgrown with bramble and is now primarily populated with young Ash (*Fraxinus excelsior*) and Sycamore (*Acer pseudoplatanus*) that have grown

from seed dispersal from mature trees. The trees are located throughout the site with the larger specimen trees been found mostly on the site boundaries.

The site requires consideration from an arboricultural perspective due to the presence of trees, within a landscape and woodland setting. A large percentage of these trees are deemed to be within impacting distance of the proposed development and the construction entrance and compound site. The tree survey and objective individual assessment resulted in the full range of retention categories, A – high, B – moderate, C – low and U – un-retainable as outlined in BS 5837. There are some notable older specimen trees within the footprint of the site, and they are highlighted in more detail in the results section of this report.

PLANNING CONTEXT

At the time of writing, it is not known to the author of this report weather any of the trees within the site are subject to a tree preservation order (TPO) or similar retention orders. A TPO can apply to a tree, trees, group of trees or woodland and can be implemented by the planning authority if it deems them to be desirable and appropriate in the interest of amenity or the environment. TPOs can be made under Part XIII of the Planning and Development Act 2000. The Forestry Act 2014 contains the main provisions for the felling of trees. Where a felling license is not required is a tree in an urban area (Part 2 of Schedule 5 and Schedule 6 of the Local Government Act 2001 before the enactment of the Local Government Reform Act 2014) and a tree within 30 meters of a building, excluding any building built after the trees were planted.

Before any recommended works are undertaken the trees should be inspected for any signs or activity of protected species within the trees. Under the Wildlife (Amendment) Act 2000 it is an offence to destroy or disturb nesting birds. Also, under the Wildlife Act and the EU Habitats Directive it is an offence to recklessly kill, injure or capture bats, to disturb them or destroy, obstruct or damage any bat roosts found. As some of the trees within the report have large cavities it may be prudent to conduct a bat survey prior to any works.

2.0 METHODOLOGY AND LIMITATIONS

The inspection of these trees was carried out at various times during February and March 2021 and a further inspection took place in September 2021. The inspection was conducted from ground level only using visual tree assessment techniques (VTA) which only gives a snapshot of what is visible not obscured or accessible on the day of the survey. The survey does not include any climbing inspections, internal investigations of the tree or inspections below ground level.

Only relevant factors that are apparent at the time of the survey are included in this report. Trees are living organisms whose health and condition can change rapidly so as such any recommendations made within this report are valid for a period of 12 months only. It is suggested that further monitoring be required if potential hazards are to be avoided.

Climbing plants such as ivy can obscure decays or structural defects present at the time of the survey. Where the ivy is so dense a thorough examination is not possible and it is recommended that it be severed at ground level and the tree re-inspected once the ivy has died back.

The fruiting bodies of some important wood decay fungi can only be seen at certain times of the year and may not be present at the time of this survey.

The tree survey was conducted in accordance with BS 5837:2012. All trees over 150mm in diameter at breast height were given a unique reference number using metal tags and had their positions plotted on the survey drawings. All individual trees and groups of trees were assessed in relation to their – species, age class, tree height, crown spread, stem diameter at 1.5m above ground, minimum ground clearance, condition and management recommendations. The measurements for tree height, ground clearance and crown spread were taken to an accuracy of 0.5 m. The conditions of the trees both physiologically and structurally were assessed from being – good to fair to poor with additional information shown within the comments.

When categorizing a tree, as recommended in BS 5837:2012 – 4.5.5, the classification should begin by considering whether the tree falls within the scope of category U. If the tree does not fall into this category it should be considered according to the criteria for inclusion in category A. Subsequently if trees do not meet the criteria, they should be considered in light of the criteria for inclusion in category B. If this criterion is not met trees are placed in the low category C.
Definitions of the different categories as shown in the Cascade chart in 4.5 of BS 5837 are given below:

- Category U – those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.
- Category A – trees of high quality with an estimated remaining life expectancy of at least 40 years
- Category B – trees of moderate quality with an estimated remaining life expectancy of at least 20 years
- Category C – trees of low quality with an estimated remaining life expectancy of between 10 and 20 years

The above categories can be further subdivided regarding the nature of their values or qualities–

- Sub-category 1 - Arboricultural qualities: the trees influence as a good example of its species, its health and structure.
- Sub-category 2 - Landscape qualities: the trees importance within and as landscape features
- Sub-category 3 - Cultural qualities: trees of an age that have a significant conservation and historical value.

ROOT PROTECTION AREA (RPA)

The Root Protection Area (RPA) first appeared in the 2005 version of BS: 5837 and then within the updated version BS: 5837 - 2012. The BS describes the RPA as –

> *"layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability and where the protection of the roots and soil structure is treated as priority"*

The Root Protection Area (RPA) is the area around an individual tree to be protected from disturbance during construction works. The RPA is shown as a radius in metres measured from the centre of the tree's stem. Protection of the roots and soil structure in the RPA should be treated as a priority.

