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Arboricultural Report
Application 23/02627/PLF

Church Lane
Carnaby
East Riding of Yorkshire

October 2023 (Ver 3)

Client Contact

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Danish Building – Unit 4
44 – 46 High Street
Hull
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1.0 INTRODUCTION

- 1.1 This report provides information in accordance with British Standard 5837:2012 'Trees in Relation to Design, Demolition and Construction' for proposed residential development on land at Harold Hill, Church Lane, Carnaby, East Riding of Yorkshire. The development proposals are for the erection of a self-build dwelling with associated works and infrastructure and the creation of 15 parking spaces for community use in associated with The Baptist Church, Church Lane, Carnaby, East Riding of Yorkshire YO16 4UP
- 1.2 The arboricultural survey was commissioned by Johnathan Smith Architects. The aims of the survey are to undertake an assessment of all the existing trees within the proximity of the proposed development including trees on and adjacent to the site.
- 1.3 The following information has been recorded in accordance with BS 5837 2012.
 - Designated tree number
 - Tree Species – the common name has been given followed by the Latin or scientific name
 - Height
 - Stem or base (multi stemmed trees) diameter and root protection area
 - Crown clearance (height of the periphery of the crown spread above ground level)
 - Branch spread (to N, S, E, and W)
 - Age class. This is given as young (Y), mature (M), and over mature (OM)
 - Physiological condition -general comments given only, poor, fair, good
 - Tree structural condition - general comments given only, poor, fair, good
 - Useful life expectancy
 - Preliminary management recommendations
 - Tree category (A, B, C or U)
 - The Tree Survey to be undertaken according to BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations. The information collected to be presented in a schedule.

