



## Tree Safety Survey

### GILLIES HILL WOOD

For

### CAMBUSBARRON COMMUNITY DEVELOPMENT TRUST

29 March 2023



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## 1. GENERAL INTRODUCTION

- 1.1. Alan Motion Tree Consulting Ltd has been instructed by Weir Forestry to carry out a tree safety survey on behalf of **Cambusbarron Community Development Trust**, in relation to the health, condition and safety of two trees on land at Gillies Hill Wood.
- 1.2. The survey has been carried out following the guidance and procedures outlined in the National Tree Safety Group publication “Common sense risk management of trees.”

## 2. STANDARD CONDITIONS RELATING TO TREE SURVEYS

- 2.1. Unless otherwise stated, tree surveys are undertaken from ground level using established visual assessment methodology. The inspection is designed to determine the following:
  - A. The presence of fungal disease in the root, stem, or branch structure that may give rise to a risk of structural failure of part or all of the tree;
  - B. The presence of structural defects, such as root heave, cavities, weak forks, hazard beams, included bark, cracks, and the like, that may give rise to a risk of structural failure of part or all of the tree;
  - C. The presence of soil disturbance, excavations, infilling, compaction, or other changes in the surrounding environment, such as adjacent tree removal or erection of new structures, that may give rise to a risk of structural failure of part or all of the tree;
  - D. The presence of the foregoing or any other factor not specifically referred to, which may give rise to a decline or death of the tree.
  - E. The presence of surrounding structures, roads, footpaths, utilities, boundaries and the like where growth of the tree may present a hazard or nuisance.
- 2.2. Where further investigation is required, either by climbing or the use of specialised decay detection equipment, this will be identified in the report.

- 2.3. The findings and recommendations contained within this report are valid for a period of twelve months. Trees are living organisms subject to change - it is strongly recommended that they are inspected at regular intervals for reasons of safety.
- 2.4. Whilst every effort has been made to detect defects within the trees inspected, no guarantee can be given as to the absolute safety or otherwise of any individual tree. Extreme climatic conditions can cause damage to apparently healthy trees.
- 2.5. The findings and recommendations contained within this report are based on the current site conditions. The construction of roads, buildings, service wayleaves, removal of shelter, and alterations to established soil moisture conditions can all have a detrimental effect on the health and stability of retained trees. Accordingly, a re-inspection of retained trees is recommended where site conditions are altered.
- 2.6. This report has been prepared for the sole use of Weir Forestry and Cambusbarron Community Development Trust. Any third party referring to this report or relying on information contained within it does so entirely at their own risk.

### **3. GENERAL DESCRIPTION**

- 3.1. Gillies Hill Wood is an extensive area of mixed woodland lying to the south of Cambusbarron. Numerous formal and informal footpaths extend through the site and public access improvement works are ongoing.
- 3.2. This report is restricted to the condition of two trees:
  - A. Scots pine located at GR NS 77622 91727
  - B. Beech located at GR NS 78033 91389
- 3.3. The Scots pine is located in a clearing close to interpretation signage and seating. It is a mature tree with veteran characteristics and a significant focal point.
- 3.4. The beech is located close to a small pond where clearance of Rhododendron understorey has opened up the areas to greater public access. It is a poorly-formed tree with numerous structural weaknesses.

## 4. FINDINGS AND RECOMMENDATIONS

- 4.1. The Scots pine is in good overall health and condition. There are numerous dead branches in the lower crown, typical of the species. A short bole supports four main scaffold limbs arising from a fork at 2m, and the crown breaks further into a spreading branch network. There is one significant dead branch arising at 3m extending east towards signage and seating. This branch contains a small cavity close to its union with the main stem. There is a damaged and hanging dead branch at 9m to the south over open ground. There is a mostly-dead branch extending west arising at 7m from the ground.
- 4.2. Scots pine will hold onto larger diameter dead wood for many years. The risk of larger branches falling under normal weather conditions is insignificant, and there are significant benefits in retaining this standing dead wood for its value to biodiversity. Any failure of these dead branches is most likely to occur during severe gale or storm force wind conditions when the members of the public are highly unlikely to be within the woodland. Accordingly, minimal intervention is required at present.
- 4.3. Remedial works should be restricted to shortening the dead branch extending to the east, whilst retaining the larger part of the branch and the cavity. The hanging dead branch should be removed; and the mostly dead branch extending west should be shortened back to its first main fork arising about 4m from the branch union.
- 4.4. The beech tree is a generally poor specimen, showing a history of storm damage throughout the crown. It forks into five main scaffold limbs from a low bole, and the limb unions contain bark inclusions which are a structural weakness. One limb has collapsed as a result and rests on the ground, with an area of decay forming into the main fork at the point of failure. There are two extending scaffold limbs to the west which carry significant weight. Given the history of storm damage and limb failure, the risk of further failure of these extending limbs is significant.