For single stem trees the root protection area is calculated as a circle with a radius 12 times the stems diameter. A separate calculation should be used for trees with more than one stem. The calculated RPA for each tree should be capped at 707 m2 or a circle with a radius of 15m. These calculations are based on the formulas set out in Section 4.6 and Annex D of BS 5837.

The RPA is generally regarded as a compromise between carrying out development and retaining a tree. Trees with a large stem diameter at 1.5 m can produce an RPA that if protected would not allow for developments to progress.

The RPA for each tree is plotted on the Tree Survey Drawings.

3.0 ARBORICULTURAL IMPACT ASSESSMENT

PROTECTION OF RETAINED TREES

Before any on-site works begin the protection measures outlined in detail in the Arboricultural Method Statement (AMS) should be adhered to. In general, this protection usually consists of a combination of barriers and ground protection. In general, but not exclusive to, the protection of all trees on-site must be able to accommodate all building works, ingress and egress routes outside the designated RPAs. Appropriate planning should be in place to accommodate the ingress and egress of plant machinery on-site, so no trees selected for retention are impacted.

The majority of tree roots grow in the upper metre of soil and they may spread outwards in any direction. Any disturbance of the ground within the root spread of a tree can damage its roots and may severely injure the tree. Damage to roots will interrupt the supply of water and nutrients necessary to keep the tree alive and may cause decline in vigour, dieback or even death of the tree. Damage to roots can also de-stabilize the tree and pose an unacceptable threat to the safety of people.

To avoid damage to tree roots existing ground levels should be retained within the RPA. Intrusion into soil within the RPA is generally not acceptable and topsoil within it should be retained in situ. Where alternative design solutions are not available or practical, limited manual excavation within the RPA may be acceptable subject to justification and consultation with the on-site arborist. Such excavations should be undertaken carefully using hand-held tools and preferably by using an air-spade – the use of compressed air to expose the tree's root system. It should be noted that it is not realistic to plan for large excavations using hand-held tools due to the demands that manual excavation places on the development project and limitations arising from health and safety considerations.

Details of protection measures as recommended in Section 6.2 *Barriers and Ground Protection* of BS 5837 should be adhered to.

The on-site arborist should be responsible for checking and approving the position of all tree protection measures at the first site visit prior to the commencement of works.

Category A and B trees, as outlined in detail in Section 2, are trees of high quality and arboricultural, landscape or cultural value and are highlighted as such and their protection should be paramount.

CONSTRUCTION AND ACCESS REQUIRMENTS AND CONSTRAINTS

During the construction phase of any development there will be a necessity for the use of plant machinery around the site. The constant movement of vehicles on the ground around the trees can cause compaction of the soil. Compaction will reduce soil pore space which can inhibit the tree's ability to access water and nutrients and can restrict root growth. Soil contamination from fuel and lubricants can also contaminate the roots as they access water and nutrients and subsequently have a negative effect on the tree.

The removal of any trees as a result of the development should be mitigated with the planting of as many trees where the space allows.

A tree constraints plan has been devised to mitigate against any negative impacts on the trees both above ground and below ground.

Above ground constraints are indicated by the crown spread of trees to be retained. Where the canopy is deemed to be in direct conflict with lifting machinery it may be necessary to increase the extent of the tree protection barriers to contain the canopy as set out in Section 5.2.2 of BS 5837.

Below ground constraints will include a layout design of the root protection area (RPA) which shows the minimum rooting area around the tree needed for its health and viability. The RPA is the area where the roots and the soil take priority and in accordance with BS 5837 no construction works can take place within it.

Based on the design, the majority of the trees within the footprint of the site will have to removed, because they are either within the footprint of the design or will be negatively impacted during the construction phase.

There are 79 trees individually tagged in this area. Of the 79 trees 3 are classed as Category A and 16 are classed as Category B. The remainder of the trees are classed as Category C – 48, and Category U – 12. Category U trees should be considered for removal irrespective of their constraints, or lack of, on the proposed development.

CELLULAR CONFINEMENT SYSTEMS

In order to ensure the health and vigour of trees, their roots need to be retained undamaged. To achieve this there must be no excavation, no soil stripping and no grading of the greenway within the RPA of the Category A and B trees recommended for retention.

Cellular confinement systems can be used for ground protection where tree roots are at risk from soil compaction and where it is unacceptable to dig into the ground to lay a conventional sub-base. Standard engineering practice is to remove the upper layer of soil and lay a compacted sub-base and a final surface that is level with the

surrounding ground. Surfaces constructed in this way can sever tree roots at a shallow depth and future root growth can be inhibited by soil compaction.

Standard tarmac surfacing would be inappropriate to be placed over cellular confinement systems because it seals the surface preventing the ingress of water and gaseous exchange between the soil and the atmosphere. If the cellular confinement system is to be used for the proposed greenway link than only permeable surfacing should be used.

NEW PLANTING

To mitigate against the potential loss of any existing trees as part of the development it would be considered appropriate to replant as many trees as those lost if the space provides. This new planting schedule should be considered from the outset of the design and planning application phase. Any advice required for a new planting regime should be given by a landscape architect or otherwise competent person.

