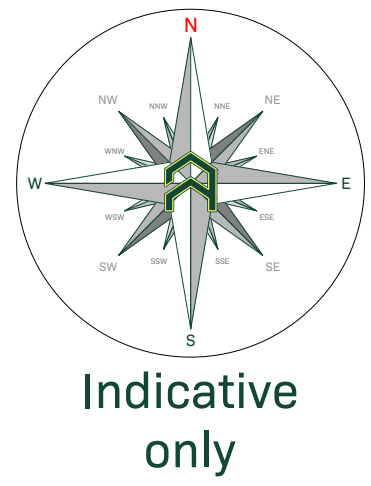




Indicative only

Rooting Environment Enhancement Areas:

Area identified for targeted soil improvement works to enhance the rooting environment of retained trees affected by partial RPA incursion. Works to include non-invasive soil decompaction using air spading, followed by incorporation of soil amendments (e.g., biochar) to improve soil structure, aeration, and nutrient availability. Measures intended to offset potential impacts associated with adjacent hard surfacing and support long-term tree vitality.

Impact: Proposed hard surfacing situated within the RPAs of 2T, 3T & 4T. **Mitigation:** Hard surfacing located within the RPAs of retained trees is to utilise a 'no dig' sub-base designed to an engineering specification in conjunction with the advice of the Project Engineer and Arboriculturist so that it can be constructed entirely above the existing soil level.

