

Weddle Landscape Design

LANDSCAPE ARCHITECTURE

ENVIRONMENTAL PLANNING

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EDGEWORTH, HEPWORTH, HUDDERSFIELD

Arboricultural Inspection and Method Statement

April 2021

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1 INTRODUCTION

1.1 Introduction

CODA Bespoke have asked Weddle Landscape Design (WLD) to inspect the trees onsite and prepare an Arboricultural Inspection Note and Method Statement.

This report has been prepared by Neil Northrop BA DipLD MCIHort MARborA CMLI of Weddle Landscape Design. Neil is a Chartered Landscape Architect and professional member of the Arboricultural Association, registered user of Quantified Tree Risk Assessment with over 14 years' experience of arboricultural consultancy.

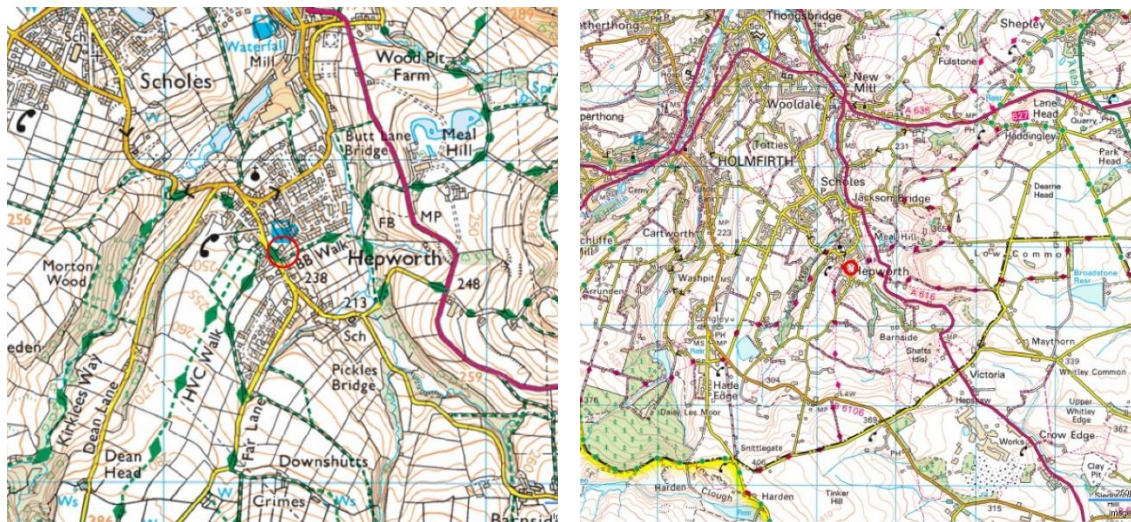
This report considers the impact of development on the trees and refers to drawing EWH 01 Tree Survey and Tree Constraints Plan and EWH 02B Tree Protection Plan

