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ARBORICULTURAL IMPACT ASSESSMENT:

STAMFORD HOUSE FARM, COWBIT

FINAL

MAY 2025

DOCUMENT CONTROL

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FIGURES

1 Tree Protection Plan.

EXECUTIVE SUMMARY

ESL (Ecological Services) Limited has been commissioned by Robert Doughty Consultancy Limited to undertake an Arboricultural Impact Assessment regarding a proposed development at Stamford House Farm, Cowbit.

Tree Preservation Orders and Conservation Areas.

- South Holland District Council's website was used to locate any Tree Preservation Orders or Conservation Areas. There is none on or adjacent to the site.

Summary of potential impacts:

- The proposed works are in proximity to mature trees. There is the potential to impact the soil, roots, stems and canopies.

Summary of proposed mitigation:

- Non-destructive working methods will be considered in areas where incursion into a Root Protection Area is required.
- Protective measures will be implemented to avoid any additional impacts.

Summary of Impact Assessment:

- There will be no impact to any tree subject to a Tree Preservation Order or with Conservation Area status.
- No trees will be lost from the site.
- The proposed works will have no impact on the site's public amenity value.

ARBORICULTURAL IMPACT ASSESSMENT: STAMFORD HOUSE FARM, COWBIT

1 INTRODUCTION

1.1 SCOPE OF WORK

1.1.1 ESL (Ecological Services) Limited (ESL) has been commissioned by Robert Doughty Consultancy Limited to undertake an Arboricultural Impact Assessment in relation to a proposed build at Stamford House Farm, Cowbit.

1.1.2 The site is located ca.950m south of Cowbit at Peak Hill, east of Barrier Bank and west of the A16. The proposed works comprise the re-instatement of a defunct access track, new hardstanding and a single dwelling.

1.1.3 The entire working area, together with its immediate surroundings, was surveyed on 11th October 2024.

1.2 LIMITATIONS

1.2.1 ESL does not carry out soil assessments or pronounce on the health of trees beyond the initial visual assessment.

1.2.2 The surveyor had full access to the site; there were no constraints on the survey.

2 SURVEY METHODOLOGY

2.1 STANDARDS AND HARDWARE USED

2.1.1 The survey was carried out with reference to the guidelines detailed in 'BS 5837:2012 – Trees in relation to design, demolition and construction – recommendations' (hereafter, 'the Standard').

2.1.2 Tree positions were recorded with a Trimble DA2 GNSS.

2.1.3 Stem diameters were measured using a stem diameter tape where practicable, otherwise by estimation, in accordance with Annex C of the Standard.

2.1.4 Tree heights were measured in accordance with Section 4.4.2.6 of the Standard.

2.1.5 Canopy spreads and other measurements were made by tape and/or Leica DISTO D110 where practicable, otherwise by estimation (also in accordance with Section 4.4.2.6 of the Standard).

2.1.6 A schedule of the trees, tree groups and hedgerows surveyed is given as Appendix 1.

2.1.7 Common names are used throughout this report with scientific names given in the schedule. Where species not listed in the schedule are mentioned, their scientific name is given at the first instance.

3 ARBORICULTURAL IMPACT ASSESSMENT

3.1 TREE PRESERVATION ORDERS AND CONSERVATION AREAS

3.1.1 South Holand District Council's website was used to locate any Tree Preservation Orders or Conservation Areas. There is none on or adjacent to the site.

3.2 SURVEY RESULTS

3.2.1 The ca.0.1ha site is generally flat and level and comprises dense woodland to the eastern, southern and western boundaries around an open area of amenity grassland with two mature trees and a sycamore stump (shown as TN01 on the Tree Protection Plan). The site is accessed from Barrier Bank to the west via a defunct track (Photographs 1 and 2).



