Former Goodfellows School, Spalding Common

British Standards 5837:2012 Arboricultural Method Statement and Tree Protection Plan



Client:

Country Court Care

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RammSanderson

ECOLOGY
FLOOD RISK
ARBORICULTURE
HABITATS

East Midlands:	West Midlands:	Yorkshire
Osprey House	Chase View Barn	The Former Library
Merlin Way	Dunston Business Village	10 Leeds Road
Quarry Hill Industrial Estate	Stafford Road	Sheffield
Ilkeston	Stafford	S9 3TY
Derbyshire	Staffordshire	[T] 0114 2439179
DE7 4RA	ST18 9AB	
[T] 0115 930 2493	[T] 01785 711 575	info@rammsanderson.com
(Issuing Office)		www.rammsanderson.com

Project Details

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Document Control

Originated:	**Ross Coverdale Pearson** HND MAborA	Senior Arboriculturist		09/08/2018
Reviewed:	**Nick Sanderson** BSC MSC MCIEEM	Director		16/08/2018
Issued to Client:	**Ross Coverdale Pearson** HND MAborA	Senior Arboriculturist		16/08/2018

1 EXECUTIVE SUMMARY

1.1 Background

i RammSanderson Ecology Ltd was instructed by Country Court Care Group to produce an Arboricultural Method Statement and Tree Protection Plan pursuant to Condition 8 of planning consent (H16-1037-16) issued by South Holland District Council, on the 1st February 2017, for the proposed erection of a new care home facility including new access, car parking areas, amenity space and associated landscaping at the site of the former Goodfellows School, Spalding Common.

ii This document should be read in conjunction with the Arboricultural Impact Assessment carried out for the development issued by Wharton Tree & Ecology Consultants in October 2016 (Red: 101016 0461 AIA V2 005).

iii Condition 8 states:

"An Arboricultural Method Statement shall be submitted to and approved in writing by the Local Planning Authority to detail how the necessary tree protection will be implemented and the details so approved shall be implemented in full before the commencement of development hereby permitted.

Reason: To ensure that the trees are adequately protected, in the interests of its visual amenity and that of the area in which it is set. This Condition is imposed in accordance with Policy SG18 of the South Holland Local Plan, 2006."

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2 INTRODUCTION AND BACKGROUND

2.1 Purpose and Scope

i This document is intended to provide sufficient information pursuant to condition 8 to the former Goodfellows School, Spalding Common consent (H16-1037-16).

ii The recommendations within this Arboricultural Method Statement are based on the findings of the provided Arboricultural Impact Assessment carried out by Wharton Tree & Ecology Consultants (October 2016). All dimensions for recommended root protection areas (RPA) are based on the data within the provided Arboricultural Impact Assessment. RammSanderson Ecology Ltd have not carried out a site visit for the purposes of inspecting any of the trees detailed within this document.

