Job No.	WDA_RH
Prepared by	MC
Checked by	JW
Date	08/12/2023
Issue	Planning
Revision No.	A

Construction Management PlanFor Demolitions and rebuilding of new dwelling at Rownham House, Rownham Hill, Leigh Woods, Bristol BS8 3PU

DECEMBER 2023



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1.0 Project Details

Project	Demolition of an existing fire damaged dwelling and rebuilding of new dwelling of the same size and style on the same footprint
Location	Rownham House, Rownham Hill, Leigh Woods Bristol BS8 3PU
Client and Employer	Mr James Bullock
Principal Contractor	TBC
Architect	WDA Architects Ltd 45 Oakfield Road, Clifton, Bristol, BS8 2AX
CMP Consultant	W P L (Safety) Ltd Ashley House, Silver Street, Wrington, BS40 5QE
Local HSE Office	2 Rivergate Bristol BS1 6EW
Structural Engineer	TBC
Mechanical Engineer	TBC
Electrical Engineer	TBC
Transport Planning and Highway Authority	
Building Control	



1.1 Introduction

This document has been prepared to show how the client will manage the demolition/construction phase of the development project at Rownham House, Rownham Hill, Leigh Woods, Bristol BS8 3PU

Planning permission for the development under application Ref: 20/P/2223/FUL

Condition 10 – Construction Management Plan

No development shall take place, including any works of demolition, until a Construction Method Statement has been submitted to, and approved in writing by, the Local Planning Authority. The approved Statement shall be adhered to throughout the construction period. The Statement shall provide for:

- (a) the parking of vehicles of site operatives and visitors (see Appendix B Site Logistics and 6.0 Site Rules)
- (b) loading and unloading of plant and materials, see 3.3 Site location & Warning Traffic Signage, 3.4 Deliveries & Waste Removal, 3.10 Mud and Dust
- (c) storage of plant and materials used in constructing the development, Appendix B Site Logistics Plan
- (d) times of site operation, see 3.2 Site Hours and 6.0 Site Rules
- (e) wheel washing facilities
- (f) measures to control the emission of dust and dirt during demolition and Construction, see 3.10 Mud and Dust
- (g) measures to control noise from works on the site, see 3.9 Noise and vibration
- (h) a scheme for recycling/disposing of waste resulting from demolition and construction works, see 3.4 Deliveries & Waste Removal
- (i) measures to keep access roads clear of vehicles
- (j) HGV routing restrictions, see 6.0 Site Rules
- (I) location and specification of fencing and other measures for the protection of retained trees, see Appendix C Arboricultural Reports

Reason: In order to preserve highway safety, local amenity and the living conditions of nearby residents and in accordance with policy CS3 of the North Somerset Core Strategy and policy DM24 and DM9 of the North Somerset Sites and Policies Plan (Part 1). The details are required prior to the commencement of development in order to ensure that construction works do not pose a threat to amenity, health or safety.

Program Details

Contract Period	TBC months
Contract Start Date	TBC 2024
Completion Date	TBC



2.0 Description of Work

This project intends to reinstate an existing detached two storey dwelling that was built in the late 1960s / early 1970s and was fire damaged in 2016 such that only the ground storey remains intact, the remains of the first storey were demolished for safety reasons. The proposed work includes –

- Demolition of any remaining elements of the first storey
- Landscaping and preparation of ground, patio and car park to remain
- Surfacing of the main access into the site to a distance of 6 metres
- Reinstatement of the two storey, flat-roof dwelling, replicating its appearance prior to the fire in 2016 (Due to absence of the original planning application drawings, the planning application drawings used photographic records, historic maps and topographical survey of the site)
- Materials will replicate those in the original building: brick cladding on the ground floor, timber cladding on the upper floor, double-glazed windows set in timber frames, GRP flat roof brickwork chimney to match the walls

The planned start date for this development is TBC 2024

Asbestos Information

Because of the age of the original building there are no records regarding asbestos used in its original construction. A full Refurbishment and Demolition survey should be conducted and its findings kept with this CMP on site at all times.



3.0 H&S Statements / Communication

All the contractor's operations will be executed at all times in such a way as to ensure the health, safety and welfare of all its employees and all persons likely to be affected by its operations, including sub-contractors and the general public.

Where necessary, site management will consult with the Principal Designer about any hazardous circumstances, before commencing site operations.

It is the responsibility of the site manager to ensure that all employees and subcontractors comply with UK H&S laws and regulations. A qualified, full-time safety advisor will visit the site regularly, take action as appropriate and submit written reports. The site manager will action the reports and include copies of them in the monthly report to the Client.

All subcontractors and their subcontractors will be required to appoint a person to liaise with site management on matters of safety.

Site management will organise regular safety coordination meetings to ensure that all subcontractors are complying completely with the UK H&S law and regulations.

All persons employed on site are required to take all reasonable care not to endanger themselves or others.

The contractor must ensure that all operatives are issued with appropriate protective clothing and safety equipment and for ensuring its proper use. All persons employed on the project will be required to wear safety helmets in compliance with regulations.

3.1 Safety advisors

The site will be visited by trained and competent safety advisors on a regular basis (minimum monthly) The safety advisor will monitor the implementation of statutory provisions and will file an action report with the site agent / manager and provide copies to the directors and client.

3.2 Site hours

The hours of working on site during the period of construction shall be restricted to

Monday - Friday	8:00am - 6:00pm
Saturday	8:00am - 1:00pm

No working shall take place on Sundays or Public Holidays. Any work outside of the agreed hours must be confirmed by the local planning authority.

The term 'working' includes the use of any plant or machinery (mechanical or other), the carrying out of any maintenance/cleaning work on any plant or machinery deliveries to the site and the movement of vehicles within the curtilage of the site in order to protect the amenities of nearby occupiers.



3.3 Site location & Warning Traffic Signage

The site is located within the grounds of the registered historic Park and Garden Ashton Court Estate at the Western Edge of Bristol. The setting is rural but with eight terraced houses on the edge of the property. Access is via a lane that leads from the A369 to a gate adjacent to these properties.

Suggested access routes from the National road network to site are laid out in **Appendix A Routes to Site.** All site traffic will be directed using directional signage to the site from the A369 from the North West and South.

The contractors must take into account the adjacent eight residential dwellings that lie to the North East of the property. The Contractor must draw up a traffic management plan for the lane leading to the site incorporating turning arrangements (see **Appendix B** Site Logistics Plan/Traffic Management/Tree ProtectionPlan) and take into account peak vehicle and pedestrian times associated with the eight terraced houses adjacent and the other detached houses in cul-de-sac Rownham Hill.

Contractor's vehicles and deliveries must deliver to the site loading / unloading area as detailed in the TMP, and leave from the site entrance with appropriate precaution and care (see section 3.4) Deliveries and departures must be overseen by a Banksman (see Appendix B Site Logistics Plan)

Subject to discussions and approval by the Highways Authority appropriate signage at the site access will be provided to inform all local road users of the existence of construction traffic movements and that vehicles could be entering and exiting the site at all times. Full details of the signage proposed will be provided by the contractor at the appropriate time. Tree Protection Barriers will be installed just inside the entrance (see Appendix B Site Logistics Plan ii Tree Protection) and care must be taken when manoeuvring vehicles over Root Protection Areas (see Appendix C Arboricultural Reports)

3.4 Deliveries & Waste Removal

All loads delivered to site will be within the loading capacity of the roads. Vehicles involved in deliveries and removal of waste must be carefully coordinated on a daily basis by the Principal Contractor. The PC is responsible for liaising and coordinating deliveries to minimise site traffic and disruption, taking into account local levels of pedestrian traffic and avoiding unsociable hours (see 3.2).

All site traffic will be directed to the site by use of directional signage as appropriate (in accordance with Traffic Safety Measures and Signs for Road Works and Temporary Situations, Chapter 8) see 3.3.

The contractors will conduct a detailed survey of the site and its neighbours to draw up the location of their site set up and material store within the site, see suggested locations - **Appendix B Site Logistics Plan.**



Suppliers and subcontractors must be notified in advance of the desired location for delivery and the limitations involved. Direction and access maps, with site delivery rules and times, must be sent out with each order.

A booking in system should be in place for deliveries to the site meaning that all deliveries arrive at set times and their arrival is expected. The size of the vehicle being used for each delivery should also be confirmed in advance.

Vehicles arriving at site will be greeted by a Banksman to confirm arrangements, then directed to unload, and leave within a short space of time, turning as indicated in the TMP and leaving the site **in forward gear**. Delivery drivers will be permitted to use the on-site welfare facilities if requested/required in a COVID-19 safe manner.

Suggested access roads to the site are adequate for anticipated size of loads. Given the nearby residential housing at Rownham Hill (see 3.3 above) the suggested routes to site seek to minimise disruption and should be adhered to. **Appendix A Routes to Site**

A sign will be added to the gate advising of the permitted delivery times and contact phone details of the PC (24hr number) All external gates / doors on site will open inwards and not impede the carriageway or footpaths at any time.

All external gates / doors will be monitored and kept closed preventing access and egress of plant and operatives.

The Site Office / Cabin will be located to provide a straight line of sight to the delivery entrance area, so this can be supervised and ensure a safe transit into and out of the site, see **Appendix B Site Logistics Plan.**

3.5 Parking

There is some provision for contractor's vehicles on site (see **Appendix B Site Logistics Plan**) however, all contractors and visitors must plan to use their vehicles efficiently to transport personnel and tools to site. There are bus stops 400M West of the Site entrance where the A369 is met by the B3129.

3.6 Plant and lifting appliances

All contractors will ensure that all items of plant or lifting appliances are in good order and that any statutory required tests and examinations have been conducted within the requisite period and that current test certificates are available on site for inspection.