2.0 SITE PLANS

2.1 Location Plan (1A)



2.2 Tree Survey (Plan 1B)



3.0 SURVEY METHODOLOGY

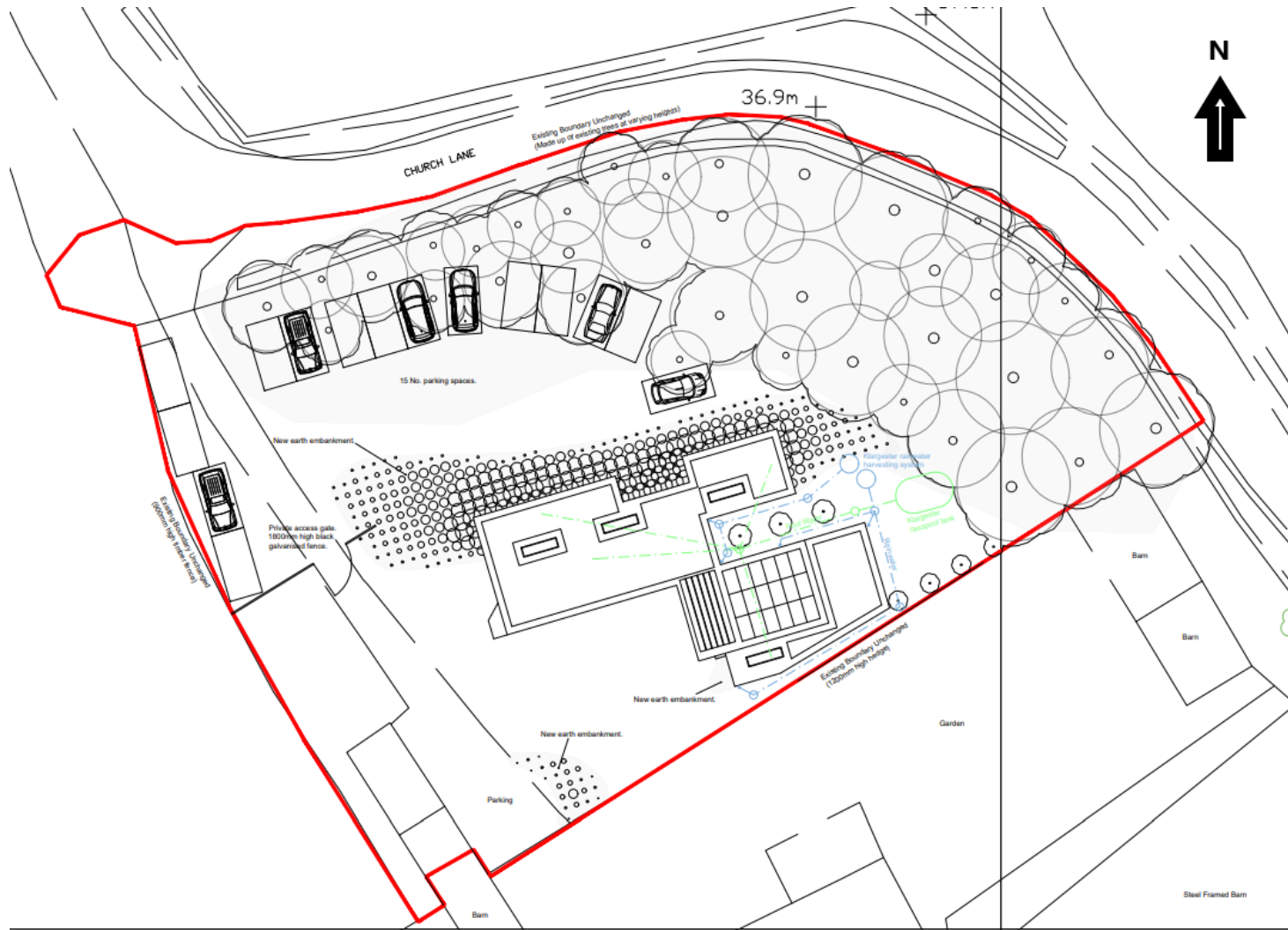
- 3.1 The survey was carried out to British Standard 5837:2012, using the categories explained below:
 - 3.1.1 The trees were assessed visually from ground level. Where potential problems were identified, further inspection by tree climbing is recommended. No digging or drilling methods were employed during this survey.
 - 3.1.2 The trees were not given number tags.
 - 3.1.3 The approximate height of each tree is measured from ground level to top of canopy using a clinometer.
 - 3.1.4 The approximate diameter of each tree is measured at 1.5m above ground level using a diameter tape measure.
 - 3.1.5 The age of each tree is based upon experience. (Y = young, MA = middle aged, M = mature, OM = over mature).
 - 3.1.6 The physiological condition of the trees is based upon experience. (Good, Fair, Poor, Dead).
 - 3.1.7 The structural condition and description is also based on experience. (Good, Fair, Poor).
 - 3.1.8 Both the approximate expected lifespan remaining and category/rating of each tree is based on the surveyor's experience.
 - 3.1.9 The retention category of each tree or group of trees is based upon the information detailed above using the following categories:
 - A Trees of high quality and value
 - B Trees of moderate quality and value
 - C Trees of low quality and value
 - U Trees to be removed for arboricultural reasons
 - 3.1.10 The following subcategories have been used in rating tree value:
 - 1 Mainly arboricultural value
 - 2 Mainly landscape value
 - 3 Mainly cultural values, including conservation

3.1.11 Schedule of Trees (Note the root protection area is listed as a radius in metres below the stem diameter).

Tree no	Species	Height	Stem Dia RPA	Branch Spread	Crown Height	Age Glass	Physiological Condition	Structural Condition	Preliminary Management Recommendations	Useful life Expectancy	Category Grading
T1	Beech	9m	400e 4.8m	4m	1m	M	Good	Good	Remove for development	40+	B2
S2	Elderberry	4m	300e 3.6m	3m	-	M	Good	Good	Remove	20+	C2
T3	Ash	20m	600e 7.2m	6m	3m	M	Good	Good	No action Trees on adjacent land	40+	B2
T4	Walnut (Multi stemmed)	8m	400e 4.8m	4m	1m	MA	Good	Good	No action	40+	B2
W5	Woodland	20m	400e 4.8m	4m	-	M	Good	Good	Mixed broadleaf woodland Removal of dead elms Species include Elm, dead elms, sycamore, ash. Cherry. field maple, oak, beech, plum, elderberry	40+	B2
H6	Leyland Cypress	3m	200e 2.4m	1m	-	MA	Fair	Fair	No action	20+	C2

