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## **Arboricultural Impact Assessment:**

Eskdale Drive Jarrow NE32 4AA

## **Prepared for:**

Dunelm Geotechnical & Environmental Somerville House St. John's Road Meadowfield Durham DH7 8TZ

#### On behalf of:

South Tyneside Housing Ventures Ltd

Report ref: Dunelm\_EskdaleDr\_AIA1.1

Report prepared by	Position	Date
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Appendix 1 – Tree protection plan.

#### 1.0 INTRODUCTION

#### 1.1 Background & Scope

1.1.1 Dendra Consulting Ltd was commissioned by Dunelm Geotechnical and Environmental to undertake this survey and report. The scope of the contract was to undertake an arboricultural impact assessment (AIA) to accompany a planning application for proposed development of land on Eskdale Drive, Jarrow. The survey was carried out to BS 5837 – Trees in Relation to Design, Demolition and Construction- Recommendations, 2012.

#### 1.2 Personnel, Timing & weather conditions

1.2.1 The survey was undertaken on the 16<sup>th</sup> December 2017 by Liam Robson. The weather was overcast and damp, with no significant visibility constraints.

#### 1.3 Survey methodology

- 1.3.1 All observations were from ground level. Height was measured, where possible, using a clinometer and is expressed in metres. Crown spread is also expressed in metres. In dense tree cover height and crown spread may have been estimated. Stem Diameter at 1.5 metres was measured using calibrated DBH tape and is expressed in millimetres.
- 1.3.2 A tree quality assessment is made for each tree or group of trees as recommended in British Standard 5837 (2012). The resulting categories for the trees are as follows: U = Unsuitable for retention, C = Low value, B = Moderate value, A = High value. The associated number represents the assessment criteria; 1 = mainly arboricultural qualities, 2 = mainly landscape qualities, 3 = mainly cultural and conservation qualities. A cascade chart based on the recommendations in BS5837 is provided as figure 1.

Figure 1 – Chart for tree quality assessment. Adapted from BS5837 (2012).

Category	Criteria								
Category U Trees unsuitable for retention. Trees in such a condition that they cannot be realistically retained for longer than 10 years	<ul> <li>Dead, dying or dangerous trees</li> <li>Trees with serious structural defects</li> <li>Trees with serious physiological defects</li> </ul>								
	1. Mainly arboricultural values	2. Mainly landscape values	3. Mainly cultural & conservation values						
Category A Tree of high quality with an estimated remaining life expectancy of at least 40 years.	Trees that are particularly good examples of their species. Particularly of rare or unusual species.  Trees forming essential parts of a group	Trees, groups or woodlands of particular visual importance.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value.						
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	Trees that might be categorised in the higher category but are downgraded because of impaired condition.	Trees present in numbers such that they attract a higher collective rating than they would as individuals.	Trees with material conservation or other cultural value.						
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 15cms.	Trees not qualifying in higher categories	Trees present in groups or woodlands that do not possess significant landscape values.	Trees with no material conservation or cultural value						

# 1.4 Root protection

1.4.1 The Root Protection Area (RPA) is represented by an area in m² around a tree which acts as a protective zone. In our schedule of trees it is expressed both as the RPA and as the Root Protection Radius (RPR). The RPR is a figure given in metres used to identify the radius of a circle around a tree which serves to act as the RPA. In certain circumstances the shape of the RPA may be altered to suit site specific factors such as the presence of buildings, roads, other trees etc.

#### 2.0 REPORT FINDINGS

2.1 Two individual trees and two groups were included in the survey. The full results of the survey are provided in section 6.0. The trees were examined for physiological and structural defects. Remedial works for such defects have been provided where appropriate, and this has been recommended regardless of development. Please note that some of this work may be superseded by recommendations required for development purposes. The results of the tree quality assessment is summarised in figure 2 below.

Figure 2 – The results of the tree quality assessment

Category	Tree/Group numbers
High	None
Moderate	T2
Low	T1, G1 & G2
Unsuitable for retention	None

## 3.0 IMPACT ASSESSMENT

## 3.1 Assessment criteria

3.1.1 Potential impacts are identified and evaluated using the criteria illustrated in figure 3. This is done without consideration for any mitigation which is then considered in section 4.0.