3.7 Pedestrian and Cyclist protection

Careful consideration must be given to the protection of pedestrians and cyclists on the routes adjacent to the site, especially near the site access point (**Appendix B Site Logistics Plan**)



All deliveries will require a gatesman to keep pedestrians away from hazards. When delivery/waste vehicles arrive and leave, the external road must be checked visually for pedestrians/cyclists.

The site itself must be fully fenced and hoarded for the entirety of the works (As shown on site plan in **Appendix B Site Logistics Plan**)

All temporary works designs will be to Local Authority standard and to be approved by Local Authority before construction starts onsite.

All site traffic and personnel must be advised by prominent visual warning signs and barriers to restrict them to authorised routes and permissible areas on site.

3.8 Fire and emergency procedures

Evacuation procedures will be designed and communicated to all people on the project. In particular, adequate fire points will be provided to protect the structure during the course of construction.

3.9 Noise and vibration

All contractors will ensure any noise emitting operations will be kept under the Exposure Action Value Limited as set out under the Control of Noise at Work Regulations 2005 (Regulation 4) – HSE publication L108 including making provision under the noise regulations for suitable noise assessments that are conducted by competent persons. Adequate records of assessments and hearing protection measures deemed necessary are to be maintained on site.

3.10 Mud and Dust

All contractors will be required to ensure that provisions made under the UK H&S Law and regulations (see guidance from CIS36 reducing the production of dust) are complied with and that suitable risk assessments are conducted by competent persons. Adequate records of assessments and dust suppression measures deemed necessary are to be maintained on site.

No vehicle loading or unloading will take place on the public highway and suitable wheel washing facilities will be installed prior to commencement of any works and used for the duration of the development to seek to ensure that no mud or debris is deposited on the public highway during the construction period (see **Appendix B Site Logistics Plan**)

3.11 Accidents

All contractors are required to have formal arrangements for the reporting, recording and investigation of accidents and dangerous occurrences. All accidents on site must be reported to client as soon as possible after the event has happened.



4.0 Project Management Structure

The PC will oversee all the works as well as being responsible for sub-contractors and suppliers, ensure all parties adhere to the measures set out in this CMP and will be responsible for coordinating work, deliveries and waste for the project in an efficient and safe manner.

All contractors will provide details of their management and standards relating to Health and Safety.

The management structure relating to Health and Safety for this project will be at least:

- 1no. Site Manager
- Operatives and Sub-Contractors (Confirmed as they are appointed)

The works will be inspected daily by the Site Manager and at a regular interval (of not more than one month) by the Health & Safety Manager or Inspector. A copy of each report from the Health & Safety inspections will be submitted at each progress meeting to the client.



5.0 Communication and Controls

- The Principal Contractor will be responsible for the implementation and updating of the construction phase health and safety plans.
- Passing of information must be through a recorded method for example
 - a) Pre-order meeting
 - b) Drawings, specification and supporting documentation
 - c) Induction training (form in Site Safety Folder)
 - d) Contractors Toolbox talks (which are to be recorded in site diaries)
 - e) Site safety notice boards
 - f) Regular site meetings
 - g) Monthly site safety meetings

5.1 Co-operation between Contractors

- The Principal Contractor's management team will review with subcontractors' operatives:
 - a) Working to site rules
 - b) Proper use of shared facilities
 - c) Care for own and others Safety Advisers
 - d) Reporting of hazards
 - e) General health and safety comments/discussions
- The Principal Contractor must supply a stock of PPE for visitors to the site. Each individual to accept the site manager's authority to manage all safety matters in respect of site works.

5.2 Communication between parties

- The Principal Contractor will distribute copies of this plan to the neighbours of the site 4 weeks before works start onsite.
- All updates to this plan must also be distributed to the neighbours in a timely manner or as soon as any significant change takes place.
- A 24hr telephone number for the Principal Contractor must be displayed on front gate for use by local residents, businesses etc. for any complaints, no members of the public should access the site. Complaints will be dealt with in a timely manner and forwarded to the relevant member of the contractor's team or the design team if necessary.
- These contact details must be provided to the council's planning and highway officers.



6.0 Site Rules

It is the Principal Contractors' responsibility to ensure that the site rules comply with all UK H&S law and regulations but will contain the following.