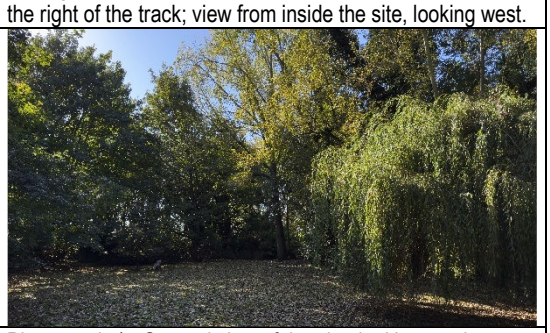
Photograph 1. Site access, looking east from Barrier Bank.



Photograph 2. Site access with TG01 to the left and TG02 to the right of the track; view from inside the site, looking west.



Photograph 3. General view of the site, looking southwest.



Photograph 4. General view of the site, looking southeast.

3.2.2 Tree group TG01 marks the eastern, southern and western boundary and comprises a mix including sycamore, ash, cherry, cypress, horse chestnut, maple, poplar and willow over privet and hawthorn. The group is mature and in a generally fair condition.

3.2.3 Tree group TG02 runs along the northern edge of the access track against the boundary fence. It comprised a mix including cypress and sycamore over privet and elder. The group is in a generally poor condition.

3.2.4 Trees T01, T02 and T03 are an apple, cypress and sycamore respectively and are ranged north of the proposed build. The trees are in a generally fair condition.

3.3 IMPACT ASSESSMENT

3.3.1 There will be no impact to any tree subject to a Tree Preservation Order or with Conservation Area status.

3.3.2 There is no demolition phase to this project.

3.3.3 Access to the site will be via the defunct track leading off Barrier Bank. Some access pruning may be required to open the track and improve visibility onto Barrier Bank for vehicles leaving the site. The sycamore stump (TN01) will be removed.

3.3.4 Re-instatement of the track may be required ahead of the build, to facilitate access and to protect the roots of adjacent trees during the build. A no-dig solution such as Geosynthetics CellWeb can be used to avoid the need to disturb the rooting environment. This should be installed working from Barrier Bank into the site, working from the newly re-instated portion of the track, never from the amenity grass. The newly re-instated track and hardstanding can also be used for materials storage and parking during the build phase.

3.3.5 The principal area of build falls outside the Root Protection Areas of the adjacent trees. A minor, temporary incursion will be required for working space/scaffolding (anticipated to be no more than 2.0m). Ground protection will be installed as shown on the Tree Protection Plan to mitigate impacts to the rooting environment during the build phase.

3.3.6 Due to the proximity of tree canopies, no lifting by crane will be permitted. All lifting will be done with boom lifts or similar.

3.3.7 The new build will be subject to some shading but as shown in Photograph 3, this is likely to be dappled. Likewise, some seasonal nuisance from leaf fall is to be expected. This may increase future pressure to remove stock from the site, however, many homeowners value the presence of mature trees. Should concerns warrant it, statutory (e.g., Tree Preservation Order) or non-statutory (e.g., restrictive covenant) protections could be put in place to manage future works.

3.3.8 Dust deposition may be an issue during the construction phase. See section 4.8 of the attached Method Statement for the dust management protocols.

3.3.9 At the time of writing, the is no plan showing the route of proposed new services. These must be located outside the Root Protection Areas as shown on the Tree Protection Plan. Where this is not practicable, a safe working method must be agreed with the scheme arborist prior to any works being carried out.

3.3.10 In summary, the proposed build will not impact the site's public amenity value and the build can be achieved with a minimal, temporary impact to the retained trees.

3.3.11 The content of the following method statement must be communicated to all site staff and visitors, by way of induction or a toolbox-talk, to ensure everyone on site is aware of their responsibilities.

4 ARBORICULTURAL METHOD STATEMENT

4.1 CONTACT INFORMATION

Report Author	**Client/Agent**
John Pover	Lewis Smith
ESL (Ecological Services) Limited	Robert Doughty Consultancy Limited
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e-mail: john_pover@esl-lincoln.co.uk	e-mail: l.smith@rdc-landplan.co.uk

4.1.1 The Client may retain the services of a specialist to carry out specific tasks relating to this project (e.g., Access Facilitation Pruning); contact details for specialist contractors are available from the Client.

