



Location: Field House Whitby Road Robin Hoods Bay

Report Type:
Arboricultural Survey
Arboricultural Impact Assessment
Arboricultural Method Statement

Ref: ARB/AE/2355

Date: April 2020

Contents

- 1 Introduction
- **2** Site Information
- **3** Tree Quality Assessment
- 4 Design Proposals and Arboricultural Impact Assessment
- 5 Arboricultural Method Statement Pre-construction & Site Preparation Works
- 6 Arboricultural Method Statement Tree Protection measures During Construction

Appendices

- 1 Tree Details
- 2 Arboricultural Tasks Sequence Table
- 3 Tree Constraints Plan
- 4 Tree Protection Plan

1 Introduction

- 1.1 This report has been prepared by Andrew Elliott of Elliott Consultancy Ltd on behalf of the applicants.
- 1.2 Elliott Consultancy Ltd was commissioned to visit the site to inspect the trees and to produce an arboricultural report in accordance with British Standard 5837:2012 'Trees in Relation to Design, Demolition & Construction'. An initial inspection of the trees was undertaken on the 30th April 2020.

1.3 **Scope of the report:**

- This report provides arboricultural information and advice in relation to the proposed construction of a new building extension and refurbishment of existing – as shown within Appendix 4.
- It should be used to guide the construction process in order to minimise potential damage to retained trees.
- Section 4 provides a summary of the design proposals and their impact on the current tree population.
- Sections 5 6 provide a method statement that details all measures recommended for adequate tree protection including any special construction measures to be utilised.
- Within the Arboricultural Tasks Sequence Table (Appendix 2), is a timescale for implementation of these tree works and protective measures in reference to the development period.
- 1.4 Prior to site works commencing, the Arboricultural Method Statement needs to be passed to the site manager or contractor and used as reference during the development period, with particular attention paid to Sections 5-6, and Appendix 4.

2 Site Information

2.1 Field House is a two-storey, semi-detached, residential dwelling on the northern edge of Robin Hoods Bay, with access taken directly from the B1447 Whitby Road. Figure 1 shows the extent of the site proposed for construction:



Figure 1: Project area highlighted

- 2.2 The proposals for the site include the refurbishment of the existing structures and extension to the existing house to create a link between the main house and existing garden annex.
- 2.3 The project area is approximately 2m lower than the adjacent garden where the majority of tree cover is located. The two sites have historically been separated by a significant stone retaining wall (this it is believed has been present for the significant life of the adjacent tree cover.
- 2.4 Tree cover pertinent to these proposals includes trees within the adjacent property to the northwest, and a single small Cherry on the sites western fence-line. No visibility or access restrictions were encountered during the survey.

3 Tree Quality Assessment

- 3.1 BS5837:2012 notes that all trees apart from those with stem diameters <150mm or classified as Category U should be viewed as a site constraint. When inspected, each tree and or group feature is assigned one of four categories that signify how suitable that tree/group would be for retention within any development proposals, and therefore the degree to which it should constrain the site. The four categories are as follows:
 - 3.2.1 Category A trees are those of high quality and value, and of a condition whereby they could make a substantial contribution to the site. Such trees should be retained and offered adequate consideration during the design phase and physical protection during the construction phase in accordance with BS 5837:2012.
 - 3.2.2 Category B trees are those of moderate quality and value, and of a condition that still make a substantial contribution to the site. Category B trees should be retained wherever possible and offered adequate consideration during the design phase and physical protection during the construction phase in accordance with BS 5837:2012.
 - 3.2.3 Category C trees are considered to be of low quality and value, or lacking stature, but of an adequate condition to remain in the short-term. These trees can also be retained if required but where they form a significant constraint to development their removal should be considered. Where they are to be retained they should be afforded adequate consideration during the design phase and physical protection during the construction phase in accordance with BS 5837:2012.

3 Tree Quality Assessment (cont)

- 3.2.4 Category U trees are of such a condition that any existing value would be lost within 10 years. As a result it is recommended that Category U trees are not considered a constraint for development and are removed prior to construction commencing.
- 3.3 In addition to the four main categories explained above, each tree/group is assigned a sub-category which signifies its overriding value as determined by the surveyor, which is noted by adding a suffix of 1, 2 or 3 alongside the category letter. 1 signifies that the trees/groups main value is arboricultural e.g. it may be a particularly good example or may be rare. A 2 signifies that the overriding factor was due to the landscape value that the tree/group provides e.g. it may be part of a group feature such as a screen. A 3 indicates that a cultural factor was the overriding value e.g. it may have historical or commemorative importance.

4 Design Proposals and Arboricultural Impact

4.1 This section concentrates on the proposals and how they relate to the trees on the site (proposals are shown within Appendix 4).

4.2 Potential Conflict 1: Loss of trees to allow design.

No trees are required to be removed to allow the construction.

Mitigation / Countermeasure: No countermeasures or mitigation are required.