DEVELOPMENT OF RETAINED TREES

A number of the trees assessed as part of this report have the potential to remain as part of the landscape for many years. On-going management of these trees including a regular review and inspection system should be put in place. As trees are dynamic living organisms and their condition can change rapidly this report will only remain valid for a period of 12 months. If the landscape of the site is to be altered in the future a further assessment should be made on the impacts that proposed development would have on these trees.

Due consideration should be given to the Category A and B trees that have been recommended for retention as part of this report.

4.0 ARBORICULTURAL METHOD STATEMENT AND TREE PROTECTION PLAN

TREE PROTECTION AREA AND SEQUENCE OF OPERATION

Prior to any construction works commencing on the proposed development site, including any ground works, demolition, delivery of materials or the use of vehicular machinery, a sequence of operations will be implemented. All operations will follow this sequence in a systematic way in order to ensure that any trees selected for retention are protected during the construction phase.

TREE WORKS

Trees that were identified for removal either as a result of the proposed development or as result of the survey conducted for this report will be shown in the Tree Constraints Plan (TCT) and identified with a red outline. Any trees to be removed that are located within the RPA of trees to be retained will not be felled with the use of excavation machinery but will be done so according to best practice as recommended in BS 3998:2010 Tree Work Recommendations. All tree work operations recommended as part of this survey should be undertaken by suitably qualified tree surgeons with the appropriate insurance.

Where the stumps from trees that were felled are to be removed and are within the RPA of retained trees only the use of appropriate machinery, stump grinders, will be allowed within this restricted area. No excavation machinery will be allowed within the RPA of retained trees.

If tree works are to be undertaken within the bird nesting season, March – September, the trees in question will be assessed for the presence of any nests by a competent person before any works commence. If bird nests are present works will cease and an ecologist consulted before works can commence.

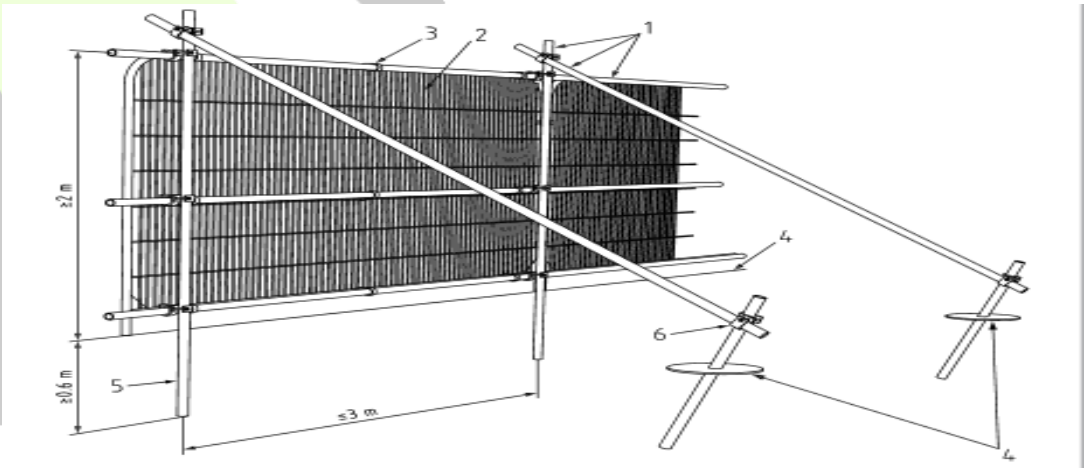
INSTALLATION OF PROTECTIVE BARRIERS

All protective barriers will be installed around those trees to be retained prior to the commencement of any works on the site. The location of all tree protection barriers will be visible on the Tree Protection Plan (TPP). The installation of the protective barriers will be done as outlined in Section 6.2 Barriers and Ground Protection of BS 5837.

The tree protection barriers will remain in place for the duration of the construction works and should only be removed once the on-site arborist has signed off on its removal.

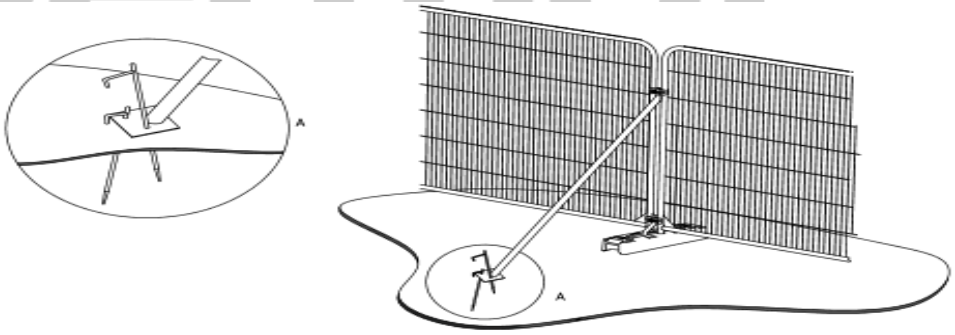
The appropriate tree protection signage should be attached to the protective fencing, either a visual representation of tree protection or for example – T.P.A. Tree Protection Area Restricted Access Keep Out – should be used.