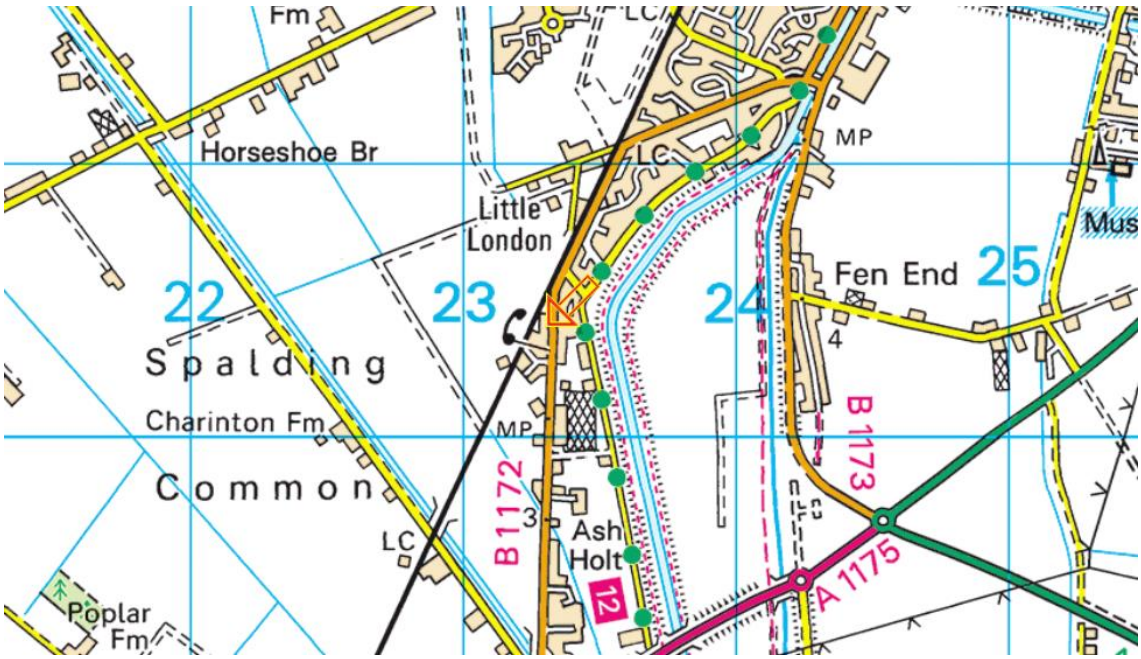
2.2 Responsibilities

i The responsibility for implementing this management plan will be the site contractor and any associated sub-contractors/management team during the build time and during any post construction requirements. A copy of this document should be kept on site and referred to where necessary.

2.3 Site Location and Context

i The site comprises the former Goodfellows School, Spalding Common, Spalding, Lincolnshire.

Figure 1: Site Location Plan



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Figure 2: Site Context Plan



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3 ARBORICULTURAL METHOD STATEMENT

3.1 Tree Protection Plan

i The Tree Protection Plan (Appendix A), details the required tree protection and mitigation measures for all trees proposed to be retained and integrated within the proposed layout.

ii The Tree Protection Plan is superimposed on the proposed layout and includes details of;

- Trees selected for retention and trees proposed for removal.
- The precise location and specification of protective barriers to form a construction exclusion zone around the retained trees.
- The position, extent and general construction specification of any new permanent new hard surfacing within the RPA.

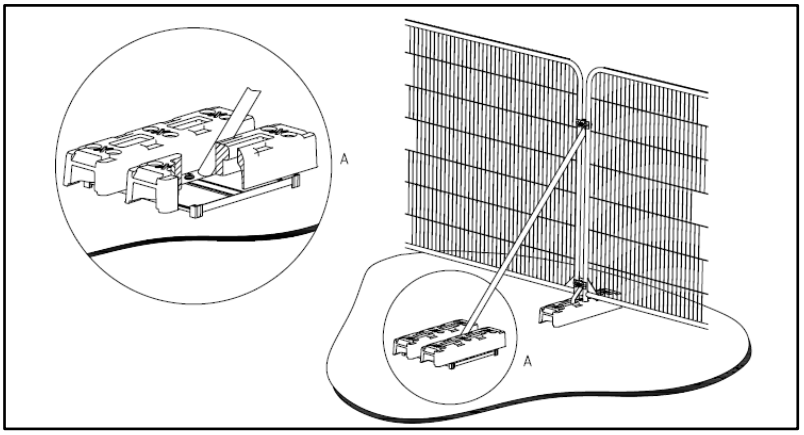
3.2 Erection of Protective Fencing

i Temporary protective fencing, in accordance with BS5837:2012 'Trees in relation to design, demolition and construction', will be erected and maintained for the duration of construction works to protect all retained trees.

ii The location for this protective fencing will be as detailed on the Tree Protection Plan (Appendix A).

iii The fencing should consist of 2m tall welded mesh panels on rubber or concrete feet which are well braced to resist impacts as seen below (Figure 3). It should be erected at the outset of the development works, before any activities (including demolition and ground works) are carried out or materials and plant brought onto site and maintained in place until the completion of all construction works.

Figure 3: Specification for protective barrier © British Standards Institute



iv All-weather warning notices should be attached to the fencing to clearly identify the area as a tree protection exclusion zone into which access is not permitted

v Once erected, the protected area should be regarded as sacrosanct and the fencing should not be removed or altered unless recommended by the project Arboriculturist and, where necessary, approval from the local planning authority.

3.3 Hard Surfacing Within the Root Protection Area

i All areas of new hard surfacing within the RPA which require the installation of a 'no-dig' type surface are detailed on the Tree Protection Plan (Appendix A). These will be constructed to a specification which incorporates a three-dimensional cellular confinement system (e.g. CellWeb TRP™) and follows the recommendations within BS5837:2012 Section 7.4.

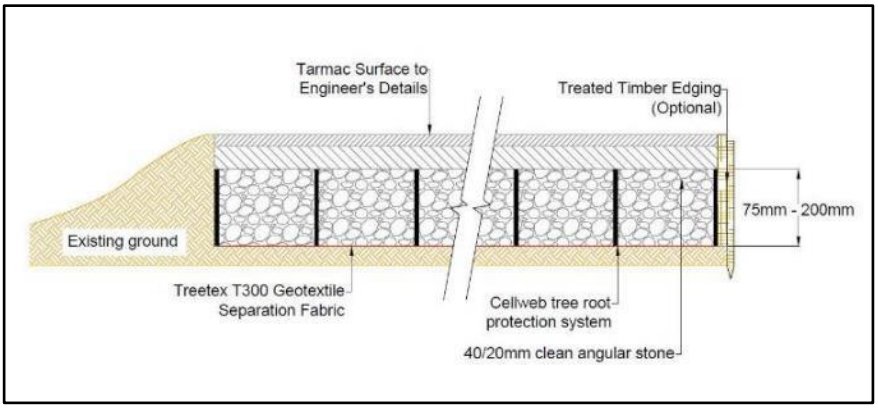
ii A 'no-dig' design will be used which does not require excavation into the soil other that the removal, using hand tools, of any turf layer or other surface vegetation. The structure of the hard surface will be designed to avoid localised compaction and the advice of a structural engineer will be sought to ensure that the design is suitable for the anticipated vehicle loads it will be subjected to.