Figure 3 – Impact assessment parameters and predictions

Assessment parameters  Assessment parameters	. Measure of impacts			
<b>Timing</b> When impact is likely to occur	Pre-development Development stage Post-development			
<b>Nature</b> and <b>Magnitude</b> of impact	Major negative Negative Minor negative Neutral / Negligible Minor positive Positive Major Positive			
<b>Extent</b> of impact	Site level Street level Local level District level County level National level			
<b>Probability</b> that impact will occur	Certain / Highly likely Likely Possible Extremely unlikely			

#### 3.2 Pre-development impacts

3.2.1 The proposals will require the removal of T1, a low value feature of the site.

The impacts of this removal will constitute a minor negative impact at a site level.

#### 3.3 Development stage impacts

3.3.1 None.

#### 3.4 Post development impacts

3.4.1 Potential post development tree/resident conflicts such as encroachment, shading, leaf fall, honeydew, etc usually arise from the erection of residential properties close to large trees. Such problems are subjective and depend entirely on different attitudes to trees. Consequently the impacts are difficult to predict with any degree of accuracy. In this instance, it is considered that the trees to be retained are situated a significant distance away from the proposed buildings. Therefore no impacts of this nature are predicted.

## 4.0 MITIGATION

# 4.1 Pre development impacts

4.1.1 Four new plantings are proposed within the soft landscaping scheme. These will mitigate for the loss of T1 in the future.

# 4.2 Development stage impacts

4.2.1 None required.

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## 5.0 SUMMARY OF IMPACTS AND MITIGATION

Propose	d activity	Characteristic of impact without mitigation	Nature, Magnitude, Extent and Probability of impact without mitigation	Proposed Mitigation	Nature, Magnitude, Extent and Probability of impact with mitigation		
	moval to evelopment	Loss of single low value tree	Minor negative impact at site level – Certain	New plantings within landscaping scheme	Neutral impact – Highly likely		

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#### **SCHEDULE OF TREES** 6.0