Below are illustrations as recommended in BS 5837. These illustrations provide a visual representation of possible options for the construction of the protective fencing.

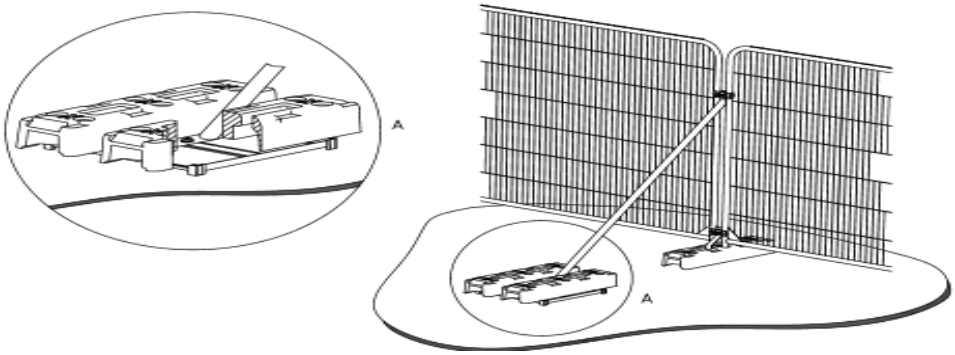


Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps



a) Stabilizer strut with base plate secured with ground pins



GROUND PROTECTION

Where the RPAs of the trees selected for retention extend beyond the proposed location of the protective fencing adequate ground protection will be required. Where there is no existing hard surface present ground protection must be used in order to protect the soils from compaction.

For pedestrian movement, the construction of an appropriate raised walkway or the use of load bearing geotextile membrane would be required.

For the use of machinery within the RPA the appropriate method should be selected depending on the weight of the machinery – inter-linked ground protection boards, compression resistant layers of geotextile membrane or pre-cast reinforced concrete slabs.

In all cases the objective should be to avoid compaction of the soil so that the tree root functions remain unimpaired.

INSTALLATION OF UNDERGROUND SERVICES

Where possible the location, direction and installation of new underground services should be designed so as not to enter the RPAs of retained trees. Where it is not feasible to re-route the services, the excavations should be done with hand tools in conjunction with an air-spade. The methodology for trenchless installation can be found in NJUG Vol.4: Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees.

DURING CONSTRUCTION WORKS

The tree protection barriers will be maintained at all times for the duration of the construction works. Any interference with or damage to the tree protection barriers should be recorded and the on-site arborist informed.

The location of the tree protection barriers will be visible on the Tree Protection Plan (TPP) and a copy should be retained on-site for reference at all times.

No machinery will enter the RPA exclusion zones for the duration of the on-site works. No excavations will take place within the RPAs as outlined on the TPP. The ground levels within the RPAs will not be altered at any stage of the construction works.

All diesel, petrol, concrete and other materials hazardous to the health of the trees will be kept within the confines of the designated storage area for the duration of the construction works.

No trees will be used to support cables, wires, or signage.

All on-site personnel will be briefed on the RPAs of the retained trees and their measures and requirements during their initial site induction.

REMOVAL OF TREE PROTECTION BARRIERS

The tree protection barriers will be assessed and signed off by the on-site arborist prior to their removal. During the removal of the barriers care will be taken to avoid any unnecessary damage to the trees. If machinery is being used, they should remain on the hard surfaces and outside the RPAs during the dismantling operations.

LANDSCAPING

Post construction phase there is usually a need for landscaping works to take place. The removal of the tree protection barriers in order for the landscaping works to commence will allow access to previously restricted areas. The landscape contractor should have access to the TPP and adhere to the exclusion zones. The landscape contractor should have his own method statement detailing his proposed work. No rotovating should take place within the RPAs. The use of machinery should be restricted from entering the RPAs and there should be no alteration of the soil levels within the RPAs.

CONCLUSION

Successfully preventing ground compaction and damage to the tree's rooting system during the construction phase needs to be adhered to from the outset. If any part of the arboricultural method statement is deemed unfeasible or needs to be altered in some way the on-site arborist should be consulted before any works re-commence.

5.0 RESULTS

The tree survey was conducted on foot at various times during February and March 2021. The survey assessed 87 individual and groups of trees. Nineteen trees assessed were deemed to be trees of high or medium quality and are classified as category A or B trees. The table below gives a break-down of the 87 trees surveyed.

INDIVIDUAL TREE QUALITY ASSESSMENT SUMMARY										
	A	B	C	U	A3	B1	B2	B3	C2	C3
Sycamore		3	20	5						
Ash		2	8	1						
Cedar		1								
Cherry			1							
Hawthorn				1						
Pine				1					1	
Scots pine			1			1				
Horse Chestnut				1						
Ponderosa Pine					1					
Spruce			1					1		
Birch		3	2							1
Western Red Cedar					1					
Sycamore & Ash (Group)			5							
Oak		3								
Willow			1							
Apple			1		1					
Beech	1	2	3	1						
Monterey Pine	2									
Yew		1								

Mirabelle Plum		**1**								
Western Hemlock			**1**		**1**					
Ligustrum							**1**			
Griselina					**1**					
Maple		**1**			**1**					
Chinese Plum yew					**1**					
Himalayan cotoneaster					**1**					
Various				**1**						

TREES TO BE REMOVED

Due to the constraints placed on the trees by the development, the following trees will have to removed.