4.0 ARBORICULTURAL IMPLICATIONS ASSESSMENT

4.1 Proposed Layout – Plan 2A



4.2 Woodland to Church Lane and Parking

The car parking spaces are distributed informally along the southern edge of the woodland, utilising existing gaps in the tree belt. Due to the lower level of Church Lane views from the highway into the site are restricted. Native shrubs could also be planted within the woodland to provide an understory vegetation. The woodland contains approximately 30% of dead elms trees (See Appendix D) which may need to be removed. Fortunately, the removal of these trees will act as a much-needed thinning to provide the remaining trees with more room for growth and development.

The parking area would be constructed utilising a low invasive method of construction (No – Dig) which would be suitable for the occasional use and minimise impact on trees. Details are provided in appendix B.



4.3 Self Build Dwelling

The area proposed for the self-build dwelling contains no trees and consist of open grassland. Trees exist along the woodland area to the north and east and one tree and some elderberry scrub are located on the western boundary. The southern boundary consists of a m cypress hedge which provides enclosure to the site.



4.4 Future Relationship with Trees

The proposed dwelling would have an open southerly aspect unaffected by trees. The woodland area is to the north which would not be cause shading or other issues.

4.3 Root Protection Measures

Tree protection measures in the form of protective fencing are considered necessary during construction work. Details of the position of the fencing have been shown on plan 3A and details of the fencing construction in appendix A. In addition, the parking area will be constructed using a low invasive method. The area to use this method of construction has been shown on plan 3A with further details and method statement in appendix C.

4.4 Construction and Storage Space

Adequate space exists for construction work and for the supply and storage of materials.

4.5 Services

No new services will be dug within the root protection areas of the trees to be retained.

4.6 Landscaping

New shrub planting is proposed within the woodland area. Details are provided in section 6 and appendix B.

5.0 TREE PROTECTION MEASURES (Plan 3A)



6.0 LANDSCAPE PROPOSALS (Plan 4A)



6.1 Schedule of Woodland

Woodland Planting	Size	Density	Numbers
Shrubs / small trees Hawthorn (<i>Crateagus monogyna</i>) Hazel (<i>Corylus avellana</i>) Spindle (<i>Euonymus europeus</i>) Guelder Rose (<i>Viburnum opulus</i>) Field Maple (<i>Acer campestre</i>) Holly <i>Ilex aquifolium</i>	40 -60cm	2m – 3m spacing	20 of each species

7.0 ARBORICULTURAL METHOD STATEMENT (AMS)

7.1 General Site Management Constraints

- No soil stripping, compaction, excavation or removal is to take place other than for the foundations, services and drainage as proposed.

7.2 Local Planning Authority Meeting

- The Local Planning Authority to be notified not less than 72 hours prior to commencement of works on site.

7.3 Tree Removal and Site Clearance

- Trees T1 and shrubs S2 to be removed. Dead elm trees to be removed from woodland area

7.4 Erection of Tree Protection

- Tree Protection Fencing and scaffold board ground protection to be erected as indicated on the Tree Protection Plan (plan 3A) and as detailed in Appendix A.

7.5 Low Invasive Parking Areas

- With the tree protection fencing in place work can commence on the parking area The parking should be undertaken as detailed in the method statement in appendix C.