iii An assessment will be made to confirm that the existing site topography lends itself to the installation of a three-dimensional cellular confinement system. Final on-site measurements will be taken to ascertain the extent of any incursions into the RPA and provide subsequent guidance on the extent of any 'no-dig' installation.

iv The new hard surfacing will be resistant to deformation by tree roots and will be set back from the tree's stem and above ground buttresses by a minimum distance of 500mm to allow for growth and movement.

v Indicative cross-sectional drawings of a suitable three-dimensional cellular confinement system (CellWeb TRP™) are shown below (Figure 4).

Figure 4: Cross section illustrating a permeable tarmac surface finish



3.4 Ground Works, Demolition & Construction Works

i Installation of all recommended protective mitigation measures prior to the commencement of any works, combined with use of temporary ground protection and/or the retention of existing hard surfacing within the RPAs, will allow the ground works to take place whilst minimising any adverse effect or impact on the retained trees.

ii All plant and vehicles engaged in ground works should either operate outside the RPA or run on temporary ground protection or existing hard standing, where appropriate.

iii During ground works and demolition, the utmost caution should be used to not sever any roots, especially those measuring ≥25mm in diameter. Any roots which are uncovered should be immediately wrapped/covered to prevent them from desiccation and rapid temperature changes. Backfilling with the original soil or suitable topsoil should be carried out as soon as is practicable to ensure that roots are exposed for the minimum amount of time. Any wrapping should be removed prior to backfilling and where necessary, additional watering of the reinstated soil should be carried out.

iv No roots ≥25mm in diameter will be removed without the prior approval of the project Arboriculturist and where necessary the approval of the Local Planning Authority. Any approved root pruning will be carried out by a suitably qualified and competent Arborist, following the guidance of BS3998:2012 'Tree Work – Recommendations'. Root pruning will be carried out using a suitable sharp cutting tool, with all cuts made to ensure that the wound is of the smallest possible diameter and with no raged or torn ends. Soil backfilling will take place as soon as practicable following any root pruning.

v In the case where plant or wide/tall loads are being used, it will be ensured that all parts of the equipment remain outside of the RPAs, in order that they can operate without coming into contact with any of the on-site or adjacent trees. All works will have appropriate supervision by a banksman, to ensure that adequate clearance from trees is maintained at all times.

vi Any minor access facilitation pruning that becomes necessary during the course of construction to maintain safe clearances will only be carried out with the prior approval of the project Arboriculturist and where necessary the Local Planning Authority. All approved work will be carried out suitably qualified and competent Arborists working to BS 3998:2010 and, where necessary, under the direct supervision of the project Arboriculturist.

vii If damage occurs to part of a tree during the works, the project Arboriculturist will be contacted without delay to allow an inspection of the damage to be carried out and recommendations made for appropriate mitigation.

3.5 Soil Compaction and Remediation Measures

i Soil that has been compacted will not provide suitable conditions for the survival and growth of vegetation, whether existing or new, and is a common cause of post-construction tree loss on development sites.

ii Compacted soil will adversely affect drainage, gas exchange, nutrient uptake and organic content, and will seriously impede or restrict root growth.

iii Soil compaction will be avoided around existing vegetation, including trees, and in areas where new planting or seeding is proposed.

iv Where soil compaction has occurred near to existing trees, remedial works might include sub-soil aeration using compressed air, and the addition of other materials, preferably of a bulky, organic nature (but excluding peat), to improve structure.

v Heavy mechanical cultivation such as ploughing or rotavation not be carried out within the RPA. Any cultivation operations within the RPA which are necessary for landscaping will be undertaken carefully by hand to minimize damage to the tree, particularly the roots.

vi Decompaction measures include forking, spiking, soil augering and tilthed radial trenching. Should any decompaction measures become necessary, they will only be carried out following an appropriate assessment by the project Arboriculturist and where necessary, with the prior approval of the Local Planning Authority.