Tag numbers - 246, 247, 248, 249,250, 251, 252, 253, 254, 255, 256, 259, 260, 261, 262, 263, 264, 265, 266, 267,268, 269, 270, 271, 272, 273, 274, 275, 276, 287, 288, 291, 305, 313, 314, 315, 316, 317, 318, 319, 320, 321, 365, 366, 367, 373, 374.

To retain all the trees, the development cannot proceed.

It is the opinion of the author of this report that the three Category A trees and those Category B trees located on or close to the boundary be retained and incorporated into new developments and layouts where possible**.** The Category A trees are T294, T307 & T309. The decision on Category C trees should be left solely to the discretion of the management of the site but it is the author's recommendation that they be retained where possible as they still offer positive qualities to the landscape.
All Category U trees should be considered for removal irrespective of their influence on the proposed development site.

There are a number of trees growing on the adjacent land whose root systems may enter the proposed development site, as indicated in the Tree Constraints Plan. Care should be taken not to intentionally cause damage to the roots within the RPA of these trees.

6.0 APPENDIX 1

SURVEY KEY

Tree No	Refers to numbered metal tag on each tree.
Species	Refers to common and botanical name.
Age	Referred to in generalised categories.
Young	A tree planted within the last 10 years.
Semi Mature	A tree that has grown less than 1/3 its expected height
Early Mature	A tree between 50% & 80% its expected height
Mature	A tree that has reached its expected height but still has potential to grow.
Over Mature	A tree at the end of its time and the crown is starting to break up and decrease in size.
Ht	Tree height in meters
Spread(S)	Approximate tree canopy spread measured in meters
DBH	Tree diameter at breast height in cm
RPA	Root protection area as a radius from trees stem centre that is to be protected from disturbance during construction works. For a single stem, the root protection area is calculated as an area that is 12 times the stem diameter. The RPA is plotted on the tree constraints plan in meters.
Condition	Condition of the tree both physical and structural.
G – Good	A specimen of generally good form and health
F – Fair	A specimen with defects but can be managed and retained.
P – Poor	A specimen through defect, decay or reduced vigour has a limited life.
D – Dead	A dead tree
Comments	Additional description/commentary on each individual tree
Recommendations	Management recommendations are noted, including remedial pruning works and re-inspections where necessary.

Retention categories (RC)

The retention category is to identify the quality and value of an existing tree and make decisions whether trees should be retained or removed in accordance with BS 5837 section 4.5.

Category U – trees with no expected value in the immediate future and recommended for removal based on arboricultural best practice.

Category A – trees of high quality with a minimum 40-year life expectancy

Category B – trees of moderate quality with a minimum 20-year life expectancy

Category C – trees of low quality with a minimum 10-year life expectancy

Sub-category 1 - Arboricultural qualities: the trees influence as a good example of its species, it's health and structure.

Sub-category 2 - Landscape qualities: the trees importance within and as landscape features

Sub-category 3 - Cultural qualities: trees of an age that have a significant conservation and historical value.

7.0 APPENDIX 2 – TREE SURVEY DATA – REAR OF FITZPATRICKS SHOP

Tree No	SPECIES	AGE	HT (M)	SPREAD (M)	DBH (CM)	RPA M	CONDITION-PHYSIOLOGICAL/ STRUCTURAL	COMMENTS	RECOMMENDATIONS	RETENTION CATEGORY
0244	Quercus robur (English oak)	M	23	10	80	9.6	Good	Large specimen overhanging road and neighboring entrance. Forked @3m with included bark. Deadwood throughout crown. Stay wire stuck in base of trunk.	Clean crown	B
0245	Fraxinus excelsior (Ash)	EM	14	6	50	6.0	Poor	Previuosly pruned hard. Unbalanced crown. Showing signs of decline.Large hollow section at base.	Fell	U
0246	Group of approx. 10no young Ash/Sycamore	Y	3/4M	1/2	10	2.4	Good	Young trees growing from seed. Of no real value	NAR	C
0247	Cedrus atlantica glauca (Atlas Cedar)	M	25	12	90	10.8	Good	Large specimen. Ivy clad. Deadwood present throughout.	Clean crown & Sever Ivy.	B