7.6 Construction Work

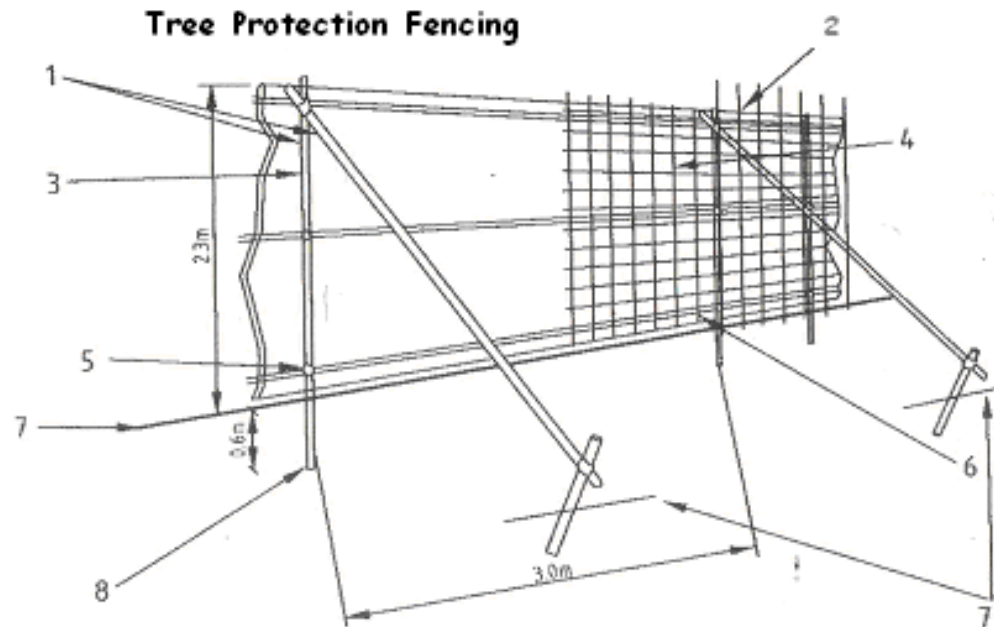
- Once the parking area has been completed then construction work can commence.
- Services for the development are to be located as indicated on the plans with the service runs agreed with the architect and service providers before any excavation work commences. No services to be located within the root protection areas of the trees.
- No site materials to be stored within the fenced tree protection areas.

7.6 Completion of work.

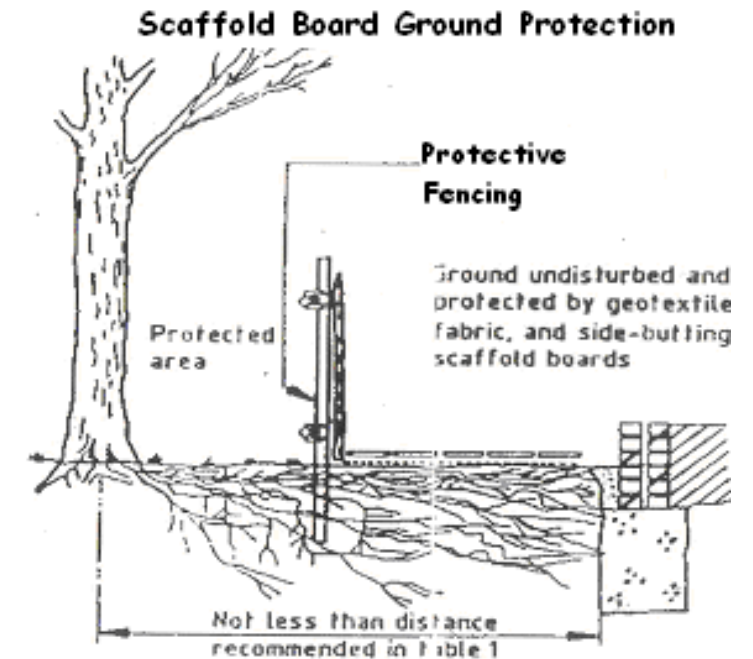
- On completion of the construction work the tree protection can be removed.
- Ground preparation may be required and could include light cultivation of the surface of the soil to enable seeding or turfing. Such light cultivation would not exceed 5cm and therefore have no impact on the existing trees.
- Landscaping works to be implemented.