4.2 AUDITING

4.2.1 It is strongly recommended an auditable record of all protection measures be kept; this should include records of toolbox talks and inductions, together with the locations, specifications and inspection regimes for fencing, ground protection and any other measure implemented to comply with this Method Statement.

4.3 PRE-COMMENCEMENT TREE OPERATIONS

4.3.1 There is currently no requirement to undertake any tree works associated with this project. Should this change, advice must be sought from the scheme arborist prior to any operations commencing.

4.3.2 All tree related operations (e.g., crown modification) will be completed before works commence on site.

4.3.3 These operations will be undertaken by a suitably qualified arborist working to industry best practice (e.g., BS 3998). Method statements must be submitted prior to any proposed operations commencing.

4.4 BIOSECURITY

4.4.1 Good biosecurity practices must be used, such as disinfecting tools used on one tree before using them on another and cleaning soil/debris from vehicles, boots and clothing prior to leaving site.

4.5 BARRIERS AND FENCING

4.5.1 By default, protective fencing and associated signage will be installed outside the Root Protection Areas as shown on the Tree Protection Plan before works commence on site. Any installation within a Root Protection Area will be agreed with the scheme arborist in advance. The Root Protection Area defined in the schedule will be applied to the trees, tree groups and hedgerows and/or any remnant thereof. Restrictions regarding Root Protection Areas (as given below) will apply during all operations to install protective fencing.

4.5.2 Barriers must be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained tree(s). They will be inspected by the site manager to ensure they remain effective throughout the duration of the works. Examples of protective fencing are shown in Diagrams 1 (default) and 2 (above-ground stabilising system).

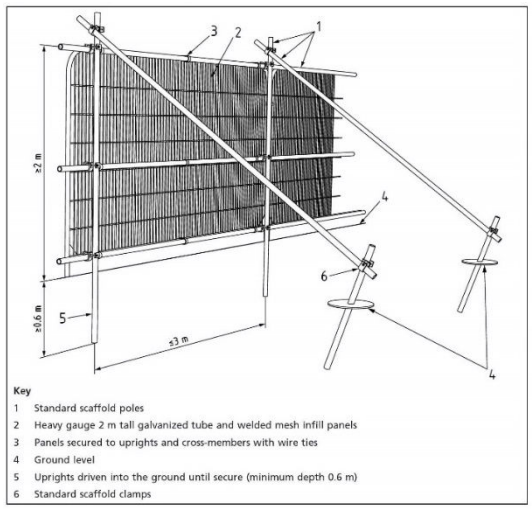


Diagram 1. Default specification for protective barrier.

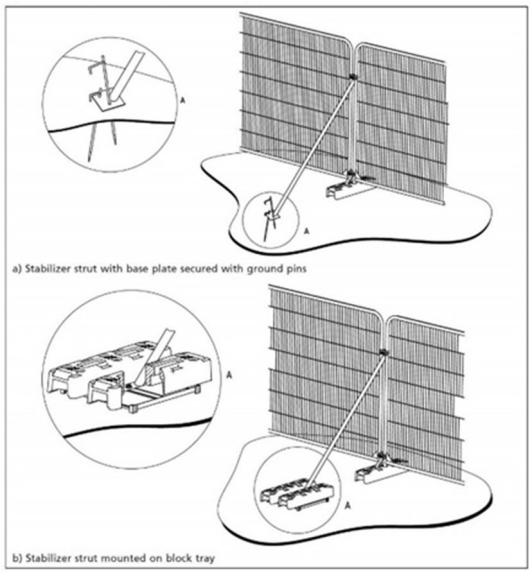


Diagram 2. Examples of above-ground stabilizing systems.

4.6 ROOT PROTECTION AREAS

4.6.1 A Tree Protection Plan is given as Figure 1.

4.6.2 The following restrictions must be applied to all Root Protection Areas. By default, there must be:

- No access by foot- or vehicular-traffic into a Root Protection Area.