0248	Prunus Spp. (Cherry)	EM	7.5	2	20	2.4	Fair	Roadside tree with phone wire passing through.Leaning heavily (S). No obvious signs of decay.	NAR	C
0249	Fraxinus excelsior (Ash)	M	15	5	70	8.4	Fair	Large roadside tree – extensive storm damaged within crown. Showing signs of stress on lower southern limb.	Tidy damaged limbs. Reduce end weight on (S) limb.	C
0250	Pinus Spp. (Pine)	EM	8	3.5	45	5.4	Dead	Dead	Fell	U
0251	Fraxinus excelsior (Ash)	M	24	12	90	10.8	Good	Forked @ 2.5m. Ivy clad. Hanger in crown.	Crown reduce by approx. 20%. Remove hanger. Sever Ivy.	B
0252	Crataegus Monogyna (Hawthorn)	SM	6.5	1	15	1.8	Poor	Ivy Clad & in a state of decline.	Fell	U
0253	Pinus Spp. (Pine)	M	11	4	80	9.6	Dead	Dead	Fell	U
0254	Acer pseudoplatanus (Sycamore)	SM	10	3	20	2.4	Good	Young tree. Should thrive with removal of 0253.	NAR	C

0255	Acer pseudoplatanus (Sycamore)	EM	10	5	60	7.2	Poor	Roadside tree in serious decline. Has suffered storm damage within crown & also mechanical damage to the root system. Cavities in lower stem.	Fell	U
0256	Acer pseudoplatanus (Sycamore)	SM	9	2	20	2.4	Fair	Roadside tree. Roots have suffered mechanical damage.	Fell	U
0257	Acer pseudoplatanus (Sycamore)	SM	11	4.5	20	2.4	Good	2 trees in close proximity. Slight lean. No obvious signs of decay.	NAR	C
0258	Acer pseudoplatanus (Sycamore)	SM	11	4.5	20	2.4	Good	2 trees in close proximity. Slight lean. No obvious signs of decay.	NAR	C
0259	Acer pseudoplatanus (Sycamore)	EM	14	5	40	4.8	Good	Well balanced crown. Ivy clad	Sever Ivy	B

0260	Aesculas Hippocastanum (Horse Chestnut)	EM	14	7	70	8.4	Fair	Leaning heavily towards neighbours garage.Root pan lifting. Ivy clad.	Fell	U
0261	Picea abies (Norway spruce)	M	22	5	70	8.4	Fair	Evidence of dieback. Ivy clad.	Reduce leader by 4/5m. Sever ivy	B3
0262	Acer pseudoplatanus (Sycamore)	EM	9	3	20	2.4	Good	Forked @ base. No obvious signs of decay.	NAR	B
0263	Fraxinus excelsior (Ash)	EM	13	3	30	3.6	Fair	Hard to assess due to difficult terrain.Ivy Clad .	Sever Ivy	C
0264	Acer pseudoplatanus (Sycamore)	SM	13	1	15	1.8	Poor	Lacking vigour. Suppressed by larger trees.	Fell	U
0265	Picea abies (Norway spruce)	EM	17	2	40	4.2	Fair	Major deadwood. Ivy clad.	Clean crown. Sever Ivy	C
0266	Acer pseudoplatanus (Sycamore)	EM	14	5	50	6.0	Fair	Forked @ 5.5m. Broken limbs @ 5.5m & 10m.	Tidy broken limbs. Reduce height by approx. 3-4m.	C

0267	Acer pseudoplatanus (Sycamore)	EM	14	5	25	3.0	Good	Forked @ base. Ivy clad.	Sever Ivy	C
0268	Pinus Ponderosa (Ponderosa pine)	M	24	7	65	7.8	Good	Nice specimen. Deadwood – lower trunk. heavy limb overhanging neighbouring garage.	Remove limb over garage & clean crown	A3
0269	Acer pseudoplatanus (Sycamore)	M	15	7	40	4.8	Poor	High risk to neighbour's property. Major lean in that direction.	Fell	U
0270	Betula pendula (silver birch)	M	21	7	50	6.0	Good	Forked @ 3m – Weeping from that fork. Deadwood throughout crown.	Clean crown & inspect fork. Cut back from 0271.	B
0271	Acer pseudoplatanus (Sycamore)	EM	12	3	35	4.2	Good	Suppressed slightly by 0270.	NAR	C
0272	Acer pseudoplatanus (Sycamore)	EM	9	4	35	3.6	Good	Forked @ 4m – Included bark	NAR	C

0273	Acer pseudoplatanus (Sycamore)	EM	11	28	45	5.4	Good	Well-formed crown & well balanced	NAR	C
0274	Acer pseudoplatanus (Sycamore)	EM	9	30	30	3.6	Good	Well-formed crown & well balanced.	NAR	C
0275	Acer pseudoplatanus (Sycamore)	M	13	8	45	5.4	Good	Forked @ 4m -good union. Leaning slightly.	NAR	C
0276	Acer pseudoplatanus (Sycamore)	SM	8	5	15	1.8	Good	Young multi stem tree.	NAR	C
0277	Acer pseudoplatanus (Sycamore)	SM	9	2	20	2.4	Good	Young tree with good potential	NAR	C
0278	Acer pseudoplatanus (Sycamore)	SM	8	2	20	2.4	Good	Young tree with good potential	NAR	C
0279	Salix spp. (Willow)	E	8	4	25	2.4	Good	Suppressed by ash. Leaning & Ivy clad	Clear young neighbouring ash to	C