Appendix A – Tree Protection Fencing and Scaffold Board Ground Protection

Extract from BS5837



- 1) Standard Scaffold Poles
- 2) Uprights to be driven into the ground
- 3) Panels secured to uprights with wire ties
- 4) Weldmesh
- 5) Standard clamps
- 6) Wire twisted and secured on inside of fence
- 7) Ground level
- 8) Approx 0.6m into the ground



Appendix B LANDSCAPE SPECIFICATION

1.0 Planting of Trees and Shrubs

1.1 **Notch planting** for seedling trees and shrubs should be undertaken where the notch will provide a slit of sufficient size to accommodate the roots of the plants without any trimming or being forced into the slits. Planting Stock - all shrubs to conform to BS 3936.

2.0 Planting Season

2.1 Unless otherwise specified all transplanting shall be carried out between the end of October and the end of March. Container grown trees may be transplanted at times other than these at the discretion of the clients Project Manager. The transplanting shall be carried out when the weather is dull and the ground is moist and workable. On no account must the planting take place when there is freezing wind. Where approval is given by the developer to transplant between March and September, the trees shall be given a transplanting spray before transplanting and again between 7 and 10 days after planting, at the Contractor's expense.

2.2 Transplanting in Frosty Conditions: Planting of trees in frosty conditions will only be permitted if adequate precautions are taken. The prepared root balls must have additional wrapping. The bottom and sides of the tree pits, and the piles of top-soil, must be protected from freezing by the use of boards, tarpaulins or other approved materials.

2.3 Watering: During dry conditions shrubs shall be well watered especially where container plants are used outside the winter planting season.

3.0 Programme of implementation

3.1 Planting to be undertaken during the first planting season October – March following completion of building work unless otherwise agreed.