4.3 Potential Conflict 2: Damage to retained trees during construction.

Overhanging sections of foliage and underlying root tissue can be damaged during development due to a variety of causes, including impact, root severance, compaction, or material spillage.

Mitigation / Countermeasure: The current position of the house, outbuilding, hardsurfacing, and the historic retaining walls reduces the potential for any significant root damage to be caused by the proposals. It is expected that the retaining walls will not be removed (protecting any fine root tissue that has grown between the walls and the adjacent garden), and it would not be expected that any significant root tissue would have extended under either the existing buildings or under the current hard-surfaced areas on the lower levels. As the new sections of building are all proposed within the current footprints of present buildings or hard-surfaced ground, no negative impact due to root tissue damage is expected. Similarly, overhanging foliage from the adjacent Pine trees is both minor and at a height whereby there should be no expected conflicts or necessity to prune. An exception to this may be the proximity of the small multi-stemmed Cherry (Tree 11) with its overhang of the building roof-line. This low quality and low value tree may require some minor pruning back of overhanging foliage to allow adequate clearance of the building to allow construction which can be undertaken without significant arboricultural or aesthetic impact (indeed it may be considered appropriate to remove the tree due to its poor form and close location to the building for future management reasons - although this is not considered essential to the proposal at present). This minor work can be undertaken by a suitably experienced Arborist and be in accordance with BS3998. All other trees adjacent to the site can be protected from any impact by ensuring the Construction Exclusion Zone (CEZ) shown on Appendix 4 is adhered to at all times.

5 Pre-Development and Site Preparation Works

- 5.1 Refer to Appendix 2 for stage specific tasks.
- 5.2 Pruning works detailed at Appendix 2 should be undertaken by a suitably experienced Arborist.
- 5.3 Construction material storage must be confined to an area identified outside of all root protection areas and the construction exclusion zone (see Appendix 4) this area can be provided by the properties own access driveway.

6 Tree protection measures during construction

- 6.1 Refer to Appendix 3 for stage specific tasks.
- 6.2 All ground levels where trees are located should be maintained. Changes to soil levels adjacent to trees can severely affect the trees structural integrity and its ability to gain moisture and nutrients from the surrounding soil. Unavoidable level changes that may affect retained trees, and not already accounted for within this method statement, should be assessed by a qualified arboriculturalist so that any mitigation or special construction techniques can be considered.
- Building material storage and operations that can contaminate soil, such as cement mixing, must be confined to areas outside the construction exclusion zone.
- 6.4 Fires will not be lit.
- 6.5 The tree should not be used to attach notices, cables or other services.

Appendix 1: Tree Data

Key to tree survey headings:

- Species Common name of each tree
- o **DBH –** Average 'Diameter at breast height' in mm taken on stem at 1.5m.
- o Hgt Average Height in metres of each tree
- o **Average spread:** Crown spread in metres to from centre of stem
- o **CH –** Crown clearance from ground to lowest branches
- Age Age-class of tree: Y = Young, SM = Semi-mature, M = Mature, OM = Over-mature.
- General observations details both Physiological and structural Condition
- Est Con Estimated life expectancy / contribution to the landscape (in years): 0-10, 10-20, 20-40, 40+
- Recommendations Any recommendations that, regardless of land use, require attention.
- BS. Cat Retention category. A, B, C, or U. For retained trees A being of the highest quality, C being the lowest. Category U trees for removal regardless of design. Category A, B, & C are given sub-catagories1, 2, & 3 details of which are shown in appendices.

Tree Survey Data

No.	Species	Age	DBH	Stems	Height	Cr	own	Spre	ead	СН	EstD	General Observations	EstCont	BS Cat	Recommendation
						N	S	Е	W						
1	False Cypress spp	SM	35	1	6	2	2	3	2	0.5	N	Offsite. Poor multi-stemmed form at 2.5m. Previously crown has been removed at 5m.	20+	C1	No work required
2	Black Pine	М	58	1	18	3	2	7	4	8	N	Offsite.	40+	B1	No work required
3	Beech	EM	54	1	13	6	6	7	6	1	N	Offsite. Multi-stemmed spreading form - slight supression of form by surrounding trees.	40+	B1	No work required
4	Black Pine	M	31	1	18	2	1	2	2	12	N	Offsite.	40+	B1	No work required
5	Black Pine	M	36	1	18	3	3	3	3	10	N	Offsite.	40+	B1	No work required
6	Black Pine	M	41	1	18	3	3	3	3	10	N	Offsite.	40+	B1	No work required
7	Black Pine	М	71	1	18	3	5	8	3	4	N	Offsite. Single lower branch over project area at 4m above ground - significantly above expected roof-line.	40+	B1	No work required
8	Grey Poplar	SM	14	1	2	0.5	0.5	0.5	0.5	1.5	N	Offsite. Small cut back stem. Cut at 2m - poor quality.	40+	C1	No work required
9	Black Pine	M	61	1	18	4	3	3	3	8	N	Offsite.	40+	B1	No work required
10	Black Pine	М	53	1	18	0.5	3	6	0.5	8	N	Offsite. Suppressed form. Extends over project area but is 8m above expected rooflines at lowest point.	40+	B2	No work required