Arboricultural Impacts			
Impacts			No. of Trees
Trees to be removed			5
Groups / Hedges to be removed (Partial removal)			0 (0)
Trees with proposed incursions into the RPAs			3
Groups / Hedges with proposed incursions into the RPAs			0
Trees that require pruning			0
Groups / Hedges that require pruning			0
Trees to be transplanted			0
Groups / Hedges to be transplanted			0
Arboricultural Impacts			
Ref.	Species	Proposed Structure	Incursion (%)
2T	Holm oak	Proposed hard surface	32%
3T	Horse chestnut	Proposed hard surface	27.50%
4T	Horse chestnut	Proposed hard surface	35.20%
Tree Work Schedule			
Ref.	Species	Works	Category
5T	Sycamore	Fell to ground level and grind out stump	C1
6T	Elder	Fell to ground level and grind out stump	C1
7T	Elder	Fell to ground level and grind out stump	C1
8T	Unknown	Fell to ground level and grind out stump	U
1T	Yew	Fell to ground level and grind out stump	B12
All tree work is to be undertaken in accordance with British Standards (BS3998:2010 Tree Work - Recommendations. All arisings are to be removed and the site left as it was found. Care is to be taken to ensure that the ground around retained trees does not become compacted as a result of tree surgery operations. No equipment or vehicles such as (but not limited to) timber limes, tractors, excavators, or cranes are to be parked or driven beneath the crowns of any retained trees to prevent adjacent compaction and root death.			
No. Individual Trees Removed			
U	A	B	V
1	0	1	3
0 (0)	0 (0)	0 (0)	0 (0)
No. Groups/Hedges/Woodlands Removed (%) = Partial			
U	A	B	V
0 (0)	0 (0)	0 (0)	0 (0)
Referenced Documents			
Title	Originator	Drawing Number	Key
Existing Site Plan	Rosebury	03/LF/24	
Proposed Site Plan	Rosebury	06/LF/26 F	
Hard Surfacing			
Trees can be affected by construction within the RPAs either through the direct damage caused by the removal of roots or compaction of the rooting environment, or through secondary damage such as poisoning through leaks and spills (oil, fuels, etc.) including such activities as de-icing (road salt, etc.).			
Proposed hard surfacing within the RPAs of retained trees is therefore to be designed so that it can be constructed above the existing soil level and minimise any adverse impacts upon the trees RPAs. As the use of traditional foundations and sub-bases can result in excessive root loss through the direct removal of roots during excavations and by compaction of the soil beneath the excavation, as such the 'traditional' methodology must be avoided.			
When designing hard surfacing that is to be situated within the RPAs of retained trees, the design team need to pay particular attention to the proposed usage (pedestrian, domestic traffic, delivery vans, emergency services, HGVs, etc.) the existing and proposed levels of hard surfacing and finished floor levels, edging types and details, proximity to tree trunks and surface rooting, contamination capture and SUDs, etc..			
Possible sub-bases (foundation systems) for new hard surfacing situated within the RPAs of retained trees could include: - A proprietary system such as a multi-dimensional confinement system (CarlWeb TRP or similar); - Engineered solution such as a road deck, bridge, etc.			
An engineered solution is likely to require a level of excavation for site specific investigations to locate roots to aid in foundation design so that a suitable foundation can be designed to avoid roots and for the installation of the structure.			
NB: The use of a multi-dimensional confinement system and/or engineered solution will affect the finished levels of the hard surfacing by raising the levels and needs to be considered when designing foundations and setting the finished floor levels of adjoining buildings.			
Soil Amelioration			
Where development proposals result in partial incursion into a tree's Root Protection Area (RPA), the potential for adverse effects on rooting conditions must be carefully considered. The RPA represents the minimum area required to maintain a viable rooting environment, and although limited encroachment may sometimes be acceptable, more substantial incursions increase the risk of soil compaction, reduced aeration, and long-term physiological stress to retained trees.			
Within the current scheme, the predicted RPA incursions exceed commonly accepted guideline thresholds for two of the affected trees. To address this, targeted soil improvement works are proposed within adjacent soft landscaped areas to enhance the overall quality and functionality of the remaining rooting environment. The objective is to ensure that the development does not result in a net decline in soil conditions available to the retained trees.			
The proposed works involve air spading, a non-invasive technique that uses compressed air to fracture compacted soil without causing damage to woody roots. This process improves soil porosity and allows beneficial amendments to be incorporated into the upper soil profile. Following decompaction, soil conditioning materials such as biochar can be integrated into the soil matrix. Biochar is widely recognised for its ability to improve soil structure, increase moisture retention, enhance microbial activity, and improve nutrient availability.			
Collectively, these measures help restore soil permeability and rooting potential within the wider landscape areas surrounding the trees. By improving the quality of the remaining rooting environment, the approach aims to offset the functional loss of rooting space caused by the new hard surfacing.			
This strategy demonstrates that tree retention has been actively considered within the design and that positive arboricultural intervention is proposed to enhance long-term tree vitality, thereby reducing the likelihood of development-related decline. It also aligns with the overarching principles of BS 5837:2012, which encourage design solutions that minimise harm and, where appropriate, improve conditions for retained trees.			
Rev.	Date	Notes	
01	13/03/26	Initial assessment.	
 Unit 3, Well House Barns, Chester, CH4 0DH https://arbtech.co.uk, 01244 661170			
Address: 56 High Street, Baldock, Hertfordshire, SG7 6BL			
Client: Feneley Acquisitions Ltd			
Drawing: Arboricultural Impact Assessment			
Project No:	Drawing No:	Revision No:	
46317896	AIA01	01	
Date:	Scale:	Drawn:	
Mar 2026	1:100 _{AS}	DM	
Tree Key:			
Tree/Group Number:	Tree Canopy:	Trunks:	
Root Protection Area:	Ancient / Veteran Tree Buffer Zone:	Ancient woodland Extent:	
Category 'U' Tree Groups:	Category 'U' Tree Groups:	Category 'A' Tree Stems:	
Category 'A' Tree Groups:	Category 'B' Tree Groups:	Category 'B' Tree Groups:	
Category 'C' Tree Groups:	Category 'C' Tree Groups:	Category 'V' Tree Stems:	
Category 'V' Groups:	Basic Shading Arc:	Trees to be Removed:	
Proposed Pruning:			
All dimensions should be checked on site. No dimensions are to be scaled from this drawing. Please refer to any discrepancies listed. Arbrex Consulting Ltd cannot be held responsible for inaccuracies in the trees drawing within this plan is based. The drawing is designed to reflect the principles of the layout or design only, and release only to the protection of the client. This drawing is not to be used as a definitive part of the engineering or construction design or method statement. An arborist or structural engineer should be consulted for any matters of construction, stability or specification and for any standards or regulatory requirements relating to proposed structures, hard surfacing or underground services. All trees shown are protected and/or - a tree/shrub/other (any) should not be released upon. © Arbrex Consulting Ltd, 2025			

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