- No storage on or adjacent to a Root Protection Area of spoil, materials, chemicals, tools, vehicles or any other thing that could lead to compaction or contamination of the rooting environment or that could impact a tree's roots, stem or canopy.
- No changes to ground level within a Root Protection Area.

4.6.3 Additional precautions for outside Root Protection Areas:

- The site manager will safeguard against contamination of Root Protection Areas (e.g., wash-off or chemical/fuel spill).
- There must be no fires lit within 20m of a Root Protection Area (this includes areas designated for smokers). Always note wind direction before starting a fire so that debris (especially that capable of causing ignition) does not blow into a Root Protection Area.
- No sprayed herbicide will be used near to a Root Protection Area as overspray or drift could affect retained trees. Only use topical application and always follow the manufacturer's instructions.

4.6.4 Roots with a diameter less than 25mm must be cut with clean, sharp tools, leaving as small a wound as possible. Root clusters less than 25mm in diameter (including fibrous roots) must be preserved where possible and care must be taken not to damage the bark surrounding roots.

4.6.5 Roots greater than 25mm must be preserved. These roots must not be severed without first being assessed by the local authority tree officer or a suitably qualified arboriculturist. If pruning is unavoidable, it must be done with clean, sharp tools to minimise the wound.

4.6.6 If roots become exposed during work, care must be taken to avoid desiccation or exposure to temperature change, especially rapid changes in the temperature of the air surrounding them. Soil level must be restored (without compaction) as soon as possible. Until this is done, exposed roots must be covered with dry sacking or similar, especially overnight.

4.6.7 Within hardstanding/highway limits, backfill around the roots with inert granular material mixed with topsoil or sharp sand (*not* builder's sand) and avoid excessive compaction. Outside these areas, backfill with the excavated soil and compact lightly, leaving it slightly proud of the surrounding surface to allow for natural settlement. Other materials must *not* be added to this backfill.

4.7 GROUND PROTECTION

4.7.1 The minimum specification for ground protection is:

- For pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame to form a suspended walkway or on top of a compression-resistant layer (e.g., 100mm depth of woodchip) laid onto a geotextile membrane.
- For pedestrian-operated plant up to a gross weight of 2t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g., 150mm depth of woodchip) laid onto a geotextile membrane.

- For wheeled or tracked construction traffic exceeding 2t gross weight, an alternative system (e.g., proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice to accommodate the likely loading to which it will be subjected.

4.8 DUST MANAGEMENT

4.8.1 Trees and hedgerows adjacent to the proposed works will be inspected on a regular basis (at least once every two weeks during the growing season) for signs of dust/debris deposition. If found, it will be washed off using clean water and a low-pressure delivery system. It must not be knocked or brushed off as this may cause damage to the tree/hedgerow.

4.8.2 Where practicable, operations likely to produce dust or flying debris should be located away from any Root Protection Area. If this is not practicable, protective screens will be erected to prevent impact damage to adjacent trees.

4.9 CONTRACTOR PARKING, SITE HUTS AND FACILITIES, STORAGE AREAS

4.9.1 These facilities are restricted to the footprint of existing carriageways, hardstanding or on land outside the Root Protection Areas as shown on the Tree Protection Plan.

4.9.2 Areas used for storing, fuelling or maintenance of tools and equipment must be located away from Root Protection Areas. Where this is not possible, measures must be implemented (e.g., spill mats) to ensure there is no pollution of the soil within or adjacent to a Root Protection Area.

4.10 WORKING SPACE

4.10.1 Consideration must be given to working space required for construction. Operatives and materials must be able to move without entering into/passing over a Root Protection Area or impacting adjacent trees. Care must be taken regarding the overhanging canopies. Where necessary, use a banksman.

4.11 SERVICES

4.11.1 All new services will be installed outside the Root Protection Areas as shown on the Tree Protection Plan. If this is not practicable, a safe-working method will be agreed with the scheme arborist prior to works commencing.