									allow better light - Sever Ivy	
0280	Fraxinus excelsior (Ash)	EM	13	8	30	3.6	Good	Nice tree. Forked @ 2m. No obvious signs of decay.	NAR	C
0281	Malus sylvestris (Crabapple)	M	8	8	30	3.6	Fair	Multi-stemmed from base – Ivy clad. Weighted to (N)	Crown reduce by 30% - Sever Ivy	C
0282	Fraxinus excelsior (Ash)	M	12	7	30	3.0	Good	A well-formed tree with good balance. No obvious signs of decay.	Sever Ivy	C
0283	Group of 10nr Fraxinus excelsior (Ash) at rear of neighbouring property.	SM	10-12	4-6	20-25	3.0	Good	Hard to assess properly due to access. Nice mix of multi stemmed and single stemmed trees.	Cut back scrub	C
0284, 0285, 0286	Group of 10-15nr Fraxinus excelsior (Sycamore & Ash)- Back of Apartments	SM /EM	10-12	3-5	15-25	3.0	Good	Mix of multi-stemmed & single stemmed trees	Thin out block & cut back scrub.	C
0287	Ligustrumlucidum (Chinese tree privet) On boundary with Apartments	M	10	4	25-30	3.6	Good	No obvious signs of decay – Showing good vigour	NAR	B2

288	Group/cluster of 20-30nr trees - Fraxinus excelsior (Ash)	Y/S	10-12	1	10-20	2.4	Good/Fair	Mix of multi-stemmed & single stemmed trees	Thin out block & cut back scrub	C
0289,	Griselina littoralis (Papauma)	EM	14	7	50,27, 25,32	6	Good	Large multi stemmed specimen. Showing signs of decay on lower trunk (S).	Crown clean	A3
0290	Fraxinus excelsior (Ash)	EM	14	8	30	4.8	Good	No obvious signs of decay – Showing good vigour	NAR	B
0291	Fraxinus excelsior (Ash)	EM	16	6	30	3.6	Good	2 interlocking trees - Ivy clad	Sever Ivy	C
0292	Fagus sylvatica (beech)	EM	18	10	40	4.8	Good	Nice well-balanced specimen – signs of decay on lowest limb.	Remove lowest limb back to main trunk.	B
0293	Fraxinus excelsior (Ash	EM	16	8	30	3.6	Good	A well-formed tree with good balance. No obvious signs of decay.	NAR	C
0294	Pinus Radiata (Monetery Pine)	M	20	14	60	7.2	Good	Large spreading specimen – Overhanging the path –	Tidy broken limbs- Sever Ivy	C2

								Broken limbs throughout- Ivy clad		
0295	Acer pseudoplatanus (Sycamore)	EM	10	6	40	4.8	Good	Suppressed by Pine branching.	Cut back interfering branches from pine.	C
0296	Pinus sylvestris (scots pine)	EM	14	7	40	4.8	Fair/Poor	No obvious signs of decay – Showing good vigour Trees between 296 & 294 are sitting on a very steep incline and inaccessible to individually tag. Some trees failed i.e., pine, while there are a few nice trees growing here i.e., beech, birch and pine.	NAR	B1
0297	Fraxinus excelsior (Ash)	EM	12	10	30	3.6	Good	Forked @ base. Minor deadwood throughout. Ivy clad.	Clean crown Sever Ivy	C
0298	Betula ermanii (Erman's birch)	M	14	5	30	3.6	Fair	Deadwood throughout. Ivy clad.	Clean crown Sever Ivy	C
0299	Betula ermanii (Erman's birch)	M	14	6	30	3.6	Fair	Suppressed by neighbouring Taxus. Deadwood throughout. Ivy clad.	Clean crown. Sever Ivy. Cut back Taxus branching.	C

0300	Taxus bacatta (English yew)	EM	9	7	30	3.6	Good	Leaning from bank- No signs of decay.	NAR	B
0301	Fagus sylvatica (beech)	EM	14	7	40	4.8	Good	Fork @ 3m – Heavy lean from bank.	NAR	B
0302	Betula ermanii (Erman's birch)	M	14	6	40	4.8	Poor	fruiting bodies @ base (w). This tree is In decline -	Fell	C3
0303	Acer henryii (Henry's Maple)	EM	14	8	60	7.2	Good	Tri-stemmed @ 2m. Showing good vigour. Wire stuck in stem. Growing on bank – Ivy clad.	Sever ivy	B
0304	Acer pseudoplatanus (Sycamore)	M	9	9	40	4.8	Good	Nice well-balanced tree. No obvious signs of decay.	NAR	B
0305	Quercus robur (English oak)	EM	8	10	50	6.0	Good	Nice specimen with a number of broken/split limbs. Suppressed by pine.	Clean crown	B