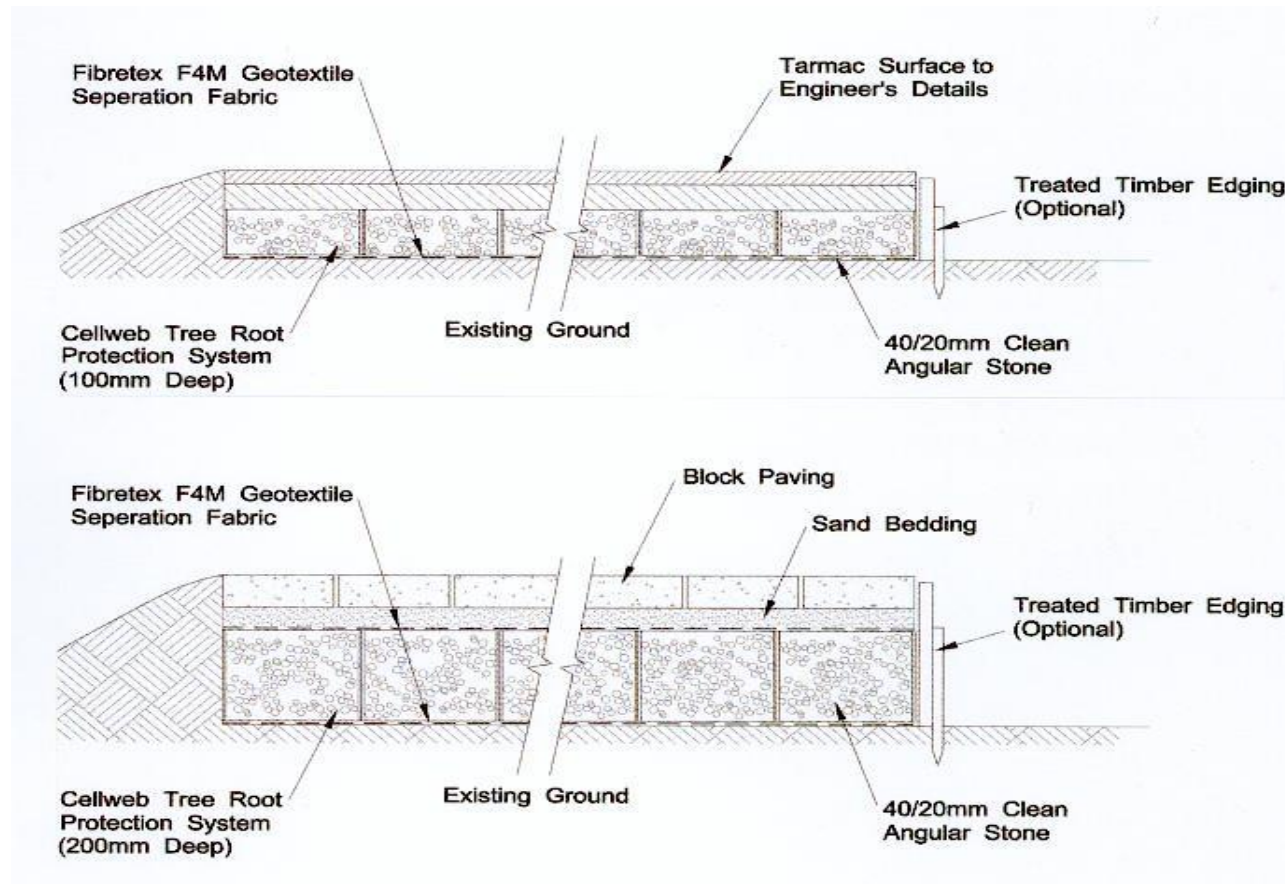
4.0 Maintenance

4.1 **Trees and Shrubs** - A maintenance programme will be drawn up ensuring that all trees that fail to make active growth are replaced during the first available planting season for the first 3 years.

4.2 **Weeding** - During March, an application of Glyphosate will control competitive weeds and grass around trees and hedges for the first 3 years after planting. A weed free zone of 1 metre around each plant will be adequate. Glyphosate is a non-selective herbicide that is absorbed through leaves. The chemical should be applied by someone who has a relevant pesticide application certificate.

Appendix C - Creation of Low - Invasive Vehicular Parking Area

The parking area construction to comply with **British Standard 5837:2012 'Trees in relation to construction'**. Low-invasive vehicular access in proximity to trees. One such product that is suitable is the CellWeb, tree root protection system that allows for a variety of surface materials although crushed stone in this instance would seem a suitable finished material. Examples of the CellWeb construction system are shown below. A 200mm deep construction depth would be required to allow for construction vehicles.



Driveway Construction Method Statement

- Surface vegetation and debris to be removed by cutting and lightly raking the surface.
- The surface of the existing ground to be raked to reduce compaction.
- Fill in any hollow with sharp sand.
- Lay a geotextile oil resistant membrane which conforms to TS65.
- Lay a Geogrid / cell web material (200mm depth).
- Construct roadway edging with treated boards and pegs.
- Fill Geogrid with 10/40mm clean angular stone. This must not be tipped on to the Geogrid but should be placed at one end and then pushed on to the geogrid so that any machinery used moves onto a spread sub base and not directly onto the unfilled grid or the ground on either side of the geogrid.
- A further geotextile membrane which conforms to TS20 Geotextile specification is to be placed on top of the filled geogrid.
- A layer of 30mm sharp sand is to be placed on top of the TS20 Geotextile.
- Final surfacing to be with crushed stone..

Appendix D - Dead Elm Trees



The access road is already an established track with compacted ground due to previous farm traffic. The adjacent trees are dead elms so the access road would therefore have no detrimental impact on adjacent trees.