• Site Working Hours (as per 3.2 above) The hours of working on site during the period of construction shall be restricted to

```
Monday - Friday......8:00am - 6:00pm
Saturday.....8:00am - 1:00pm
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- No working shall take place on Sundays or Public Holidays. Any work outside of the agreed hours must be confirmed by the local planning authority.
- The term 'working' includes the use of any plant or machinery (mechanical or other), the carrying out of any maintenance/cleaning work on any plant or machinery deliveries to the site and the movement of vehicles within the curtilage of site in order to protect the amenities of nearby occupiers.

No working permitted on Sundays or Bank Holidays

- All Contractors must stay within the working area and not stray beyond unless with prior permission of the site managers or client.
- Fire access routes to be kept clear at all times.
- The site will be secured before leaving site at the end of each working day.
- When delivery vehicles turn they must comply with the turning pattern indicated in Appendix B Site Logistics Plan and have a Banksman present during any movement in reverse gear.
- Delivery of materials will be avoided at the beginning and end of the day.
- No drugs or alcohol allowed on site.
- No radios to be used on site.
- No burning to be allowed on site.
- All electrical equipment to be 110 Volt.
- All operatives are to wear PPE appropriate to their activity.
- Any contractor vehicles will be parked in limited designated spaces by prior arrangement with the PC, there will be no parking of contractors vehicles on roads outside the site, HGV vehicles must not use the toll bridge on the B312 to access the Site, see appendix A routes to site.



7.0 Welfare Arrangements

It is the Principal Contractor's responsibility to ensure that the site welfare arrangements comply with all UK H&S law and regulations, (schedule 2 of the CDM 2015 regulations), but will contain the following.

Type of Facility	Used by	Location	Maintenance/Cleaning Frequency
Toilets/Working	All	Site	Daily
facilities		Compound	
Canteen	All	Site	Daily
		Compound	
Drying room	All	Site	Daily
		Compound	
First aid	All	Site	Checked at least weekly
supplies		Compound	

Please note the attached **Appendix B Site Logistics Plan** which shows the location of Welfare, WC and office within the site compound.

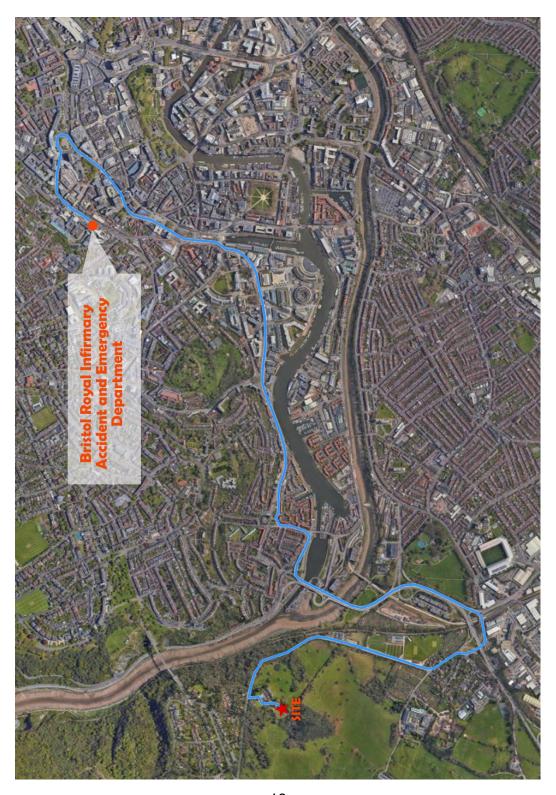


8.0 Emergency Plan Details

• Local hospital with Accident and Emergency facilities is:

Bristol Royal Infirmary, Upper Maudlin St, Bristol BS2 8HW

01179230000 / 999





Local Fire Station:

Avon Fire & Rescue Service Temple Redcliffe, Bristol BS1 6EU

0117 926 2061 / 999

Local Police Station:

The Bridewell Police Station 1 Bridewell Street, The Bridewell, Bridewell St, Bristol BS1 2AA

0117 998 9112 / 999



Appendix A Routes to site

Notification of the available access routes to the site from the local road network will be provided to the contractor and sub-contractor personnel and delivery companies as part of contract agreements.

Route 1 – from the North, Gloucester via A430, A38, M5, A369

Route 2 - from the East, Swindon via A3102, M4, M32, A3029, A369

Route 3 - from the South East, Warminster via B3414, A36, B3110, A4, A369

Route 4 – from the South, Bridgwater via A38, A39, M5, A369



From the North - Gloucester via A430, A38, M5, A369

•	Head south - Bruton Way/A430 Keep right to continue on Trier Way/A430 Turn left onto Bristol Rd Turn left onto Bristol Rd/A430 Continue straight onto A38 Continue straight to stay on A38 At the roundabout, take the 2nd exit and stay on A38 At the roundabout, take the 2nd exit onto A430 Keep right to stay on A430 At roundabout, 3rd exit onto the M5 slip road to Bristol/Stroud Merge onto M5 Jctn 19, left 2 lanes, A369 exit to Portishead/Ryl Portbury Dock Gordano Interchange, 2nd exit onto Martcombe Rd/A369 At junction with B3129 go through lights continue onto Rownham Hill and turn next Right into lane, Rownham Hill,	0.5 mi 0.4 mi 1.7 mi 0.1 mi 469 ft 1.4 mi 0.8 mi 0.4 mi 233 ft 0.4 mi 29.2 mi 0.2 mi 4.1 mi
•		

Rownham House, Rownham Hill, Leigh Woods, BS8 3PU



From the East – Swindon via A3102, M4, M32, A3029, A369

From the roundabout at the junction of Victoria Road and the A4289, 2nd exit onto Bath Rd/A4289, go through 1 roundabout 0.4 mi
 Roundabout, 2nd exit Kingshill Rd/A4289, through 2 roundabouts 0.6 mi
 Roundabout, 2nd exit - Wootton Bassett Rd/A3102 0.6 mi
 Mannington Roundabout, 1st exit - Great Western Way/A3102 1.5 mi
 Blagrove roundabout, 2nd exit, Great Western Way/A3102 0.4 mi





•	Spittleborough Roundabout, 3rd exit - M4 to South Wales/Bristo	l0.6 mi
•	Merge onto M4	29.5 mi
•	At junction 19, exit onto M32 towards Bristol	4.7 mi
•	Continue onto Newfoundland Circus/A4032	0.4 mi
•	Continue onto Bond St/A4044	0.3 mi
•	St James Barton Roundabout, 1st exit Haymarket, follow A38	0.6 mi
•	A38 turns slightly left and becomes Anchor Rd/A4	0.5 mi
•	At roundabout, 1st exit onto Hotwell Rd/A4 follow for	0.5 mi
•	Use right 2 lanes turn slightly right - Cumberland Basin Rd/A4	210 ft
•	Keep right on Humphry Davy Way, signs for A4/A38/A370/Bath/	1
	Taunton/Bristol Airport/Weston-s-Mare	0.1 mi
•	Use any lane, turn slightly left onto Brunel Way/Plimsoll	
	Swingbridge/A3029	0.5 mi
•	Slight left onto Winterstoke Rd/A3029	161 ft
•	Slight right onto Ashton Rd (signs for Portishead/A369)	259 ft
•	Slight right to stay on Ashton Rd	266 ft
•	Use right lane, take the A369 slip road to U.W.E. Bower Ashton	0.1 mi
•	At roundabout, continue straight - Clanage Rd/A369	0.8 mi
•	On Rownham Hill turn Left into lane also called Rownham Hill m	arked as
	a No Through Road', at end of lane, turn right to enter gate into	Site

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From the South East – Warminster via B3414, A36, B3110, A4, A369

•	At roundabout junction of Portway and the B3414, exit onto George St/B3414	430 ft
•	Roundabout, 2nd exit Silver St/B3414, through 1 roundabout	1.2 mi
•	At the roundabout, take the 2nd exit onto A36	4.7 mi
•	At the roundabout, take the 3rd exit and stay on A36	0.7 mi
•	At Beckington Roundabout, take the 2nd exit and stay on A36	3.3 mi
•	Turn Left into Branch Road, signed 'Wellow'	0.7 mi
•	Turn right onto B3110	3.5 mi
•	At roundabout, take the 1st exit onto Bradford Rd/A3062	59 ft
•	At roundabout, take the 2nd exit onto Midford Rd/B3110	0.3 mi
•	Turn left onto Wellsway/A367	0.2 mi
•	At Red Lion Roundabout, 3rd exit onto Frome Rd	0.5 mi
•	At roundabout, 3rd exit onto Rush Hill	0.5 mi
•	Continue onto Whiteway Rd	1.2 mi
•	Continue onto Pennyquick	1.0
	mi	
•	At roundabout, 2nd exit onto Bristol Rd/A4	3.0 mi
•	At Broadmead Roundabout, 3rd exit onto Keynsham By-Pass/A4	1.7 mi
•	At Hicks Gate Roundabout, take the 2nd exit onto Bath Rd/A4	1.6 mi





•	Continue straight onto Bristol Hill/A4, follow A4	0.8 mi
•	Slight left onto Bath Rd/A4	1.1 mi
•	Bath Bridge Roundabout, 2nd exit onto Clarence Rd/A370	0.4 mi
•	Bedminster Bridge Roundabout, 3rd exit Coronation Rd/A370	1.4 mi
•	Turn left, merge onto Brunel Way/A370 towards Weston-S-	
	Mare/Taunton/A38/A4174/Bristol Arpt	0.2 mi
•	Slight left onto Winterstoke Rd/A3029	161 ft
•	Slight right onto Ashton Rd (signs for Portishead/A369)	259 ft
•	Slight right to stay on Ashton Rd	266 ft
•	Use right lane, take A369 slip road to U.W.E. Bower Ashton	0.1 mi
•	At the roundabout, continue straight onto Clanage Rd/A369	0.8 mi
•	On Rownham Hill turn Left into lane also called Rownham Hill ma No Through Road', at end of lane, turn right to enter gate into	
	a no modern toda, at one or lane, tarringht to enter gate into	0.00

Rownham House, Rownham Hill, Leigh Woods, BS8 3PU



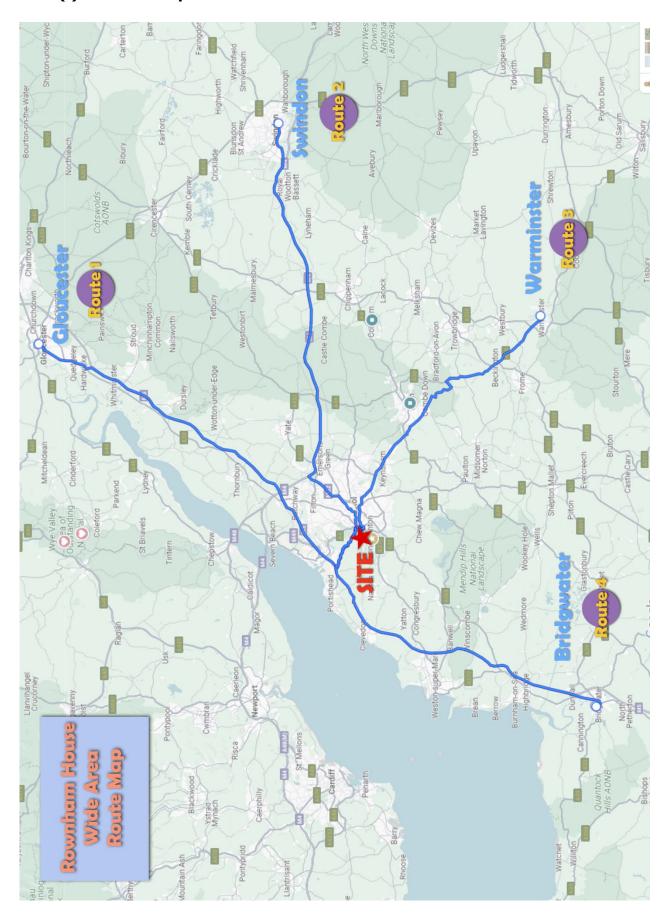
From the South – Bridgwater via A38, A39, M5, A369

•	Express Park/Bristol Road junction head North on the A38 Dunball Roundabout, take the 3rd exit onto A39 Dunball Interebagge, 1st exit ME aligned	1.1 mi 0.4 mi
•	Dunball Interchange, 1st exit M5 slip, signed Midlands/London/Bristol	0.4 mi
•	Merge onto M5	26.0 mi
•	At junction 19, A369 exit - Portishead/Clifton/	
	Royal Portbury Dock	0.3 mi
•	Gordano Interchange, 5th exit Martcombe Rd/A369	4.3 mi
•	At junction with B3129 go through lights continue onto	
	Rownham Hill and turn next Right into lane, Rownham Hill, go to end of lane, turn right, enter gate into Site	

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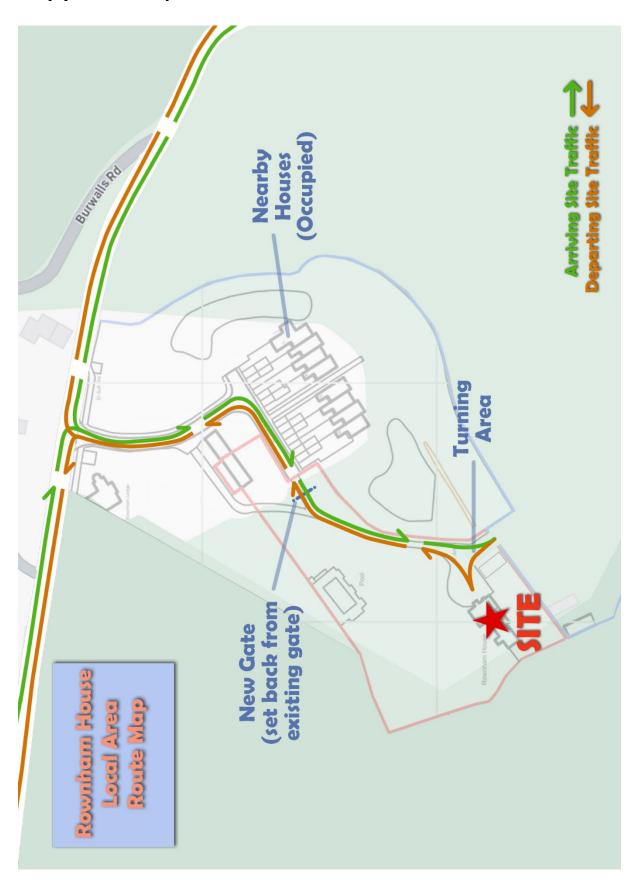


(i) Wide map





(ii) Local Map



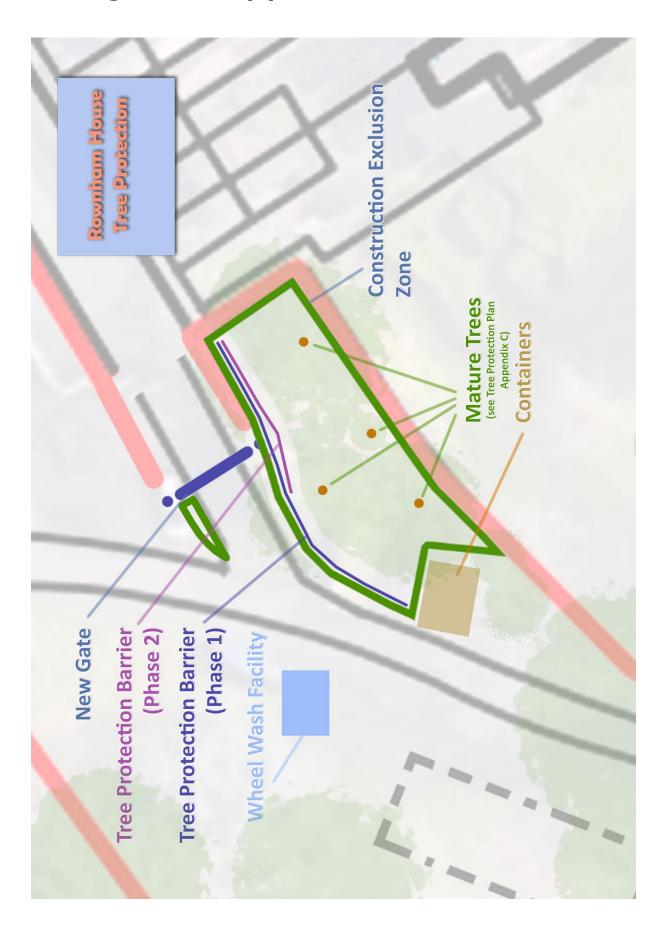


Appendix B Site Logistics Plan (i)



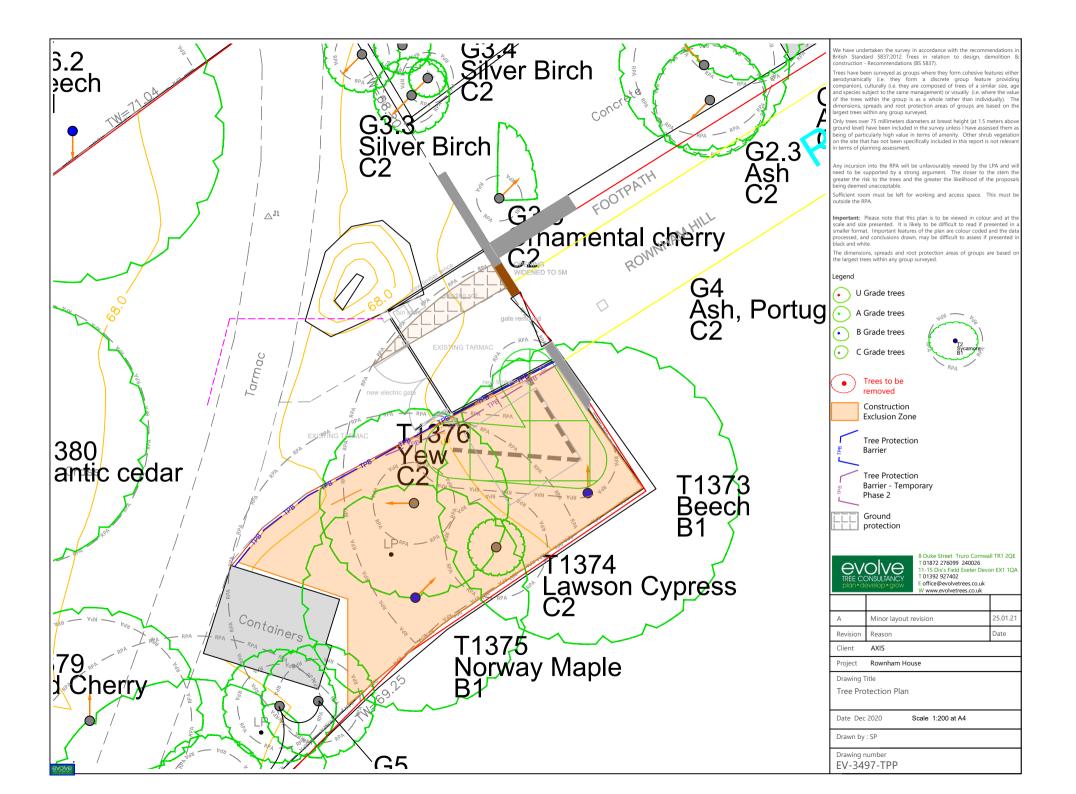


Site Logistics Plan (ii)





Appendix C Arboricultural Reports





Arboricultural Impact Assessment Report

Rownham House Rownham Hill Leigh Woods Bristol BS8 3PU

Reference: EV-3497-AIA

Rev C (09.02.2021)

Report Date: 16.12.2020

8 Duke Street Truro Cornwall TR1 2QE 01872 276 099

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I INSTRUCTIONS

- 1.1 Axis instructed Evolve Tree Consultancy to provide:
 - 1. Tree Survey & Tree Constraints Plan.
 - 2. Arboricultural Impact Assessment & Tree Protection Plan.
 - 3. Revised Arboricultural Impact Assessment & Tree Protection Plan.

This revised report and associated drawing fulfil our last instruction.

2 INTRODUCTION

- 2.1 The previously supplied constraints report and plan provide the baseline data that would inform the feasibility assessment and design of the development. This Arboricultural Impact Assessment (AIA) report analyses the final design of the site access and describes the implications for trees.