1.2 General Site Description

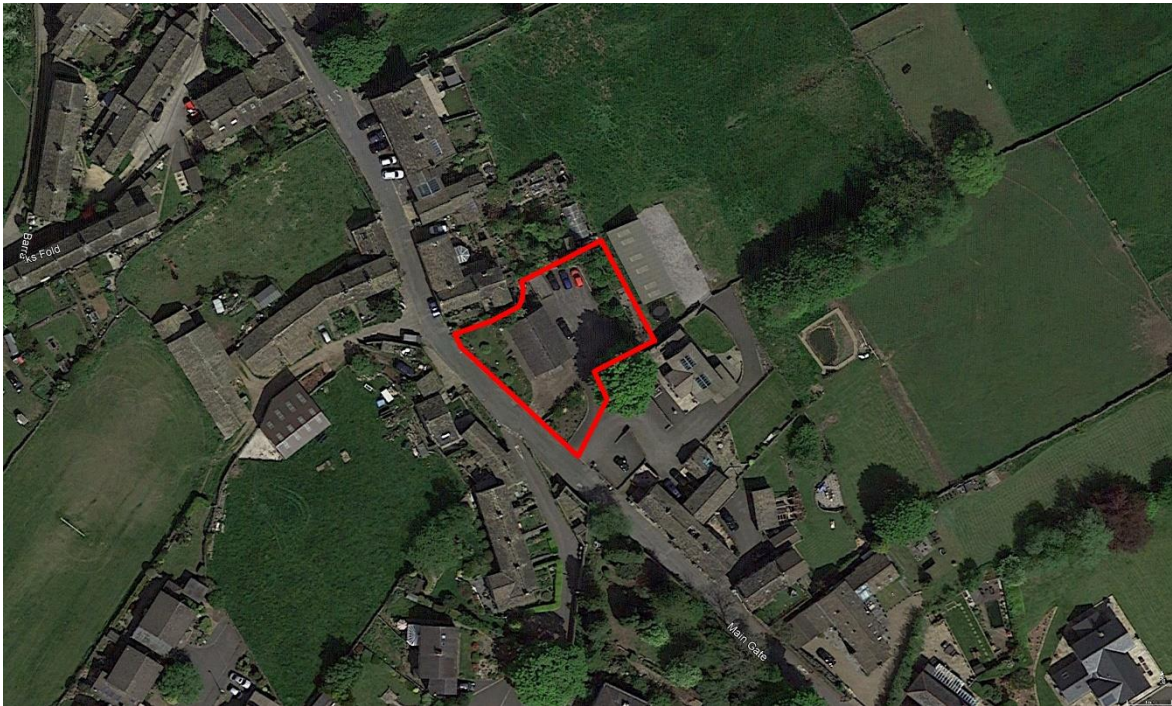
The site is located on Town Gate Road, in Hepworth, a small village to the southeast of Holmfirth in West Yorkshire. The site is currently a detached property, with extensive tarmac hardstanding and garden landscaping.

A search of Kirklees Council's conservation area maps shows that the site lies within a Conservation Area (CA) of Hepworth Village.

There is 1 tree group and 2 trees onsite, and 2 trees adjacent to the site. Offsite T1 is subject to a Tree Preservation Order (TPO) 07/99/t10.



Site Location



Site Location – Satellite Imagery

1.3 Revisions

This report has been revised to clarify a number of points made by the council's consultee 'NG' on 14/10/21.

T1 does not overhang the proposed building.

General Site Description

2 TREE SURVEY

A Tree Survey and Tree Constraints Plan to BS 5837:2012 'Trees in Relation to Design, Demolition and Construction – Recommendations' was carried out by Weddle Landscape Design in March 2021, as shown on drawing EWH 01 below.

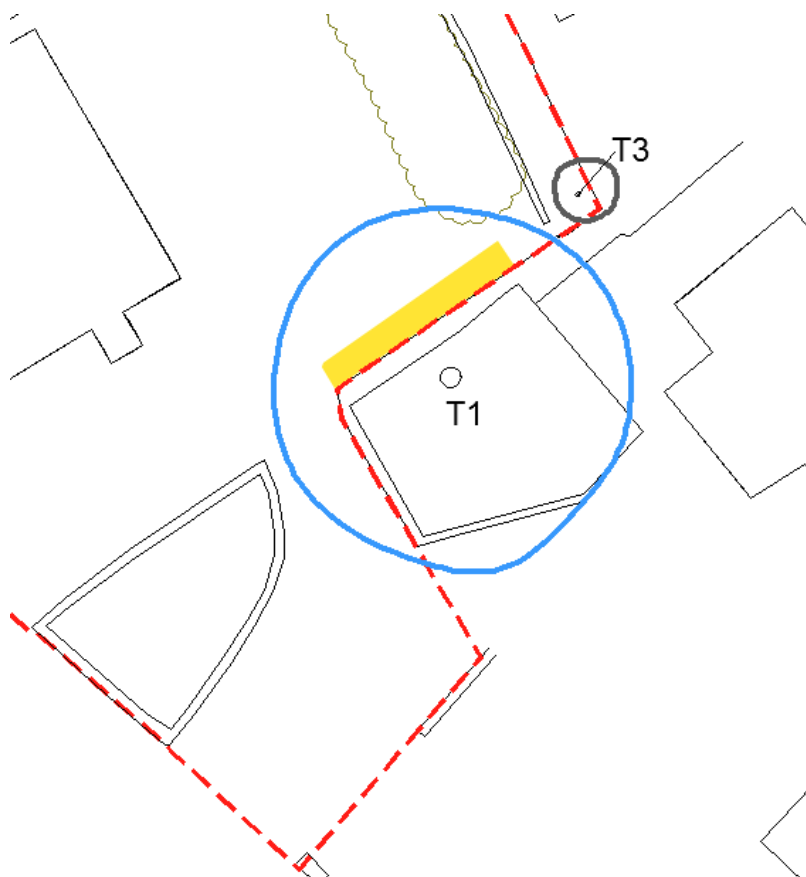
The tree survey includes an assessment of life stage, life expectancy, general observations on condition and categorisation in accordance with BS 5837:2012 'Trees in Relation to Design, Demolition and Construction – Recommendations' Section 4.5 and Table 1.

