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ARBORICULTURAL AND WOODLAND MANAGEMENT ASSESSMENT AND REPORT

AT

GRIMSBY GOLF CLUB
LITTLECOATES ROAD
GRIMSBY
DN34 4LU

CLIENT - GRIMSBY GOLF CLUB LTD

CONTENTS

1.0 INTRODUCTION

1.1 Purpose of the Report

This report is intended for use by my client as an assessment of the physiological and structural condition of four copses/shelterbelts of trees on Grimsby Golf Course. It also makes reference to 7 individual trees identified during my site inspection. Ongoing tree management recommendations also form an essential part of the report. It shall not apply to any other use or purpose.

1.2 Terms of Reference

I am instructed to prepare the report by my client -
Grimsby Golf Club Ltd, Littlecoates Road, Grimsby, DN34 4LU.
The instruction was confirmed in the form of an e-mail dated 7 December 2018 by Mr Nick Cutsforth, a director of the club.

1.3 Documents Received

A site plan of the course was issued by the club in order to assist in the preparation of this report.

1.4 Scope of the Report

I have agreed with my client that I adhere to the following brief when preparing the assessment and report;

1 Conduct a "walk through" inspection and assessment of 4 copses/shelterbelts trees growing on the course as identified on site by Scott Vincent (Head Greenkeeper). 6 additional trees were also identified for assessment and comment during the visit.

2 Mark defective or unsuitable trees, dependent on their condition or inferior form, for removal. Also consider additional trees for removal where intense shade or other greenkeeping problems are becoming evident.

3 Provide a concise report containing appropriate recommendations for their short-term management.

1.5 Limitations

The report is limited to the areas and individual trees indentified and described in the report. The visual inspection was made from ground level. No other tests have been conducted, either by myself or by others under my direction, nor have I recovered any samples for testing by a third party.

2.0 SITE DESCRIPTION AND PROTECTED STATUS OF TREES

2.1 Site description

Grimsby Golf Club stands to the west of Littlecoates Road on former farmland which undulates from its higher points near the clubhouse and descends towards the River Freshney along its western boundary. Rows and groups of trees clearly delineate the course layout. Two irrigation ponds were constructed in the 1990s to assist with water management. The larger pond lies at the lowest point on the course close to its western margin, with the smaller one located in the centre of the site.

2.2 Protected status of the trees

Certain trees growing within the clubhouse car park are afforded the protected of a tree preservation order but the trees forming the subject of this report are not protected by that order. This information was confirmed by Mr Paul Chaplin, Trees and Woodlands Officer, North East Lincolnshire Council in my telephone enquiry of 3 January 2019. As such, the formal consent of the local authority is not required before any tree works can be carried out.

3.0 DISCUSSION

3.1 Overview

The tree stock of the course varies widely in terms of age, species selection and planting layout. The trees assessed for this report are largely in early maturity and were planted in the 1970s. They are mostly in good physiological condition. However, many exhibit potentially weak structural features or poor form. Species range from native hardwoods such as oak and beech to fast-growing evergreen species such as Leyland cypress and Austrian pine. They take the form of group plantings, either as linear shelterbelts to separate adjoining fairways or smaller copses which act as feature plantings. There has been a programme of managing the trees in the past when they were smaller. This action has seen the larger copses thinned and it has benefitted many of the remaining trees which are growing into stronger trees with improving form.

3.2 General tree issues highlighted by course management

Now the trees have developed into larger specimens, certain difficulties are becoming apparent. Concerns around root invasion, accumulation of leaf litter and direct shading of greens are particularly pressing for the greens staff. Some of these issues may be easily addressed by the selective removal of trees, and incorporated into the general thinning of the copses. Thinning involves the selective removal of weak, unhealthy or deformed trees within the group and is normal practice in woodland management. It also includes the removal of "wolf trees". These are individuals which are out-growing their neighbours to the detriment of the surrounding trees. A clear example is visible in copse C1 where short-lived but extremely vigorous Leyland cypresses are overtaking better quality trees of superior life expectancy such as oak and lime. Thinning the copses should not be viewed as indiscriminate felling. It will benefit and improve of the retainable, higher quality trees.

3.3 Additional tree safety issues highlighted

I have drawn the greenkeeper's attention to several other trees with specific defects which are unsuitable for retention. The key trees falling into this category are five Norway maples (four in copse C1 to the north of the 1st fairway) and a tree which is one of a pair between the 1st and the 18th. These trees all exhibit structural flaws in the form of weak fork unions which contain included bark. Several trees are already showing evidence of significant branch failure where these defects have split away. There is also an old ash standing between the 14th and 15th fairways has suffered a partial collapse in the autumn storms. It appears badly damaged but is a valuable wildlife resource with a hollow trunk and cavities which are potential nesting and roosting facilities. The tree stands in a relatively remote location can be managed to conserve its value whilst making it safer in the immediate future.