- The site comprises a burnt out residential house and unmanaged garden. The intention is to repair and reinstate the existing dwelling.
- A planning application is pending a decision from North Somerset Council. As a result of the responses received from the planning application consultation process and ongoing dialogue with the Council's tree officer a small adjustment has been made to the design of the site entrance. This report has been revised accordingly. At the request of the local planning authority (LPA) it also includes an arboricultural method statement in Appendix G.

3 METHODOLOGY

- Arboricultural impacts are a predicted change in condition because of an activity related to the project. The importance of an impact is a result of the relationship between the magnitude of a change (positive or negative) and the quality or sensitivity of the feature being affected.
- Impacts are generally described as either none, low, moderate, or high. Time frames are referred to as short (0—10 years), medium (10—20 years), long (20—40 years) and very long (40+ years).
- 3.3 My assessment focuses on the impacts relevant to planning merits and is guided by BS5837. Typical considerations include:
 - Tree loss
 Construction access
 Shading
 - Build practicability Statutory Protection Design conflicts
 - Mitigation planting
 Canopy protection
 Necessary pruning

- Future conflicts
- Proximity to structures
- Infrastructure

- Removal of structures
- Effect on amenity value
- Use of land near trees
- 3.4 A copy of the schedule of trees is copied from the constraints report in Appendix A.

4 SUPPORTING DOCUMENTATION

- 4.1 Relevant documents provided to me include:
 - Topographical Survey prepared by jpp, drawing number 01, dated 29/11/19.
 - 2733-3-35-C Entrance Details
- 4.2 This report should be read alongside Evolve drawing:
 - Tree Constraints Plan: EV-3497-TCP.
 - Tree Protection Plan: EV-3497-TPP Rev A

5 STATUTORY PROTECTION & OTHER CONTROLS

- I have used information supplied by North Somerset Council Interactive map. If any tree is to be removed, confirmation should be sought from the LPA in writing about the protected status at that time.
- 5.2 **Tree Preservation Order:** The site is not subject to a Tree Preservation Order/s (TPOs).
- 5.3 **Conservation Area:** The site is not within a designated Conservation Area.
- 5.4 The site does lie within the within the Grade II* Ashton Court Registered Park and Garden.
- Felling Licences: Parts of the site associated with the domestic property will not be subject to the provisions of the Forestry Act. Felling licenses are generally required for felling living trees unless they are fruit trees, or trees growing in a garden, orchard, churchyard or designated open space.
- Hedgerow Regulations: The hedgerow regulations do not apply to the boundary of a domestic curtilage but will affect those hedgerows that border land used for keeping horses or agriculture. The Hedgerows Regulations 1997 make it an offence to remove most countryside hedges without first giving the local planning authority 42 days' notice.
- 5.7 **Planning Conditions/Covenants:** I did not investigate whether any planning conditions or legal covenants relevant to the trees are in place.

6 PLANNING POLICY & DESIGNATIONS

6.1 **National Planning Policy Framework (NPPF)**: This sets out national planning policy. Paragraph 175 states that:

- Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused unless there are wholly exceptional reasons and a suitable compensation strategy.
- 6.2 North Somerset Local Plan: Policy DM9 sets out the Council's policy with regard to development proposals affecting Trees and Woodlands. The policy requires development to demonstrate that there has been consideration of the "retention. protection and enhancement of tree canopy cover throughout the design and development process". It also requires proposals to consider the long and short-term impacts on trees from the development and their long term retention. In addition, the policy details requirements for tree protection during construction and new tree planting where appropriate.



Image 1. Location – Site highlighted blue (Extract from Google Map data 2019).

7 THE SITE & THE TREES

- 7.1 **The Site**: The site is located to the south of Leigh Woods, north-west of Bristol City. It is accessed off the A369 road, known as Rownham Hill. The site contains a burnt out dwelling surrounded by lawned garden bounded by trees. The garden also contains derelict outbuildings and a redundant swimming pool. The property is within the Grade II* Ashton Court Registered Park and Garden.
- 7.2 **The Trees**: The trees include a range of deciduous and conifer trees of varied age classes. Most are situated close to the boundaries of the site. A cluster occur either side of the access drive close to the site entrance.

- 7.3 The most notable trees are beech, Norway maple, cedar, and scots pines. Some significant trees are also found offsite and where appropriate these have been included in the survey. There are many other insignificant trees including ash, laurel, apple, evergreen oak, birch etc. Some are self-sown, others were introduced as part of the historical development of the garden.
- 7.4 The trees (on and off-site) contribute to an attractive landscape setting that is consistent with the nearby historic buildings and surrounding estate. The



Image 2. Study area – provided by Axis.

- principal benefit of the trees is visual amenity. This benefit is mainly private because few trees are visible from public vantage points. There are no prominent views from Rownham Hill or Ashton Court Estate.
- Distant views of the eastern part of the site are available from to the south from the A3029 and A369; very few of the trees can be seen and other, much larger groups dominate the landscape. Those that make a contribution to these distant views are categorised as B2 (having moderate landscape quality).
- 7.6 Several trees at the eastern end of the site are visible from the cul-de-sac that serves 1-8 Rownham Hill. There is no through traffic or public footpath and therefore the number of people that view these trees is low. Consequently, these benefits constitute a minor public amenity.
- 7.7 Within the site the large trees are appreciated as having a significant impact on its character and appearance. Several of the trees are of moderate or high arboricultural quality (A1 or B1 category) and there are potential benefits to retaining these, particularly where they visible to users of the cul-de-sac.

8 ARBORICULTURAL IMPACT ASSESSMENT

- One of the site's key trees is located close to the site entrance. The mature beech tree (T1373) is situated in the eastern corner adjacent to the brick boundary wall. It is not prominent to views from public places but does contribute to the character of the listed parkland.
- As per the advice in BS 5837, the design for the site entrance has adopted a precautionary approach to the protection of trees. This cautious approach starts with the root protection

- area (RPA) which has been adjusted and enlarged within the site to account for the boundary wall, the footings of which are likely to represent a barrier to root growth.
- The RPA is shown as passing across the existing driveway to address the potential for roots to have grown beneath it. Whether roots actually proliferate below the drive will depend upon its structure and the quality of the underlying substrate. Roots require a diffusion of gases between them and the atmosphere, available water, and a soil bulk density of less than about 1.5 g/cm³. Modern roads and many drives are constructed to a specification that compromises these parameters for growth.
- The drive will affect the growth of roots because construction will have degraded the quality of the substrate to some extent. Therefore, the quantity and density of roots are likely to be less than would be found in open ground. It may, dependent upon its structure, have formed a barrier to roots. My understanding is that the surface of the drive is in good condition and this is indicative that the sub-base and asphalt base are substantial.
- Notwithstanding this, designs have preceded on the basis that the driveway forms part of the RPA. If necessary, increased confidence can be achieved by excavating through the structure to investigate the quality and character of the substrate. This is not desirable in the first instance because the wearing course is intended to be retained.

Driveway Wearing Course:

There is no requirement to extend the width of the existing driveway. The surface is understood to be stable and adequate for continued use. In the unlikely event that the wearing course is compromised it will be removed and replaced without excavating the base or subbase. Refer to Appendix G – Arboricultural Method Statement.

Footway & Bin Store:

- 8.7 The previous iteration proposed a footway and bin store to the north of the driveway at the very periphery of the adjusted RPA. The incursion into the RPA equated to 4 % of the total. Because the driveway is very likely to have reduced the prevalence or even existence of roots in this area the works were very unlikely to have any adverse effect on T1373.
- Regardless of the arboricultural impacts of the scheme, the LPA have maintained a position that development should not occur within the RPA. Consequently, the proposed footpath and gravel surface have been removed. There are now no new structures proposed within the RPA, to the north of the driveway.