Elliott Consultancy Ltd

No.	Species	Age	DBH	Stems	Height	Cre	own	Spre	ad	СН	EstD	General Observations	EstCont	BS Cat	Recommendation
						N	S	Ε	W						
11	Cherry spp	SM	32	5+	7	5	5	4	6	2	N	Multi-stemmed at base with poor quality form and limited long-term value - in fenceline. Crown is 0.5m over existing roof.	10+	C1	No work required

Appendix 2: Arboricultural Tasks Sequence Tables

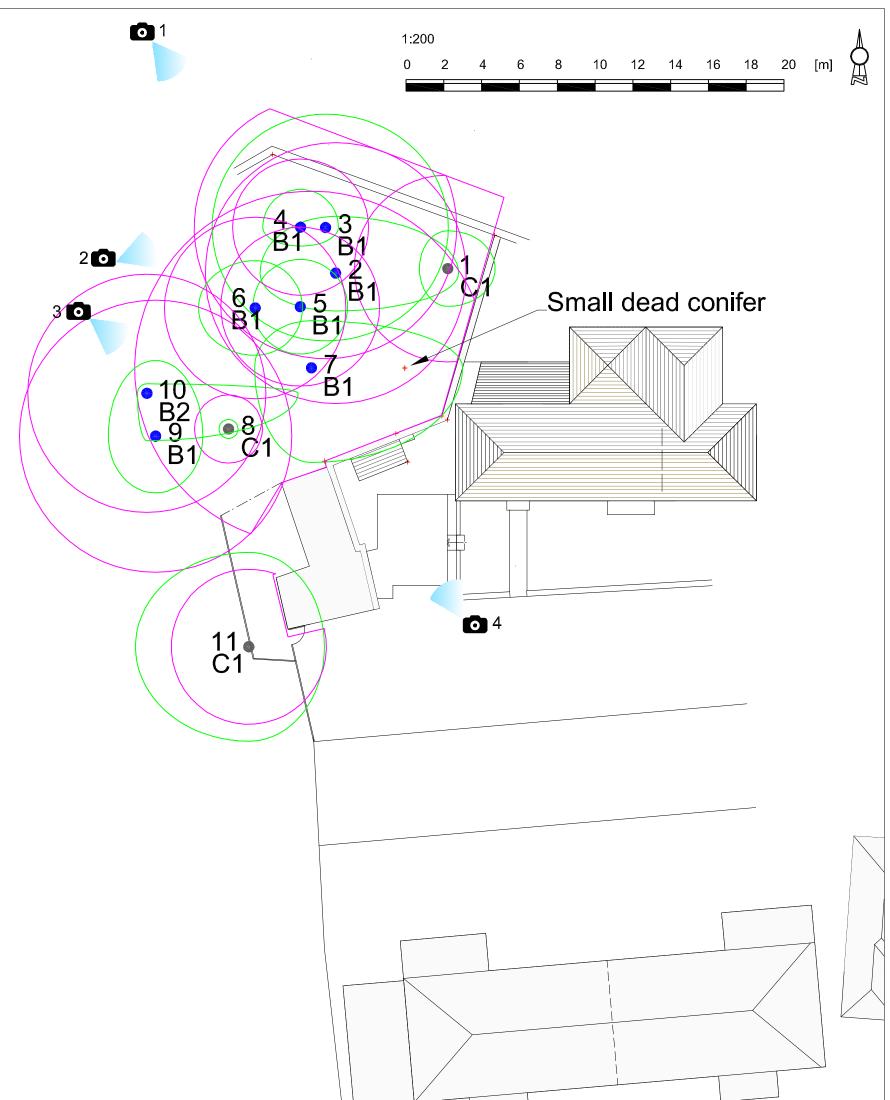
Tree or Group Number	Pre-Demolition & Construction Stage	Construction Stage	Post Construction Stage
Trees 11	Prune back small diameter branch tissue to provide a general 1-2m clearance of the new building and roof-lines.		
Adjacent trees	Adhere to Section 4.	Adhere to specification within Section 5. Monitor integrity of construction exclusion zone.	













Wrens Nest, Underhill, Glaisdale North Yorkshire YO21 2PF

Tree Position - BS5837 Category A

Tree Position - BS5837 Category B

Tree Position - BS5837 Category C

Tree Position - BS5837 Category U

Root Protection Area - to remain free from disturbance

Photo Number, Position and Aspect

1/G1 Tree/Group

A1/B1/ C1/U BS5837 Retention Category

APPENDIX 3

Drawing Title: Tree Constraints Plan

Project: Field House, Robin Hoods Bay

Drawing Number: ARB/AE/2355/TCP

Date: April 2020

Scale: 1:200 @ A3