3.4 Future management approach

An economically viable approach to the tree management has been agreed in principal with Mr Cutsforth and the Head Greenkeeper, Mr Vincent. Having identified four tree groups with the most urgent need for attention, these areas will be managed proactively over the forthcoming two to three years. This suggested timescale is dependent on finance and labour availability. However, most of the work can be carried out "in house" by Mr Vincent and his team during the winter months. Once Phase 1 has been completed, the programme will then go forward to involve identifying further groups of trees requiring attention on a rolling programme. Professional assessment regarding removal or pruning will then be provided, working through them on a similar timescale.

4.0 CONCLUSIONS

4.1 Concluding remarks

The course contains a tree population which is maturing well. The majority of the trees assessed under Phase 1 remain in good condition. However, certain trees are becoming malformed by superior trees and short-lived, light-demanding species such as birch are begining to die off as a result of overcrowding. Rampant growers such as the Leyland cypresses in copse C1 should also be removed as soon as possible. The higher quality, longer-lived trees will then thrive, leading to the development of strong, healthy groups of trees into the future with multiple attributes. The benefits with include the continued aesthetic appearance of the course, shelter for players and the wider area, wildlife habitat, air quality improvement and carbon sequestration.

5.0 RECOMMENDATIONS

5.1 Tree management recommendations

Appendix A provides an inventory of species in each copse, as well as individual trees and their locations. Management recommendations for each of the copses noted primarily involves the thinning of inferior trees or others having an adverse effect on adjacent parts of the course. On the outer margins of these groups, low branches may be removed to increase daylight reaching the turf beneath. Any major branches to be removed have been clearly marked as such with a paint spot. The work should be started as soon as possible to avoid disturbing nesting birds during the breeding season [see Wildlife and Countryside Act 1981, Section 1, and the Conservation (Natural Habitats &c) (Amendment) Regulations 2007]. Under these regulations, the works should stop on the 1st March and can recommence after 1 September every year.

5.2 Future management

The next phase of this programme should be initiated after Phase 1 has been successfully concluded. There is no specific time-frame by which the works should have been completed. Progress will be entirely dependent on the financial and labour resources available.

John F Robinson NDArb
Arboricultural Consultant
4 January 2019

APPENDIX A

INVENTORY OF COPSES

Copse number or individual tree species	Location	Constituent species (copses) or individual tree details
C1	North of 1st fairway	*Acer platanoides* 'Crimson King' (Purple Norway maple), *Alnus cordata* (Italian alder), *Betula pendula* (Silver birch), *x Cupressocyparis leylandii* (Leyland cypress), *Larix x eurolepis* (Hybrid or Dunkeld larch), *Pinus nigra nigra* (Austrian pine), *Pinus sylvestris* (Scots pine), *Prunus x* 'Kanzan' (Japanese cherry), *Prunus laurocerasus* (Cherry laurel) and *Quercus robur* (English oak). **Various trees have been selected and marked for removal under the proposed thinning regime. The crowns of remaining trees can be lifted to 4m above ground level if required. The cherry laurels can be coppiced to 30mm above ground level.**
Norway maple	Extreme east end of C1, over-shadowing 9th green	Group of 4 trees, all containing bark inclusions in multiple forks, several of which have failed in recent years. **All four trees should be removed.**
Norway maple	Opposite above group of 4, near 18th green	Group of 2 trees. **One contains identical defects to the above group and should be removed. The second tree (to the north-east) is sound and should be retained. The crowns may be lifted to 4m above ground level allow increased light to the turf beneath.**
C2	Compact copse immediately south-east of 1st green	*Acer pseudoplatanus* (Sycamore), *Betula pendula* (Silver birch) and *Crataegus monogyna* (Hawthorn). **Various trees have been selected and marked for removal under the proposed thinning regime. The crowns of remaining trees can be lifted to 4m above ground level if required.**
C3	Running between 16th and 17th fairways, then enclosing south and west margins of 16th green	Largest copse on the course, comprising; *Acer campestre* (Field maple), *Acer platanoides* (Norway maple), *Acer pseudoplatanus* (Sycamore), *Carpinus betulus* (Hornbeam), *Fagus sylvatica* (Beech), *Fraxinus excelsior* (Ash), *Larix decidua* (European larch), *Prunus avium* (Gean cherry), *Pinus sylvestris* (Scots pine), *Salix caprea* (Goat willow), *Crack willow* (Salix fragilis) and *Tilia x europaea* (Common lime). **Various trees have been selected and marked for removal under the proposed thinning regime. The crowns of remaining trees can be lifted to 4m above ground level if required.**

Copse number or individual tree species	Location	Constituent species (copses) or individual tree details
Ash	Midway along west margin of 15th fairway	Old field boundary tree. Hollow trunk with active decay forming an important habitat refuge in relatively remote location. **Crown should be reduced to fork unions around 2m - 4m above top of original trunk to help stabilise tree. Lower lateral branch structure should be sympathetically reshaped accordingly. Tree should be reviewed at next woodland assessment.**
C4	Compact copse immediately south-east of 1st green	*Acer pseudoplatanus* (Sycamore). **Various trees have been selected and marked for removal under the proposed thinning regime. The crowns of remaining trees can be lifted to 4m above ground level if required.**

APPENDIX B

GLOSSARY OF TECHNICAL TERMS USED

AGE CLASSIFICATIONS

Early maturity	Tree(s) exhibiting good or moderate vigour and aged between 30% - 50% of projected normal life expectancy.