- 4.5. Remedial work is required to reduce the risk of further limb failure. The lower extending limb to the west should be reduced back to the first erect branch union, approx.. 4m from the stem. However, there is a small cavity in the upper part of this limb at the point of a past tear-out, and this should be inspected for nest or roost activity prior to undertaking the work. If the cavity is in use, shortening should be restricted to a point just above the tear-out wound. The upper extending limb should be reduced back to the erect branch union at approx. 6m from the stem.
- 4.6. Trees identified for remedial work are highlighted on the accompanying plan, and recommended remedial work is set out in the following schedule.
- 4.7. All work should be undertaken in accordance with the recommendations contained in BS3998:2010, Tree Work - Recommendations, and the Arboricultural Association Specification for Tree Work, 1997, as minimum requirements.
- 4.8. A further inspection is recommended within 2 years. An inspection regime which alternates between trees in and out of leaf allows a fuller assessment of tree health, vitality, and structural condition. Where possible, inspections should alternate between winter, and late summer. Accordingly, a re-inspection in the summer of 2024 would be appropriate.

**TABLE 1 TREE SURVEY SCHEDULE**

Tree No	Species	DBH	N	S	E	W	Ht	C.Ht	BS Cat	Condition	Age	Stems	ERC	Comments	Recommendations
A	Scots pine	1.70	7	11	10	9	26	3	A3	Good	M	1	>40	Minor cavity/decay in main scaffold limb. Major dead wood (>50mm dia) at 3m.	Conservation dead wooding, shorten dead limb to E back to top bend. Remove dead hanger S at 9m. Reduce mostly-dead limb W back to 1st main fork. Generally remove small dia dead wood throughout.
B	Beech	1.20	7	6	7	11	15	2	C3	Poor	M	1	10 to 20	Bark inclusion, weak fork at 2m. Minor cavity/decay in main scaffold limb. 2 extending hazard beams to W. History of storm damage.	Crown reduction. Reduce lower limb W back to erect branch union 4m from bole. Reduce upper limb W back to erect branch union at 6m from bole. Monitor decay at regular intervals.

## KEY TO TREE SURVEY SCHEDULE

Tag No	Number as shown on survey plan (refers to tree tags where used)
Species	Common name
DBH	Stem Diameter at Breast Height, measured at 1.5m above ground level. Diameter measured in 0.05m bands and <b>rounded up</b> to next 0.05m.
Canopy	Canopy radius in metres t the cardinal points
Ht	Approximate tree height in metres
C Ht	Crown height, indicating clearance from ground level to lowest branches, estimated in metres
Condition	<p>General overall description of condition:</p> <p>Good:                    Healthy tree with no major health or structural defects Trees with significant safe life expectancy Trees of good shape and form for the species</p> <p>Fair:                     Healthy trees with minor health or structural defects Trees with moderate safe life expectancy Trees of average shape and form for the species</p> <p>Poor:                     Trees with significant health or structural defects Trees with a limited safe life expectancy Trees of low vigour, stressed, in decline Trees of poor shape and form, suppressed, structurally weak</p> <p>Dying/Dead:            Dead, dying, unsafe or dangerous Trees with little or no safe life expectancy</p>
Age	Age class (Young, Semi-mature, Early-mature, Middle-Aged, Mature, Over-Mature, Veteran)
ERC	Estimated Remaining Contribution in years, based on species, age, physiological condition and environmental factors.
Comments	Specific comments on any observed defects within the root zone or affecting visible buttress root system; on the main stem up to and including the point of the first main fork; and affecting main scaffold branch system or secondary branch structure. Will be left blank where no defects are noted and growth characteristics are normal
Recommendations	Description of any recommended remedial tree work operations required to ensure safety or for cultural reasons.. General description of works, not a detailed tree work specification. Any recommended works should be carried out in accordance with BS3998:2010 <i>Tree work – Recommendations</i> .