New Fence:

- 8.9 The new fence will be of timber construction so that the only intrusion into the RPA is the holes required for the posts. At its closest point, the fence will be 6.5 m from T1373 and as such the post holes pose an insignificant risk to it. The overall footprint of the excavation represents a tiny proportion of the RPA (0.02 %) and there will be no significant woody roots at this distance from it. Refer to Appendix G Arboricultural Method Statement.
- 8.10 The fence to the north of the drive has been repositioned beyond the RPA.

Entrance Gate:

- 8.11 The proposed entrance gates will be repositioned approx. 6 m to the west of the existing. The gate will be held in place with new timber posts which will require a small excavation into the RPA. The overall footprint of the excavation represents a tiny proportion of the RPA (0.09 %). The closest post is some 8 m from T1373 and will not disturb any significant woody roots. Holes will be dug with an auger and posts will be secured in place with concrete. There is a theoretic risk of toxins leaching from the concrete, however in practice, curing happens quickly enough for it not to pose a risk to the tree. Refer to Appendix G Arboricultural Method Statement.
- 8.12 Electricity will be supplied to the gate from the west and beyond the RPA of T1373. The suggested route for the supply is shown on the TPP. Refer to Appendix G Arboricultural Method Statement.

9 TREE PROTECTION PROPOSALS

- 9.1 Based on the information provided to date, this report and the supporting Tree Protection Plan (TPP) provides comprehensive tree protection proposals (related to this design).
- The TPP indicates a construction exclusion zone which will be protected by fencing and ground protection mats. This would protect T1373 from inadvertent damage during construction of the new site access arrangements.
- 9.3 The TPP defines the position of a tree protection fence which will be erected prior to the commencement of development and thereafter retained until completion. Please refer to Appendices E and F for a suitable construction specification and Appendix G for the Arboricultural Method Statement.

10 CONCLUSION

- 10.1 The proposed access arrangements have been carefully considered to avoid damage to the key tree (T1373). A precautionary approach has driven the design and specification of materials.
- 10.2 The overall arboricultural impacts of the proposed development are very low. Consequently, the proposal does not conflict with either local or national planning policies and safeguards the character of the listed parkland.
- 10.3 My recommendations include tree protection measures that ought to be implemented during construction. It would be reasonable for the LPA to enforce compliance by way of a planning condition.



Simon Proctor BSc Hons, Dip Arb (RFS), M Arbor A, MICFor Evolve Tree Consultancy

I am a Chartered Arboriculturist and a professional member of the Arboricultural Association. I hold the Royal Forestry Society's Professional Diploma in Arboriculture. I have been working as a full-time, professional arboriculturist since 1998 and have experience in both the public and private sector.





The authority of this report ceases when any site conditions change or pruning or other works unspecified in the report are carried out to, or affecting, the subject tree(s). The statements made in this report do not consider the effects of extremes of climate, vandalism or accident, whether physical, chemical or fire. Evolve Tree Consultancy cannot accept any liability about these factors, nowhere prescribed work is not carried out in a correct and professional manner in accordance with current good practice.

The recommendations within this report remain valid for the period stated for re-inspection or twelve months from the date of survey.

The limit of Evolve Tree Consultancy's indemnity over any matter arising out of this report extends only to the instructing client; Evolve Tree Consultancy cannot be held liable for any third-party claim that arises following or out of this report. This report remains the intellectual property of Evolve Tree Consultancy.

APPENDIX A Tree Schedule Explanatory Notes

Sequential Tree, Group or Woodland Reference Number.

Name: Scientific name (Common name in brackets).

Height: Recorded in metres by inclinometer in each discrete area and estimated from the measured tree. **(lwr crn ht)** Lower crown height, the height of the canopy above the ground.

Trunk diameter: Tree stem diameter in millimetres at 1.5 metres above adjacent ground level rounded up to nearest 50 millimetres. For multi-stemmed trees, a cumulative diameter is calculated (in accordance with BS 5837:2012 Annex C).

Crown Spread: Measured in metres & taken at four cardinal points (N E S W).

1st Sig branch: Existing height in metres above ground level (agl) of the first significant branch with direction of growth (if available).

Life	Y	Young	Recently planted or establishing tree.
stage	SM	Semi mature	Age less than one-third life completed. Established tree but one that has not reached its potential ultimate height and has significant growth potential.
	EM	Early mature	One-third to two-thirds life completed. A tree reaching its ultimate potential height, whose growth rate is slowing down but will still increase in stem diameter and crown spread.
	М	Mature	Two thirds plus life completed. Specimen with limited potential for any significant increase in size but with a reasonable life expectancy.
	LM	Late mature (Over-mature in the BS)	Two-thirds plus life completed and declining. A tree that has passed its optimum growth rate and may require specialist management. These trees may offer significant benefits in terms of nature conservation
	V	Veteran	A tree that shows features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.

Category: A grade given in accordance with BS 5837:2012 - Tree Categories (see copy of Table 1 from BS 5837:2012 below). **Comments:** General observations e.g. collapsing, the presence of any decay and physical defect and including further investigation of suspected defects that require more detailed assessment and potential for wildlife habitat.

Life Expectancy: Estimated remaining contribution in years in terms of amenity (<10, 10+, 20+, 40+).

=c = xpcctac	. LStill	iatea ren	laming contribution in years in terms of amenity (10, 10, 10, 10, 10).				
Physiological	G	Good	Tree that appears to be in good condition and healthy without significant defects.				
condition	F	Fair	Tree that appears to be structurally sound but due to minor defects is downgraded from good.				
	P	Poor	Tree which shows signs of poor health, in decline and/or with significant defects.				
	D	Dead	Tree which is moribund or has died.				

Recommendations: Preliminary management recommendations based on the site as surveyed and for any likely pruning likely to be required should any development proceed.

RPA-R (m) - Root Protection Area (RPA) Radius - The radius of an indicative circle of the RPA. **RPA (m²)** - RPA Area in metres squared.

8 Duke Street Truro TR1 2QE 01872 276 099

APPENDIX B Tree Schedule

Tree	Name (Common &	Ht	Stem dia.	Branch Spread (m)			ead	1 st sig branch	Life		Life Exp				RPA	RPA A
No.	Scientific)	(m)	(mm)	N	E	S	W	(m)	Stage	Comments	(yrs)	Cond	Advice	Cat	R m	m²
G1	Quercus robur (Common Oak), Corylus avellana (Hazel)	5 (1)	80	2	2	2	2	1(N)	Y	Low quality Low public amenity value	40+	Good		C2	1.0	3
G2.1	Fraxinus excelsior (Ash)	11 (2)	310	3.5	3.5	3.5	3.5	2(NW)	SM	Visible from cu de sac Low public visual amenity Topped at 2m - multi stemmed from there with bark included union At risk from ash dieback (Hymenoscyphus fraxineus)	<10	Fair		C2	3.7	43
G2.2	Malus (Apple)	7 (2)	230, 210	4.5	4.5	4.5	4.5	1(NW)	М	Low public visual amenity Mistletoe in crown	10+	Fair		C2	3.7	44
G2.3	Fraxinus excelsior (Ash)	10 (3)	160, 180	3	3	3	3	3(SW)	Y	Low public visual amenity Included bark present in fork- minor significance	<10	Fair		C2	2.9	26
G3.1	Fraxinus excelsior (Ash)	8 (4)	120	2	2	2	2	4(SW)	Y	Not on topographical survey - position/dimensions estimated Low public visual amenity	<10	Good		C2	1.4	7
G3.2	Quercus ilex (Holm Oak)	6 (3)	125	1.5	1.5	1.5	1.5	3(NE)	Y	Not on topographical survey - position/dimensions estimated Low public visual amenity	40+	Good		C2	1.5	7
G3.3	Betula pendula (Silver Birch)	8 (3)	125	2	2	2	2	3(SW)	Y	Low public visual amenity	20+	Good		C2	1.5	7
G3.4	Betula pendula (Silver Birch)	7 (3)	65	1	1	1	1	(SW)	Y	Not on topographical survey - position/dimensions estimated Low public visual amenity	20+	Good		C2	1.4	6
G3.5	Prunus sp. (Ornamental cherry)	4 (1)	100	4	2	0	0	0.5(NE)	SM	Not on topographical survey - position/dimensions estimated Low public visual amenity				C2	1.2	5
T1373	Fagus sylvatica (Beech)	16 (3)	630	8	8	8	8	4(N)	М	Visible from cul-de-sac – low to modest private amenity value Low public amenity value	20+	Good		B1	7.6	180

Tree	Name (Common &	Ht	Stem dia.	Bra	anch (n	Spre n)	ead	1 st sig branch	Life		Life Exp				RPA	RPA A
No.	Scientific)	(m)	(mm)	N	E	S	W	(m)	Stage	Comments	(yrs)	Cond	Advice	Cat	R m	m ²
										Bark included stem unions at 2 and 3 m						
T1374	Chamaecyparis lawsoniana (Lawson Cypress)	8 (2)	225	1.5	1.5	1.5	1.5		Y	Not on topographical survey - position/dimensions estimated Not visually prominent – low public visual amenity	20+	Fair		C2	2.7	23
T1375	Acer platanoides (Norway Maple)	15 (5)	660	6	6	6	6	3(NE)	М	Low public visual amenity	20+	Fair		B1	7.9	197