**KEY** 

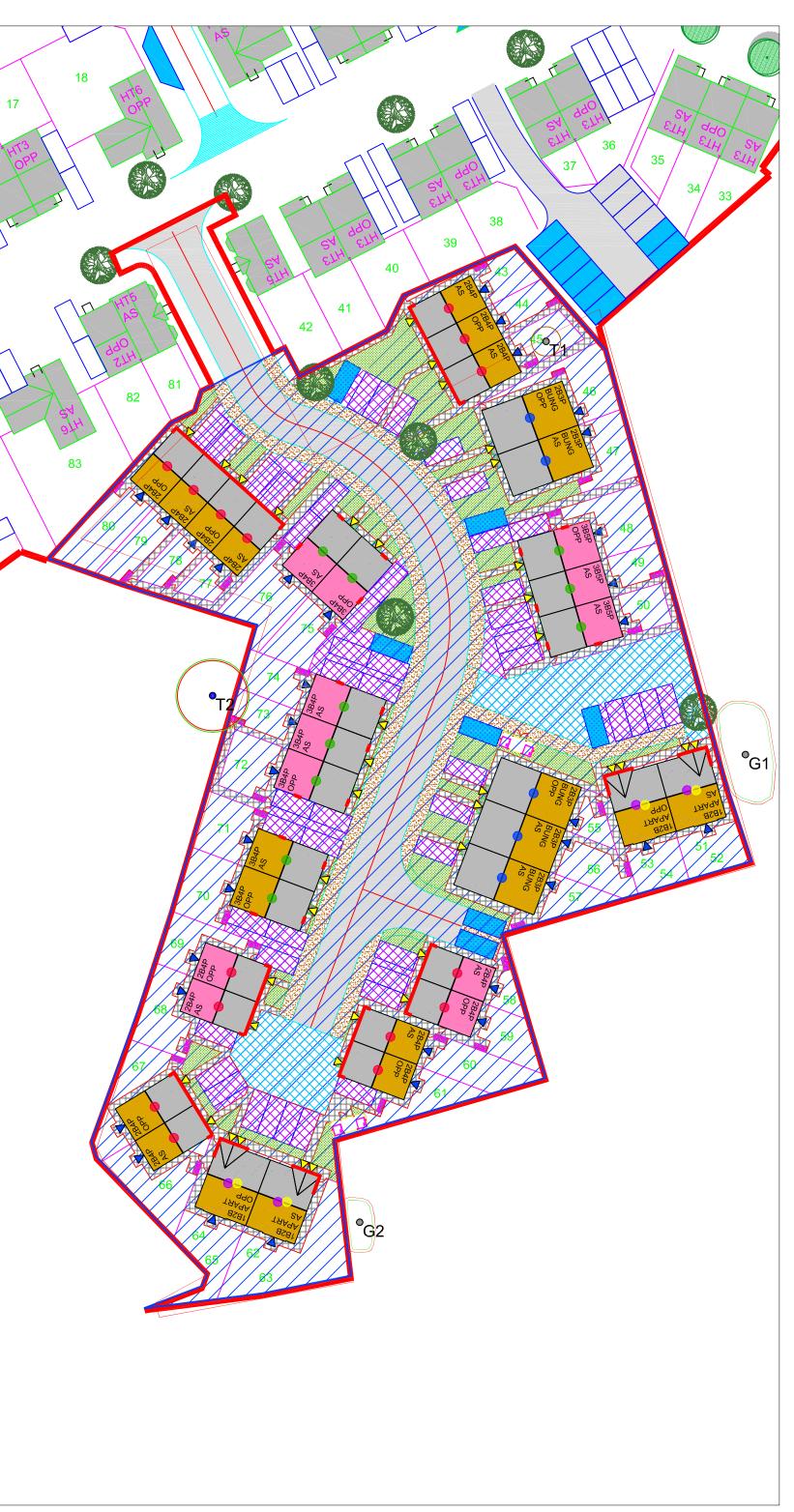
NR: Not recorded

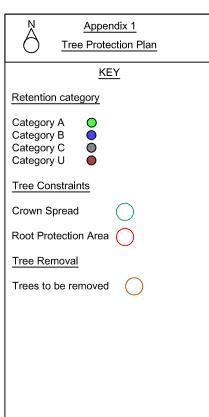
Age: Y = Young, SM = Semi mature, EM = Early mature, M = Mature, OM = Over mature

**Estimated Remaining Contribution:** Expressed in years

Recommendations for health and safety reasons are not highlighted. Recommendations for development purposes are highlighted in RED

				Cro	own S <sub>l</sub>	oread	(m)	canopy (m)	nificant	of first branch		ining n	gui.				
No.	Species	Height (m)	Stem diam. (mm)	N	E	S	w	Height of main can	Height of first significant branch (m)	Direction of first significant branch	Age class	Estimated remaining contribution	Comments	Recommendations	Tree quality Assessment	RPA (m²)	RPR (m)
T1	Alder	7.0	350	2.0	2.0	2.0	2.0	1.0	NR	NR	SM	20+	Located in neighbouring property. Not inspected in detail	Fell for development	C1	55	4.2
T2	Sycamore	10.0	400	5.0	5.0	5.0	5.0	2.0	NR	NR	M	20+	Located in neighbouring property. Not inspected in detail	No action required at the present time	B1	72	4.8
G1	Cypress	16.0	600	4.0	4.0	4.0	4.0	1.0	NR	NR	M	40+	Located in neighbouring property. Not inspected in detail	No action required at the present time	C1	163	7.2
G2	Mixed	9.0	300	2.0	2.0	2.0	2.0	1.0	NR	NR	M	20+	Species include Cypress and Hawthorn. Located in neighbouring property. Not inspected in detail	No action required at the present time	C1	41	3.6
Report end																	





Scale: 1:500 @ A3

The original of this plan was produced in colour - a monochrome copy should not be relied upon

Project: Eskdale Drive Jarrow NE32 4AA

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