0306	Group of 3nr Prunus domestica (Mirabelle plum)	M	8	4	30	3.6	Good	Growing out from bank overhanging road.	Reduce weight on roadside branching.	B
0307	Pinus Radiata (Monetery Pine)	M	22	20	132	12.0	Good	Very large spreading tree showing good vigour. Broken limbs throughout.	Tidy broken limbs.	A
0308	Group of young sycamore from seed.	Y	7-10	1	10-15	N/A	Good	Mix of multi-stemmed & single stemmed trees	NAR/Thin out block & cut back scrub.	C
0309	Fagus sylvatica purpurea (Copper beech)	EM	22	10	80	9.6	Good	Nice specimen –Well balance crown.	NAR	A
0310	Tsuga heterophylla (Western hemlock)	M	23	20	222	15	Fair	Multi-stemmed @ 2.5m. Showing signs of decay at base	Fell/ Crown reduce by 30%	A3
0311	Thuja plicata (Western Red Cedar)	M	27	13	87,85	10.4	Good	Large spreading specimen. Twin- stemmed @ 1.5m. On boundary with neighbouring property. No obvious signs of decay.	NAR	A3
0312	Fraxinus Excelsior (Ash)	EM	14	7	35	4.2	Good	Nice well-balanced tree.	NAR	C

0313-0314	Group/cluster of 8-10nr trees ash/sycamore /Dead elms	Y	7-10	1	10-15	1.8	Good	Young single & multi-stemmed trees – some with good potential.	Cut back scrub & remove elders/dead elms & vegetation in close proximity.	C
0315	Acer pseudoplatanus (Sycamore)	EM	14	6	30	3.6	Good	Slight lean (W). Ivy clad.	Sever Ivy	C
0316	Acer pseudoplatanus (Sycamore)	EM	14	4	30	3.6	Good	Good potential. Ivy clad.	Sever Ivy	C
0317	Acer pseudoplatanus (Sycamore)	EM	14	10	40	4.8	Fair	Tri-stemmed @ 1m. Large cavity (N) stem lower. Ivy clad.	Crown reduction of approx. 20% - Sever Ivy	C
0318	Acer pseudoplatanus (Sycamore)	EM	9	4	30	3.6	Good	Slight lean (E). No obvious signs of decay.	NAR	C
0319	Fagus sylvatica (beech)	EM	11	6	30	3.6	Good/Fair	Hard to assess due to Ivy-Heavy lean.	Remove shrubbery in close proximity. Sever Ivy	C
0320	Acer pseudoplatanus (Sycamore)	EM	9	4	20	2.4	Fair	Showing signs of stress on lower stem & mechanical damage.	Fell	U

0321	Acer pseudoplatanus (Sycamore)	EM	11	5	35	4.2	Good	Situated in close proximity to stone structure – No obvious signs of decay.	NAR	C
0322	Various	NA	N/A	N/A	N/A	N/A	Poor	The remainder of trees in this lower section of the site are of low value with the majority either in decline, dead, competing with scrub & other vegetation or waterlogged	Clean out scrub and remove dead trees.	U
0365	Cephalotaxus fortuni (Chinese Plum yew)	SM	4	5	15	1.8	Good	A nice specimen surpressed by surrounding trees and vegetation.	Increase light by cutting back surrounding scrub and removing lower branch on tree no 292.	A3
0366	Quercus robur (English oak)	EM	15	6	20	2.4	Good	Twin stemmed- Hard to assess due to ivy.	Sever Ivy. Increase light by removing scrub/ vegetation surrounding the tree.	B
0367	Acer pseudoplatanus (Sycamore)	EM	16	5	35	4..2	Good	Hard to assess due to ivy.	Sever Ivy –	C
0368	Acer buergerianum (Trident Maple)	EM	15	5	35	4.2	Good	Due to heavy eleagnus growth and steep incline it was not possible to assess this tree properly.	Cut away eleagnus - sever ivy - reassess	A3

0369	Betula spp. (birch)	EM	18	12	50	6	Good	Nice specimen – wire stuck in trunk @ 1m (w). forked @ 3m. No obvious signs of decay.	Clean crown and remove scrub/vegetation around base of the tree.	B
0370	Fagus sylvatica (beech)	SM	8	6	20	2.4	Fair	Leaning heavily (s)- Growing out of steep bank. In competition with tree no 0371.	Fell	U
0371	Fagus sylvatica (beech)	SM	12	7	30	3.6	Good	Nice specimen growing on top of steep bank. No obvious signs of decay.	Sever Ivy	C
0372	Fagus sylvatica (beech)	SM	10	8	30	3.6	Good	Nice specimen growing on top of steep bank. No obvious signs of decay.	NAR	C
0373	Malus domestica (apple)	M	12	10	35,34	4.2	Good	Forked @ base – Growing out of the bank. Leaning heavily (W) away from tree no 0304. Ivy clad – hard to assess	Sever Ivy & crown clean.	A3
0374	Cotoneaster frigidus (Himalayan cotoneaster)	M	12	9	28,28, 27	3.36	Good	Multistem specimen growing out of the bank showing good vigour. Ivy clad lower down.	Sever Ivy – Crown thin & clean.	A3

0375	Pinus sylvestris (Scots pine)	EM	14	4	40	4.8	Good	Minor deadwood throughout. Forked @ 10m.	Sever Ivy	C