2.1 Approach to tree protection

The Root Protection Area (RPA) as defined by BS 5837:2012 'Trees in Relation to Design, Demolition and Construction – Recommendations' has also been identified. This is the zone of roots which should be protected against damage during construction.

It was considered that due to a number of retaining walls and level changes around T1 the RPA was unlikely to conform to the circular RPA defined by the British Standard. The tarmac surfacing had not been displaced or repaired suggesting little root activity for a large mature specimen.

Therefore, further investigation was undertaken by hand digging an inspection trench adjacent to the boundary wall.



Location of inspection trench (yellow)



Inspection trench from south west



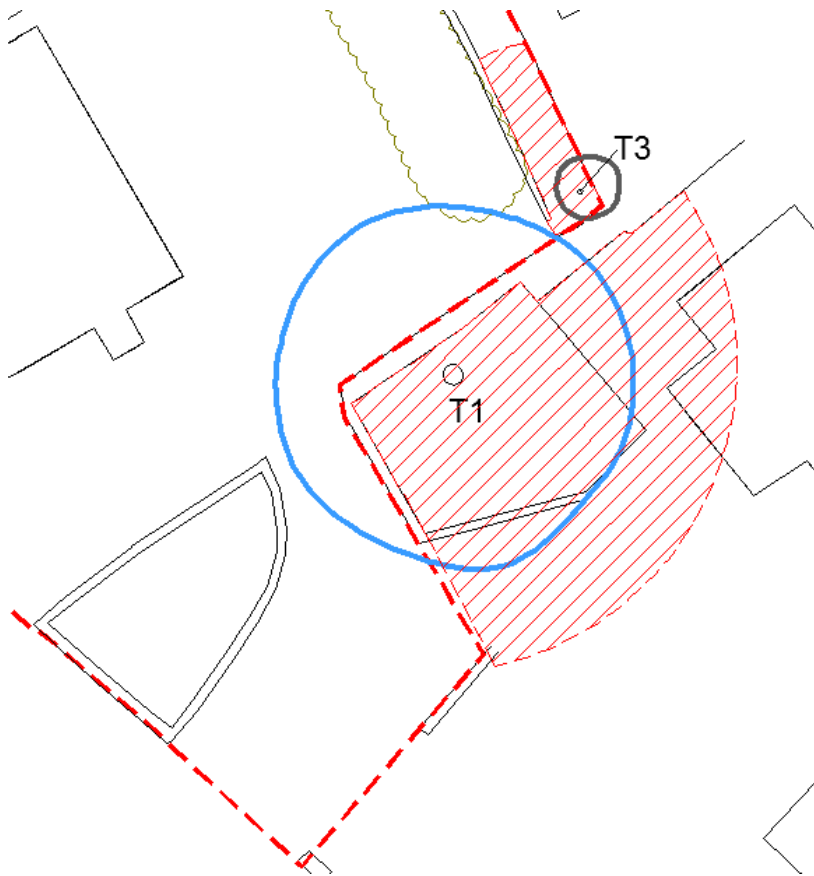
Inspection trench from north

The trench was dug under arboricultural supervision to approximately 300-400mm wide down to a maximum depth of 1.1m in line with the tree. This is approximately 400mm below the ground level on the tree side of the retaining wall.

No tree roots were found. Some small fibrous roots 3-6mm were found in the top 350mm from the Ivy which covers the retaining wall.

We can therefore conclude that the RPA of T1 is constrained by the retaining wall. The *vast majority* of its RPA is likely to be within the adjacent grassed area below the retaining walls. T1's RPA has therefore been reshaped (in accordance with section 4.6.3 clause a of BS5837:2012) to take account of this constraint as shown below.

The inspection trench has been backfilled to ensure the stability of the wall.



T1 RPA reshaped to account of retaining wall constraints.