4.12 MITIGATION PLANTING

4.12.1 No mitigation planting is currently required. An area within a field immediately east of the site has been set aside for Biodiversity Net Gain (BNG). Any planting associated with BNG will not impact the retained trees.

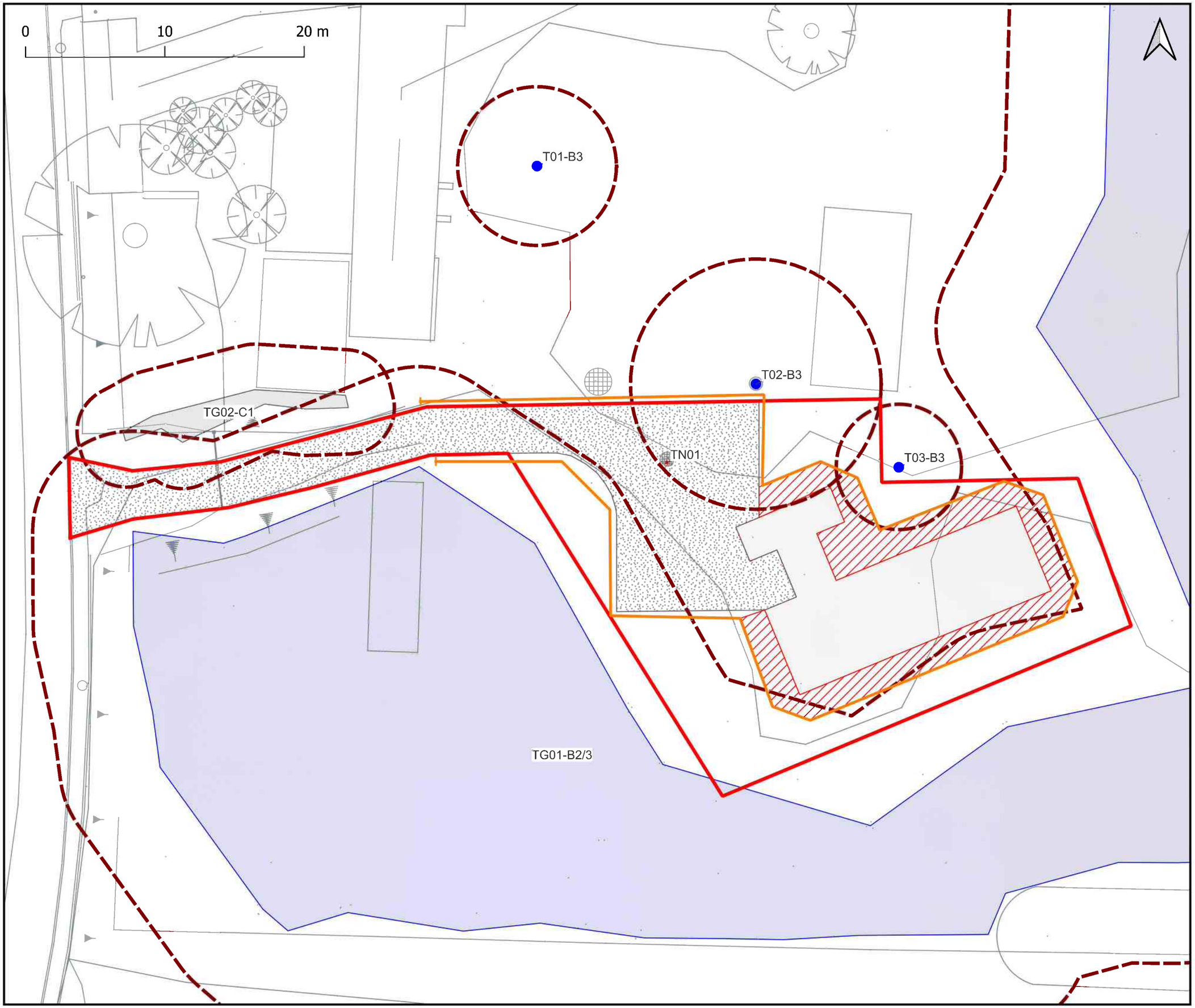
5 POST-DEVELOPMENT

5.1 REMOVAL OF PROTECTIVE MEASURES

5.1.1 Works to remove any protective measures (such as fencing) must be carried out in a way that respects the restrictions associated with a Root Protection Area.