T1376	Taxus baccata (Yew)	6 (1)	180	5	5	5	5	1.5(W)	Y	Not visually prominent – low public visual amenity	40+	Good		C2	2.2	15
T1377	Fagus sylvatica (Beech)	17 (5)	680	8	7	8	8	2(N)	М	Visible from cul-de-sac – low to modest private amenity value Low public amenity value	20+	Good		B1	8.2	209
G4	Fraxinus excelsior (Ash), Prunus lusitanica (Portugal Laurel), Magnolia (Magnolia)	6 (1)	50	2	2	2	2		Υ	Not on topographical survey - position/dimensions estimated. Not visually prominent – low public visual amenity Understorey plants	20+	Fair		C2	0.6	1
G5	Privet, Ilex aquifolium (Holly), Acer palmatum (Japanese Maple), Prunus lusitanica (Portugal Laurel), Taxus baccata (Yew)	7 (2)	185	3	3	3	3		SM	Not visually prominent – low public visual amenity Suppressed	20+	Fair		C2	2.2	15
T1378	Acer platanoides (Norway Maple)	15 (3)	650	8	8	8	8	2.5(N)	М	Not visually prominent – low public visual amenity Moderate arboricultural quality	20+	Good		B1	7.8	191

	Name		Stem	Bra	anch (n	Spre n)	ead	1 st sig			Life					RPA
Tree No.	(Common & Scientific)	Ht (m)	dia. (mm)	N	E	S	w	branch (m)	Life Stage	Comments	Exp (yrs)	Cond	Advice	Cat	RPA R m	A m ²
T1379	Prunus avium (Wild Cherry)	8 (2)	450	6	6	3	6	2(N)	М	Not visually prominent Witches broom Epicormic growth in crown	10+	Fair		C2	5.4	92
T1380	Cedrus libani atlantica 'Glauca' (Atlantic cedar)	16 (2)	590	7	7	7	7	1.5(S)	EM	Moderate arboricultural quality Not prominent – low public amenity value	40+	Good		B1	7.1	158
G6.1	Fraxinus excelsior (Ash)	22 (5)	850	10	10	10	10	4(S)	М	Locally prominent Visible from Rownham Hill - Minor to moderate public amenity value	10+	Fair		C2	10.2	327
G6.2	Fagus sylvatica (Beech)	18 (5)	600	8	8	8	8	4(S)	М	Locally prominent Visible from Rownham Hill Minor to moderate public amenity value	40+	Good		B1	7.2	163
T1381	Populus spp (Poplar)	10 (1.5)	540	4	6	6	6	1.5(SE)	SM	Not visually prominent Low public amenity value Roots severed by service trench 2m to south east	20+	Good		C2	6.5	132
T1382	Chamaecyparis lawsoniana (Lawson Cypress)	13 (3)	400	1.5	1.5	1.5	1.5	3.5(NW)	EM	Not visually prominent – low public amenity value Multiple stems above 1.5m. Included bark present in forkmoderate significance.	20+	Good		B1	4.8	72
G5	Prunus laurocerasus (Cherry Laurel), Malus (Apple)	5 (2)	175	2	2	2	2		Y	Not visually prominent – low visual amenity value Suppressed	20+	Fair		C2	2.1	14
T1383	Acer platanoides (Norway Maple)	14 (5)	500	6	6	6	6	2(NW)	EM	Not visually prominent – low public amenity value	20+	Good		C2	6.0	113

Tree	Name (Common &	Ht	Stem dia.	Bra	anch (r	Spre n)	ead	1 st sig branch	Life		Life Exp				RPA	RPA A
No.	Scientific)	(m)	(mm)	N	Ε	S	W	(m)	Stage	Comments	(yrs)	Cond	Advice	Cat	Rm	m ²
										Previously topped at 2 m - multi stemmed from there Stem wounds at 3 m - not significant Squirrel damage in crown – not significant 0.5 m from boundary wall						
G6	Prunus laurocerasus (Cherry Laurel), Malus (Apple), Corylus avellana (Hazel), Quercus ilex (Holm Oak)	5 (2)	175	2	2	2	2		Y	Not visually prominent – low amenity value Suppressed	20+	Fair		C2	2.1	14
T1384	Chamaecyparis lawsoniana (Lawson Cypress)	14 (2)	180, 420	2.5	2.5	2.5	2.5	1.5(S)	SM	0.3m from boundary wall Minor damage to coping stone Not viable in long term due to damage	20+	Good		C2	5.5	94
T1	Taxus baccata (Yew)	14 (5)	1000	7	7	7	7	2(NW)	М	Minor distant views available to the south-east In neighbouring property - dimension estimated Crack in boundary wall	40+	Good		A1 B2	12.0	452
Т2	Fraxinus excelsior (Ash)	13 (2)	350	5	5	5	5	7(W)	SM	Not visually prominent – low amenity value In neighbouring property - dimension estimated.	<10	Fair		C2	4.2	55
Т3	Taxus baccata (Yew)	6 (3)	400, 200	5	5	5	5	2(NW)	SM	Not visually prominent In neighbouring property - dimension estimated	40+	Good		B1	5.4	90

				Bra	anch	_	ead									
Tree	Name (Common &	Ht	Stem dia.		(r	n)		1 st sig branch	Life		Life Exp				RPA	RPA A
No.	Scientific)	(m)	(mm)	N	E	S	W	(m)	Stage	Comments	(yrs)	Cond	Advice	Cat	R m	m ²
T4	Prunus laurocerasus (Cherry Laurel)	8 (2)	250, 250	5	5	5	5	2(NW)	EM	Not visually prominent In neighbouring property – dimensions estimated						
T1387	Pinus sylvestris (Scots Pine)	11 (1)	750	7	9	9	7	3.5(S)	М	Minor distant views to southeast Fine tree	40+	Good		A1 B2	9.0	255
T1386	Pinus sylvestris (Scots Pine)	11 (3)	475	4	4	4	4	6(N)	М	Minor distant views to the south-east Minor crown damage and pruning in upper north canopy	40+	Good		B1	5.7	102
T1385	Sorbus aria (Whitebeam)	6 (2)	175,130, 90,220	5	5	4	5	1(W)	SM	Not visually prominent Bark included stem union Trench 1.5m to north Low quality tree	10+	Fair		C2	3.9	47
T1388	Prunus avium (Wild Cherry)	10 (3)	260	3.5	3.5	3.5	3.5	3.5(E)	SM	Stem creating contact cushion where resting against boundary wall	10+	Fair		C2	3.1	31
T1389	Pinus sylvestris (Scots Pine)	16 (4)	500	4	7	8	4	4(SE)	М	Minor distant views to the south-east	40+	Good		B2	6.0	113
T1390	Acer pseudoplatanus (Sycamore)	19 (4)	950	8	8	8	8	3(S)	М	Low vitality. Some minor displacement. of boundary wall Basal decay evident west side Buttress roots spreading to create contact cushion against ground - East side Concealed to from distant views behind T1391	10+	Fair		B2	11.4	408
T1391	Fagus sylvatica (Beech)	23	1050	7	8	10	11	4(E)	М	Moderately prominent to distant views to south-east	20+	Good		A1	12.6	499

				Br	anch	Spre	ead									
Tree No.	Name (Common & Scientific)	Ht (m)	Stem dia. (mm)	N	(r E	n) S	w	1 st sig branch (m)	Life Stage	Comments	Life Exp (yrs)	Cond	Advice	Cat	RPA R m	RPA A m ²
		(5)												B2		
T1392	Pinus sylvestris (Scots Pine)	8 (4)	400	3	3	3	4	4(SE)	М	Minor distant views to south- east	40+	Good		B1	4.8	72
T1393	llex aquifolium (Holly)	3 (0.5)	100	3	3	3	3		SM	Coppice. Low quality tree	20+	Fair		C2	3.2	32
W1	Acer pseudoplatanus (Sycamore), Fraxinus excelsior (Ash), Pine	20 (7)	500	8	8	8	8		EM	Not on topographical survey - position/dimensions estimated. In neighbouring property - dimension estimated. Dimensions vary - those given are representative	20+	Good		B2	6.0	113

Table 1 from BS 5837:2012

Trees in relation to design, demolition & construction – Recommendations. Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification			
Trees unsuitable for retention (se	· · · · · · · · · · · · · · · · · · ·			on plan			
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	companion shelter cannot be mitigated by pruning). Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.						
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values conservation	, including			
Trees to be considered for retent	ion						
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	GREEN			
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	BLUE			
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	GREY			

APPENDIX C Legal Constraints

Trees outside the site/property

Landowners and managers have a duty of care not to damage trees on the neighbouring land. The common causes of damage (root damage, compaction, physical damage, and inexpert pruning) must be avoided through good planning and site management.

However, branches and roots from trees on adjacent properties that extend over boundaries can be pruned back to the boundary line without the permission of the owners. However, the branch material belongs to the tree owner and should be returned where appropriate.

Statutory wildlife obligations

The Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000 provides statutory protection to birds, bats and other species that inhabit trees. All wild birds are protected by law under the Wildlife & Countryside Act 1981, and it is an offence to disturb injure or kill a nesting bird intentionally or to take damage or destroy an occupied nest or egg. If nesting birds are discovered works on the trees should be deferred until the nests are abandoned. Care should be taken during any felling operation, or surgery works to trees to avoid damage or disturbance to birds during the nesting season.

Tree Preservation Orders

Advice can be found at:

http://planningguidance.communities.gov.uk/blog/guidance/tree-preservation-orders/tree-preservation-orders-general/

Conservation Areas

Advice can be found at:

http://planningguidance.communities.gov.uk/blog/guidance/tree- preservation-orders/protecting-trees-in-conservation-areas/

Important: Exceptions for tree work relating to planning permission and permitted development from the Planning Practice Guidance 15 April 2015 paragraph 36-083-20150415.

Under the heading "Is there an exception for tree work relating to planning permission and permitted development?", of the PPG states:

"The authority's consent is not required for carrying out work on trees subject to an Order so far as such work is necessary to implement a full planning permission. For example, the Order is overridden if a tree has to be removed to make way for a new building for which planning permission has been granted.

Conditions or information attached to the permission may clarify what work is exempt.

However, the authority's consent is required for works on trees subject to an Order if:

- development under a planning permission has not been commenced within the relevant time limit (i.e. the permission has 'expired'):
- only outline planning permission has been granted; and
- it is not necessary to carry out works on protected trees in order to implement a full planning permission."

Felling licence

In any calendar quarter*, you may fell up to 5 cubic metres on your property without a licence if no more than two cubic metres are sold. Contact your local Forestry Commission office if you are not certain whether these exemptions apply.