4 METHOD STATEMENT FOR CONSTRUCTION

4.1 Introduction

The root system is the most susceptible part of a tree to damage, because it is not immediately visible. Damage of the root system will affect the health, growth, life expectancy and safety of the rest of the tree. The effects of below ground damage may only become evident several years later.

Damage to the trunk and branches of a tree may cause severe disfigurement although rarely kills the tree. Death of branches or their unplanned removal may adversely affect the balance of the tree and hence its safety.

Roots also need oxygen from the soil. Respiration by the roots and other soil organisms depletes this oxygen and increases carbon dioxide levels in the soil. Diffusion between the soil and the atmosphere maintains a correct balance of oxygen and carbon dioxide in the soil.

Anything which affects this balance will affect the condition of the root system. Compaction of the ground reduces space between soil particles and hence can upset this balance.

4.2 Tree Protection Fencing and Construction Exclusion Zone

The general principle of avoiding damage to trees or compaction of soil within the Root Protection Area is achieved by erecting protective fencing as recommended by BS 5837:2012, Trees in Relation to Design, Demolition and Construction - Recommendations (Clause 5.5), before site works commence.

The fenced area is referred to as the construction exclusion zone (CEZ) and should be considered to be sacrosanct.

The Tree Protection Fence shall be a minimum 2 metre high vertical and horizontal scaffold framework well braced to resist impacts as Figure 2 in BS5837:2012 and be erected as a first site operation (See Appendix A). Waterproof signage labelled as 'Tree Protection Area' should be attached to fencing as provided in Appendix A.

Within the CEZ site no construction activities will take place including:

- Movement of vehicles or plant
- Raising, lowering or adjusting soil levels
- Storage of construction materials, chemicals, fuel or cement
- Site huts, cabins or other temporary structures
- Utility trenching
- Laying of impervious materials
- Changes to the water table

4.3 Scaffolding within the Root Protection Area

Where it is essential for scaffolding to be erected within the protected area of trees, construction shall be in accordance with Clause 6.2.3 of BS5837:2012. Underlying roots will be protected by a layer of geotextile fabric placed over undisturbed soil, covered by a minimum 50mm depth of woodchip overlain by scaffold boards.

If branches extend beyond the protective fencing in positions liable to impact, the branch may be shortened back to a fork in accordance with the recommendations of BS 3998.

4.4 Utility or Service runs within the Root Protection Area

Ideally no service runs should pass through protected areas. If unavoidable, all hand dug trenching should be carried out in accordance with NJUG 10/Volume 4 (Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees published by the National Joint Utilities Group April 2007).

Particularly a hand-dug method of trenching should be used and if any roots of 25mm size and above are encountered must be retained spanning the trench, and services are to be inserted carefully beneath them.

Alternative trenchless insertion methods may also be possible in accordance with Clause 7.7 of BS5837:2012.

4.5 Landscaping within the Root Protection Area

All work within the RPA is to be carried out by hand and no adjustments to soil levels unless otherwise agreed with the arboriculturalist. No mechanical rotovations.

4.6 Permanent Hard Surfacing within the Root Protection Area

Where permanent hard surfacing is to be installed within the Root Protection Area it will be designed to provide a no-dig and permeable buildup in accordance with Clause 7.4 of BS5837:2012 and agreed with the arboriculturalist.

4.7 Additional precautions outside of CEZ fenced areas

Chemicals, fuels, oils, bitumen and cement or other material likely to be injurious to trees should be stored well away from the root protection areas of trees. Positions of chemical toilets should also be considered.

Ideally fires should be avoided if possible. If unavoidable they should not be lit where the heat could affect tree foliage or bark. 15m is a suggested offset from any tree canopy.

Trees should not be used as anchorages for any equipment.

5 PROGRAMME

5.1 Prior to development

Pruning works to T1 – Option 1 or Option 2 will be implemented as a first site operation.

Protective fencing and signage should be erected immediately prior to demolition as shown on drawing EWH 02B.

5.2 During Demolition and Construction

During demolition and construction, fence lines will be maintained as shown on drawing EWH 02B.

All contractors will be briefed via toolbox talk on the importance of maintaining fencelines and ensuring care is taken in respect to overhanging branches.

5.3 After Development

Protective fencing should be removed within one month of the development being completed.

APPENDIX A

BS 5837:2012 Standard Tree Protection Fence

Figure 2 Default specification for protective barrier