CONDITION

Description	Physiological	Structural
Good	Tree exhibiting robust vitality with vigorous growth and healthy foliage. No discernible pathogenic (especially fungal) activity. Long projected life expectancy exceeding 25 years.	Tree in sound state with no discernible weaknesses or pathogenic activity. No alteration in adjacent ground conditions.
Good/Fair		
Fair	Tree of moderate or low vigour and reasonable health. No discernible pathogenic activity. Projected life expectancy of 10 - 25 years.	Tree in generally sound state with occasional minor rectifiable defect or storm damage. No discernible pathogenic activity or alteration in adjacent ground conditions.
Fair/Poor		
Poor	Tree of declining vitality with abnormally small or discoloured foliage. Fungal pathogens may/may	Tree exhibiting significant structural defects, storm damage and/or fungal pathogens. Crown can also be of poor

	not be present. Projected life expectancy of less than 10 years.	form. Ground conditions may have been significantly altered so as to impair or weaken root structure.

Bark inclusion — A weakness present where two or more stems are joined at a fork but where they force themselves apart by producing new wood in the margin of the split (also known as a compression fork). The bark is included between the two stems at the centre of the union. They rarely bind together to form a solid structure and are frequently prone to failure.

Coppice — The practice of cutting suitable species close to ground level and allowing the cut stumps to regenerate the following year.

Wolf trees — Very vigorous individual trees growing in groups or woodland which are out-growing and suppressing their neighbours.

APPENDIX C

SURVEY CONDITIONS AND METHODS

1 Date and time of inspection
Monday 17 December 2018, 11.30am - 2.00pm

2 Persons present
John F Robinson - Tilia Tree Consulting
Scott Vincent - Head Greenkeeper, Grimsby Golf Club Ltd

3 Weather conditions
Weather conditions at the time of the inspection were cool and sunny with a light westerly breeze.

4 Survey methods
The trees have been visually inspected from ground level. Trees identified as suitable for removal have been marked with a red or orange paint spot around 1.75m above ground level. Major branches to be removed are clearly marked with a paint spot on the branch, **not** on the trunk of the same tree.

APPENDIX D

PHOTOGRAPHS

	
Picture 1 - Norway maple in the group of four trees immediately south of the 9th green showing the sites of six included fork unions. Previous failure points are arrowed in yellow, existing weaknesses are arrowed in red.	Picture 2 - Sycamores forming copse C2 immediately north of the 18th green. The asymmetric tree on the left overshadows the green and is marked for removal. Other trees within the group will be thinned out to create space for the superior specimens.
	
Picture 3 - Sycamores in copse C4, north of the 14th green. Poor quality trees such as the forked tree arrowed will be removed as part of the thinning of the	**Picture 4** - Goat willow in copse C3 beside the 16th fairway showing the misshapen crown with significant storm damage and dead wood. The tree is

copse.	marked for removal.

APPENDIX E

John Fraser Robinson

Professional qualifications and experience

Qualifications

National Diploma in Arboriculture (BTEC)
Professional Tree Inspection Award (LANTRA)

Experience

John Robinson has been working with trees since 1976.

1976 - 1978 Earl of Yarborough, Brocklesby Park, Lincolnshire
Forestry Department trainee woodman.

1978 - 1981 Merrist Wood College, Worplesdon, Guildford
Whilst on industrial placement during the second year of the 3 year course, he gained further experience as an arboricultural trainee with Sheffield City Recreation Department. Individual placements within the department yielded specific experience in tree surgery operations, tree inspections and surveys, plant material handling and nursery practices.

1981 - 2018 Lindsey Tree Services Ltd.
He established the company as a sole trader on leaving Merrist Wood College. Based in Grimsby, the firm served the northern parts of Lincolnshire and surrounding districts as arboricultural contractors and consultants and became a partnership in 1982. He successfully expanded the business and became the managing director when the firm incorporated in October 2001. It continues trading to date. The daily organisation of the business yielded routine experience in hazard tree evaluation, decay detection assessments and in compiling arboricultural method statements and risk assessments. He retired from Lindsey Tree Services Ltd in September 2018 to concentrate on his own arboricultural consultancy under the name Tilia.

2018 Tilia Tree Consulting
He has established his own consulting business, drawing on over 40 years of experience and knowledge in the specialist field of arboriculture.

He has advised and prepared reports on a wide range of tree issues since 1981. Clients include social housing providers, local authorities, utilities, health authorities, architects, developers and conservation organisations. Further wide experience has been gained in reporting for householders, landowners and their agents, consulting engineers, loss adjusters and solicitors. He has been called as an expert witness on a number of occasions, giving evidence both in court and to planning inquiries on matters involving trees and tree preservation order appeals.

Professional Association

He has been an Associate member of the Arboricultural Association since 1981 and subscribes to its programme of Continuing Professional Development. He served on the Association's Northern Branch Committee from March 2001 until February 2014.