



Indicative only

Issue: Proposed structure situated within the RPA of group G11 and tree T12.
Solution: Foundations are to be designed to an engineering specification in conjunction with arboricultural advice and site investigations.

Arboricultural Impacts

Impacts	No. of trees
Trees to be removed	0
Structures to be removed (Partial removal of groups)	0/0
Trees with proposed retention into RPAs	1
Groups / Hedges with proposed retention into RPAs	1
Trees that will require pruning	1
Structures that will require pruning	0
Trees to be translocated	0
Structures to be translocated	0

No.	Species	Proposed structure	Incursion
G11	Carpinus betulus	Plant storage structure	RPA & crown
T12	Salix pendula	Plant storage structure	RPA & crown

Arboricultural Impacts - RPAs (Area)

No.	Species	RPA (m ²)	Incursion (m ²)	%
G11	Carpinus betulus	10.8	2.2	20.4%
T12	Salix pendula	65.33	6.7	10.3%

Tree Work Schedule

No.	Species	Works	Category
G11	Carpinus betulus	Prune trees to crown form (distance to the proposed structure)	C23
T12	Salix pendula	Prune trees to crown form (distance to the proposed structure)	B12

All tree work to be undertaken in accordance with British Standard BS 3998:2010 Tree work - Recommendations.
 All stumps are to be removed and the site is to be left as found. Care is to be taken of the ground around retained trees to make sure that does not become compacted as a result of tree surgery operations. No equipment or vehicles such as lorries, tractors, excavators or cranes shall be parked or driven beneath the crowns of any retained trees, to prevent subsequent compaction and root death.

No. of individual trees to be removed

U	A	B	C
0	0	0	0

No. of groups / hedges to be removed

U	A	B	C
0/0	0/0	0/0	0/0

(*) = Partial removal of a group

Arboricultural Method Statement

All tree work to be undertaken in accordance with British Standard BS 3998:2010 Tree work - Recommendations. All aspects of the development to be implemented without detriment to retained trees.

Foundations within RPAs

The use of traditional strip foundations can result in excessive root loss and so such should be avoided.
 Designs for foundations that would minimize the adverse impact upon trees should include particular attention to the existing levels, proposed finished levels and cross-sectional details. Site specific and specialist advice should be sought from the project engineers and arboriculturist.
 Root damage can be minimised by using:
 • Piles with site investigation used to be determined their optimal location whilst avoiding damage to roots important for the stability of the tree, by means of hand tools or compressed air displacement, to a minimum depth of 600mm.
 • Beams, laid at or above ground level, and cantilevered as necessary to avoid tree roots identified by site investigation.
 Where a slab for minor structures (e.g. shed base) is to be formed within the RPA, it should bear on the existing ground level, and should not exceed an area greater than 20% of the existing unexcavated ground.
 Slabs for larger structures (e.g. dwellings) should be constructed with a ventilated air space between the underside of the slab and the existing soil surface (to enable gas exchange and venting through the soil surface). In such cases, a specialised irrigation system should be employed (e.g. roof run-off redirected under the slab). The design of the foundation should take account of the effect on the load bearing properties of the underlying soil from the redirected roof run-off. Approval in principle for a foundation that relies on topsoil retention and roof run-off under the slab should be sought from building control authority prior to this approach being relied upon.
 Where piling is to be installed near to trees, the smallest practical pile diameter should be used, as this reduces the possibility of striking major tree roots, and reduces the size of the rig required to site the piles. If piling mat is required, this should conform to the parameters for ground loading. Use of the smallest practical piling is also important where piling within the branch spread is proposed, as this can reduce the need for access facilitation pruning. The pile type should be selected bearing in mind the need to protect the soil and adjacent roots from the potentially toxic effects of unsecured concrete, e.g. sleeved bored piles or screw piles.

Utility apparatus

Underground utility apparatus
 Mechanical trenching for the installation of underground apparatus and drainage severs any roots present and can change the local hydrology in a way that adversely affects the health of the tree. For this reason, particular care should be taken in the route and methods of installation of all underground apparatus. Wherever possible, apparatus should be routed outside of RPAs. Where this is not possible, it is preferable to keep apparatus together in common ducts, all inspection chambers should be sited outside of the RPAs.
 Where underground apparatus is to pass within the RPAs, detailed plans showing the proposed route should be drawn up in conjunction with the project arboriculturist. In such cases trenchless insertion methods should be used with entry and retrieval pits being located outside of the RPAs. If the option is not feasible and providing roots can be retained and protected excavations should be undertaken using hand held tools (e.g. spades, forks, shovels) or a combination of trenchless and manual excavation (broken trench).
 Any design and installation should be undertaken in accordance with the National Joint Utilities Guidelines (NUJG).
Above-ground utility apparatus
 Above-ground apparatus including CCTV cameras and lighting) should be sited to avoid the need for detrimental tree pruning, as such the current and future crown size of the tree should be assessed.
 Tree branches can be pruned back with care to provide space, though it is not appropriate for routine or significant tree work to bear visual design solution unless this is a suitable management outcome for the tree. Any pruning should be undertaken in accordance with BS3998:2010.

Rev: Date: Notes:



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Project: Cemetery Depot, Benhall Mill Road, Tunbridge Wells, Kent, TN2 5JH

Client: AECOM

Drawing: Arboricultural Impact Assessment

Based on: SK004

Drawing No: Arbtech AIA 01 Rev:

Date: Oct 2020 Scale: 1:150 @ A0 Drawn: JCH

Key:

Tree Nos.	T01	Tree Category	Trunks
RPAs	Category 'U' trees	Category 'B' trees	
Category 'B' groups	Category 'C' trees	Category 'T' groups	
Prop. survey	Proposed site plan	Incursion Structures	