KEY

- Target note
- Cat B tree
- Site boundary
- Protective fence
- Cat B tree group
- Cat C tree group
- RPA/CEZ
- Ground protection
- Hardstanding
- Building



ESL (ecological services) limited

SITE NAME:
Stamford House Farm, Cowbit.

DRAWING TITLE:
Tree Protection Plan.

Dwg no.: ES192-L074-001
Scale: 1:250 @ A3

Date: May 2025
Figure: 1-01

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APPENDIX 1

TREE SCHEDULE

Tree number	Species	Height	Stem type	Estimated	Stem Diameter	Branch spread - North	Branch spread - East	Branch spread - South	Branch spread - West	Height above ground - First significant branch and direction	Height above ground - Canopy	Life stage	Physiological condition	Structural condition	Preliminary Management Recommendations	Estimated Remaining Contribution	Category	RPA (m)	RPA (m^2)
T01	Msil	5	S		475	6.00	6.00	5.50	5.50	2S	2.00	Mature	Fair	Fair	None	20+	B3	5.70	102.00
T02	Claw	12	S		750	7.00	6.50	6.50	6.00	1S	1.00	Mature	Fair	Fair	None	20+	B3	9.00	255.00
T03	Apse	8	S		375	4.00	4.00	4.00	4.00	2S	2.00	Mature	Fair	Fair	None	20+	B3	4.50	64.00

Tree group number	Species	Stem type	Estimated	Stem Diameter	Height	Branch spread	Height above ground - First significant branch and direction	Height above ground - Canopy	Life stage	Physiological condition	Structural condition	Preliminary Management Recommendations	Estimated Remaining Contribution	Category	RPA (m)
TG01	Apse Fexc Ppad Claw Ahip Apen Apla Sfra Lova Cmon Populus sp.	S/MS		600	18.00	6.5	2N	2.00	Mature	Fair	Fair	None	20+	B2/3	7.20
TG02	Claw Apse Lova Snig	S		275	12.00	2.5	1S	1.00	Mature	Fair	Poor	None	10+	C1	3.30

Code	Scientific name	Common name
Ahip	*Aesculus hippocastanum*	Horse chestnut
Apen	*Acer pensylvanicum*	Striped maple
Apla	*Acer platanoides*	Norway maple
Apse	*Acer pseudoplatanus*	Sycamore
Claw	*Chamaecyparis lawsoniana*	Lawson cypress
Cmon	*Crataegus monogyna*	Hawthorn
Fexc	*Fraxinus excelsior*	Ash
Lova	*Ligustrum ovalifolium*	Garden privet
Msyl	*Malus sylvestris*	Crab apple
Ppad	*Prunus padus*	Bird cherry
Sfra	*Salix fragilis*	Crack willow
Snig	*Sambucus nigra*	Elder

Key to Tree Schedule

PHYSIOLOGICAL CONDITION
Good – A tree in good health with no significant defects.
Fair – A tree in generally good health that might require remediation for some issues.
Poor – A tree in poor health having issues that cannot be remediated.
Dead – A tree without sufficient live material to sustain life.

STRUCTURAL CONDITION
Good – A tree with no obvious sign of defect.
Fair – A tree with minor defects or defects that can be corrected.
Poor – A tree with major defects or defects beyond remediation.

CATEGORY
U - Trees unlikely to contribute beyond 10 years.
A - Trees of HIGH quality with an estimated remaining life expectancy of at least 40 years.
B - Trees of MODERATE quality with an estimated remaining life expectancy of at least 20 years.
C - Trees of LOW quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter of less than 150mm.