*1 Jan to 31 March, 1 April to 30 June, 1 July to 30 September and 1 October 31 December

Exemptions: Certain types of felling do not need permission from the Forestry Commission. The Forestry Act 1967, as amended, and related regulations give these exceptions in full. The main categories are listed below:

Lopping and topping (which usually includes tree surgery, pruning and pollarding).

Felling included in an approved dedication plan.

Felling fruit trees, or trees growing in a garden, orchard, churchyard or designated public open space (e.g. under the Commons Act 1899).

Felling trees which, when measured at the height of 1.3 metres from the ground:

- have a diameter of 8 centimetres or less; or if thinnings have a diameter of 10 centimetres or less; or
- if coppice (i.e. managed by cutting to promote multi-stemmed growth arising at or near ground level) or underwood, have a diameter of 15 centimetres or less.

Felling trees immediately required for carrying out development authorised by planning permission (granted under the Town and Country Planning Act 1990) or for work carried out by certain providers of gas, electricity and water services and which is essential for the provision of these services.

Felling necessary for the prevention of danger or the prevention or abatement of a nuisance (e.g. which may involve the threat of danger to a third party). This exemption will only apply if there is a real rather than a perceived danger. We may be able to give you advice that would minimise the danger without felling the trees. We strongly recommend that you contact us if you are considering felling a tree or trees in these circumstances. You may be prosecuted for illegal felling if it is shown that the tree did not present a real or immediate danger.

Felling necessary to prevent the spread of a quarantine pest or disease and done in accordance with a notice served by a Forestry Commission Plant Health Officer (under the Plant Health (Forestry) (Great Britain) Order 1993, as amended.

The felling is done in compliance with any obligation imposed by or under an Act of Parliament.

More advice can be found at

http://www.forestry.gov.uk/pdf/treefellingaugust.pdf/\$FILE/treefellingaugust.pdf

APPENDIX D Design Considerations

The key constraints posed by the trees are shown on the TCP drawing. Both the above and below ground constraints have the potential to influence the design.

Tree Quality Assessment: The cascade chart (see Appendix B) is a construct of the BS5837 designed to help describe the characteristics and relative value of trees. It provides guidance enabling an estimate of which trees are important and which trees are not.

It does not dictate which trees ought to be retained or removed, merely the weight that should be given to them when balancing competing interests. Certain trees may be of such importance and sensitivity that they justify having a major influence on design. Others may be of little significance that could be removed without adverse impacts.

The key trees are identified in the survey schedule.

The root protection area (RPA): This is an area (representing a volume of soil) considered necessary to maintain the trees viability. The area represented on the TCP is a minimum recommended by BS5837 and is capped at 707m².

The shape of the RPA will vary in accordance with site conditions e.g. a road is likely to form a barrier to root growth. Whilst the notional RPA is circular the shape plotted on the TCP may be a polygon to reflect likely barriers to root growth.

Encroachment within the RPA of retained trees will require justification and be supported by a sound rationale from the project arboriculturist.

Tree species: The species will influence a number of factors relevant to design including height (represented by the length of the shade arc), spread (indicated on the TCP), ultimate height and spread (which may be indicated where appropriate), deciduous/evergreen nature, crown density, seasonal nuisance etc.

The proximity of a trees to houses and gardens can be a key factor affecting people's enjoyment of a property.

Age: Mature and over-mature trees are generally more sensitive to change than young trees. Their inability to adapt to altered soil conditions within or near the RPA means that care is required when designing in these places.

Shade Arc: This is an average pattern of the shade as is passes through the day. It provides an indication of how trees may impede direct sunlight.

Dense shade can be addressed by the siting of dwellings and a reasonable proportion of the garden outside the shade arcs.

Siting buildings within the shade arc can adversely affect the availability of natural daylight to principal living rooms. The internal arrangement of buildings and fenestration design can make significant improvements to daylight availability.

Services: It is prudent to locate new service outside the RPA and crown (allowing for future growth) of retained trees. However, the impact of putting services close to trees will be determined by the sensitivity and/or quality of the trees.

APPENDIX E

Tree Protection Barriers

No equipment, machinery or materials shall be brought onto the site for the purposes of the development until fencing has been erected in accordance with the plans and particulars which shall have been previously approved by the local planning authority in writing.

The areas forming the Construction Exclusion Zone are to be protected by Tree Protection Barriers as per the recommendations in BS 5837:2012 (Figure 2) or as specified below at Appendix H.

This fencing is to be erected before any work commences on site and is to remain in place undamaged for the duration of all work or each phase. It will only to be removed once all work is completed and if required by planning condition, with the formal consent of the local planning authority.

If the fencing becomes broken or removed during the course of carrying out the development, it shall be promptly repaired or replaced to the satisfaction of the local planning authority.

Within any area fenced in accordance with this condition, nothing shall be stored, placed or disposed of on the above or below ground, the ground level shall not be altered, no excavations shall be made, nor shall any fires be lit, without the prior written consent of the local planning authority.

Other than works detailed within this method statement or approved in writing by the local planning authority, no works at all (including storage or dumping of materials) shall take place within the exclusion zones defined by the protective fencing.

The fencing is to carry waterproof warning notices denying access within the RPA. The following signs or similar will be attached to the fence panels.

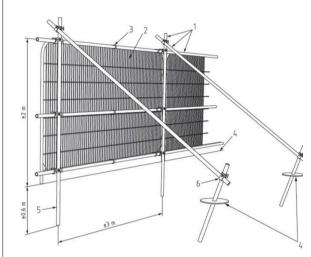




APPENDIX F

Specification for Tree Protection Barriers

Below is the fencing specification reproduced from BS 5837:2012 Trees in relation to design, demolition, and construction – Recommendations.





Key

- 1 Standard scaffold poles
- 2 Heavy gauge 2 m tall, galvanized tube and welded mesh infill panels
- 3 Panels secured to uprights and crossmembers with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6 m)
- 6 Standard scaffold clamps



APPENDIX G Arboricultural Method Statement

GENERAL

This Arboricultural Method Statement will provide the necessary protection for trees during building works and therefore meet the requirements of the LPA. The following issues are addressed:

Pre-commencement meeting.

Monitoring

Tree Protection Barriers.

Banksman

Tree Surgery

Stumps

Storage

Removal of Hardstanding

Services

Fence/Gate Posts

Additional Precautions

No work will occur onsite until the Construction Exclusion Zone (CEZ) has been established and protection measures implemented. The CEZ will remain protected until all construction activities requiring permission from the LPA are finished. Any deviation from the approved details will require written approval from the LPA.

PRE-COMMENCEMENT:

A pre-commencement meeting will be held on site prior to any construction works being undertaken. The methods of tree protection outlined in this statement will be discussed so that all aspects of their implementation and sequencing are understood by all parties. Any clarifications or modifications to this statement shall be recorded and circulated to all parties in writing.

A copy of this Method Statement will be supplied to all relevant site personnel who are working in proximity to retained trees and a register maintained in the site office to verify receipt.

Any variation to the method statement will need to be agreed with the LPA before commencing work.

The site manager will provide adequate training on the above for all relevant staff. This training will be carried out by or to the approval of the projects arboricultural consultant. Any operatives undertaking work in the RPA/CEZ must always be briefed using the method statement and supervised by an arborist or supervisor experienced in working within the RPA.

The responsible parties are identified in table 1 below.

Position	Name/Organisation	Contact details
Client	ТВС	
Architect/specifier	ТВС	
Site Manager	ТВС	
Project Arboriculturist	ТВС	

Table 1

Responsibility for implementing and monitoring the tree protection measures fall to the site manager representing the principal contractor. This person will:

- 1) Be present on site for most the time,
- 2) Be aware of the arboricultural responsibilities,
- 3) Have the authority to stop any work that is causing, or has the potential to cause harm to trees identified for protection,
- 4) Be responsible for ensuring <u>all</u> site operatives are aware of their responsibilities toward trees on site and the consequences (being mindful of the planning condition and TPO) of any failure to observe those responsibilities,
- 5) Make immediate contact with the LPA and/or the expert in arboriculture in the event of any serious tree related problems occur.
- 6) Submit monitoring reports to the LPA.

A record will be made at the key stages of construction that could influence the tree protection measures. Records will be retained as either a physical or digital log and updated accordingly at each stage. These key stages are:

- 1) Pre-commencement meeting.
- 2) Erection of tree protection measures including barriers and ground protection.
- 3) Demolition of existing structures at the edge or within the root protection area (RPA).
- 4) Installation of fence and gate posts.
- 5) Removal of existing tarmac within the RPA.
- 6) Removal of tree protection measures.

The LPA has specifically requested that an expert in arboricultural monitors the following stages:

- 1) Construction of the timber fence and gate posts within the RPA.
- 2) Removing existing tarmac surface (if necessary).

Ad-hoc records will be made of incidents that deviate from the AMS e.g. if tree protection barriers need to be moved or if trees inadvertently damaged. If there is any physical damage

to trees or the ground within the RPA then an expert in arboriculture will inspect and report accordingly.

The written record will include the following:

- 1) Date.
- 2) Person undertaking the works.
- 3) Person overseeing the works.
- 4) Reference to the appropriate AMS item.
- 5) Confirmation (or otherwise) of compliance with the AMS.
- 6) Details of any deviation from the AMS, including reasons why and what action was taken to protect the tree/s.
- 7) A record of any damage that is caused to trees along with the measures taken to mitigate the harm.
- 8) Digital photographs will be retained as a record.

REPORTING:

The LPA have specifically requested that a report is made to them at the key stages of development and following any ad hoc inspections/reports. The reports will be made in writing within 72 hours of the visit/event. An example of Evolve's monitoring report is attached in Appendix H.

TREE PROTECTION BARRIERS:

The Construction Exclusion Zones and alignment of the tree protection barrier will be set out accurately by a competent person.

With regards to installing fencing and gate posts alongside the south of the driveway, the barrier position will be phased. The barrier will initially be aligned alongside the driveway as per the blue line on the TPP. Once the work to build the fence and gates begin the barrier will be realigned as per the purple line.

The protective fencing will comply with the specification recommended in the British Standard 5837:2012 Figure 2 (see Appendix F). Affixed to every other panel or at 6 m centres will be all weather signs stating 'CONSTRUCTION EXCLUSION ZONE' --- KEEP OUT (see Appendix E).

An 8 m² area to the north of the driveway will be protected by way of ground protection rather than a fence. This will take the form of a proprietary plastic ground mat of 1cm thick steel road plates.

Once the development has started the Construction Exclusion Zone must be considered sacrosanct and off limits for any access or construction activity without the written consent of the LPA.

BANKSMAN:

All reasonable steps will be taken to ensure that no damage is done to the trunks or lower branches when using mechanical equipment that could reach above the tree protection barrier such as excavators, cranes, or aerial access platforms. Where necessary a banksman will be employed.

TREE SURGERY:

No tree surgery is planned.

STUMPS:

No trees are to be felled.

ON SITE STORAGE OF SPOIL AND BUILDING MATERIALS:

Soil, spoil and building materials will be stored outside the CEZ.

METHOD STATEMENT FOR REMOVAL OF HARD SURFACING AND BUILDINGS NEAR TO TREES:

If the existing asphalt hardstanding requires resurfacing this will be done without excavating the base course of the drive.

Removing the surface will be done with an excavator with a grading bucket - a toothed excavation bucket risks disturbing the base (or subbase) and snagging any roots that might have made their way beneath the wearing course.

Works will be overseen by a competent person capable of identifying risks to the tree and managing the works and any incidents accordingly.

If these plans change, the impact of any alterations within the RPA will be subject to the advice of the projects arboricultural consultant and be subject to the approval of the LPA.

SERVICES:

The position of the electrical supply to the new gates is shown on the TPP. Any excavations below the ground will be done outside the RPA. Within the RPA the cable will be armoured and hung discreetly in a suitable position along the fence that attaches to the northern fence post. The cable will be dug into the driveway structure to serve the southern fence post without excavating the soil beneath it.

If these plans change, the impact of any alterations within the RPA will be subject to the advice of the projects arboricultural consultant with reference to the hierarchy of protection described within NJUG Volume 4 (2007) and be subject to the approval of the LPA.

FENCE/GATE POSTS:

Two gate posts and three fence posts are required within the RPA. Gate posts are likely to be 20 cm² cross section and fence posts 10 cm² cross section.

Prior to work beginning on the fence and gate the tree protection barrier will be repositioned as per 'TREE PROTECTION BARRIERS' above. Once begun the works will continue without undue delay until completion.

To minimise the area disturbed the post holes will be dug with a tractor mounted or small tracked auger and will be situated on the drive during the work.

Auger holes for the larger posts will be 40 cm diameter and for the smaller posts 20 cm diameter.

Posts will be secured in place with concrete. In order to mitigate the very small (academic) risk posed by leaching, the walls of the hole will be sheathed in a plastic membrane.

Once the work is complete the tree protection barrier will be repositioned to terminate at the southern gatepost. The new fence will effectively become part of the tree protection barrier.

ADDITIONAL PRECAUTIONS:

No storage of materials or lighting of fires will take place within the construction exclusion zone (CEZ). No mixing or storage of toxic materials will take place up slope of the CEZ where it may leak into it.

No fires will take place within 10 m of a tree and will consider fire size and wind direction to ensure that no flames come within 5 m of any foliage of trees being protected.

No notice boards, cables or other apparatus will be fixed to trees.

Materials which may contaminate the soil will not be discharged within 10m of any tree stem. When mixing any building materials, it is essential that the slope does not allow contaminates to run into the RPA. If necessary, the area will be bunded and materials removed from site.

As a contingency, water will be kept available on site to thoroughly flush any contamination away. Spillages within the RPA will be recorded and reported to the project arboriculturist.



Arboricultural Monitoring Report

Site:

Client:

Reference: -AMR

Site Visit Date: 2021

Report Date: 2021

Evolve Tree Consultancy

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office@evolvetrees.co.uk

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11 INSTRUCTIONS AND METHODOLOGY

- 11.1 xx instructed us to provide guidance relating to the provision of tree protection measures. The following report has been provided:
- 11.2 Summary of tree report & TPP. Fencing recommendation & proposals.
- Planning approval PAxx does not include a condition requiring trees to be protected in any specified way. Planning condition 3 does refer the plan 101 Rev B as an approved drawing.
- Based upon the plans and information provided it is my understanding that the development will comply with the planning permission providing
- 11.5 This report provides the following information:
 - 1. Responsible parties.
 - 2. Dates of site visits.
 - Record of observations.
 - 4. Issues requiring improvement.
 - 5. Recommendations for improvement.
 - 6. Confirmation of improvements.
 - 7. Statement on completion.

12 SUPPORTING DOCUMENTATION & STATUTORY DESIGNATIONS

- 12.1 This report should be read alongside:
- 12.2 I have used the information provided by the Cornwall Council Interactive Map on the assumption this is a true and accurate record. Should any tree be identified for

- removal confirmation must be obtained from the local planning authority in writing as to the protected status of the trees.
- 12.3 Tree Preservation Order/s (TPOs): None of the trees on or adjacent to the site are currently protected by a Tree Preservation Order (TPO).

13 RESPONSIBLE PARTIES

Position	Name/Organisation	Contact details
Client		
Architect/specifier		
Project Arboriculturist	Evolve Tree Consultancy	01872 276099/01392 927402

14 MONITORING RECORD

Item 1								
Date	Observations	Recommendations						
Images								
Confirmation visit – none required.								

Item 2		
Date	Observations	Recommendations
Images		

15 COMPLETION

15.1	This will include a paragraph about final visit and any requirements to submit to the LPA for
	approval.