3.6 Completion

i At the completion of the construction works, before removal of any of the tree protection measure at the completion of the project it is recommended that the advice of the project Arboriculturist is sought regarding whether a re-survey of the retained trees is necessary for signs or symptoms of damage and/or stress that the construction may have caused.

ii The protective fencing and ground protection measures should remain in position until its use is considered unnecessary and any risk of damage to the retained trees and/or their respective RPAs e.g. soil compaction from vehicular plant or machinery, has completely passed.

3.7 Tree Planting & After Care

i When planning or implementing any new tree planting scheme, it is recommended that the guidance within BS 8545:2014 'Trees: from nursery to independence in the landscape – Recommendations' is followed.

ii The following points summarise good after care for newly planted trees with an additional consideration to any necessary formative, corrective and maintenance pruning:

iii Water immediately after planting and weekly throughout the first growing season by allowing 10 – 20 litres of water for each tree. This is especially important during prolonged periods of dry weather in which case the frequency of watering may need to be increased.

iv Do not allow weeds or grass to grow within a 500mm radius of the stem.

v Maintain an organic mulch (e.g. composted woodchip or bark) to a minimum depth of 75mm for a radius of 500mm around the base of new trees.

vi At the end of each growing season, check that tree-ties are not damaging the tree stems and loosen if necessary.

vii Ensure that the tree stakes remain firm while the new planting becomes established and only remove when the tree can support itself, usually after a period of 2 -3 years.

viii Carry out formative pruning to the young trees by removing dead or crossing branches, suckers arising from the roots or weak shoots on the stems.

3.8 Contacts

i RammSanderson Ltd. 0115 930 2493, info@rammsanderson.com

4 REFERENCES

i The British Standards Institution (2012). BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations*.

ii The British Standards Institution (2010). BS 3998:2012 *Tree work – Recommendations.*

iii Department of Communities & Local Government (2012). *National Planning Policy Framework*, London: DCLG.

iv Wharton Tree & Ecology Consultants (October 2016). Arboricultural Impact Assessment: Former Goodfellows School, Spalding Common (Ref: 101016 0461 AIA V2 005).

Appendix A: Tree Protection Plan - RSE_1750_TPP_V1

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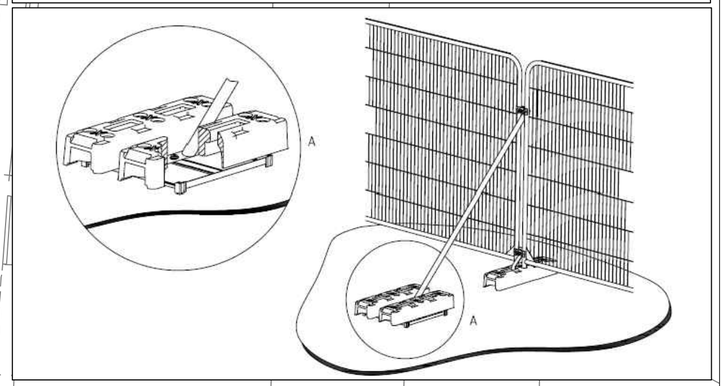
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T13-C1
5.4m
T27-C1
T26-C1
5.6m
9.5m
T12-C1
9.5m
T11-C1
T29-C1
4.5m
5.4m
T10-C1
T8-C2
T30-C1
7.5m
T9-C1
T31-C1
T32-C1
7.5m
7.5m
T7-C1
T6-C1
G33-C2
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T4-C1
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SPALDING COMMON

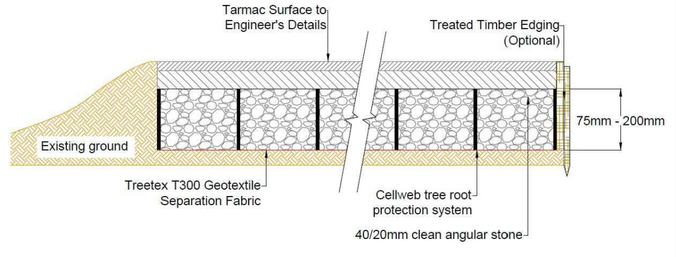
Tree Protection Fencing

Tree protection fencing is to be installed at the positions shown at the commencement of works, before any ground works or soil stripping are carried out and before vehicles or materials are brought onto site.

The fencing will consist of a vertical and horizontal scaffold framework which is well braced to resist impacts as shown above. The areas enclosed are to be maintained as a total exclusion zone to all construction activity. All-weather warning notices will be attached to the fencing to clearly identify the area as a tree protection exclusion zone into which access is not permitted.

No working activity, storage of materials, ground level changes, excavations or vehicular access is permitted within the protected area. Once erected, the protected area are to be regarded as sacrosanct and the fencing must not be removed or altered unless recommended by the project Arboriculturist an, where necessary, approval from the local planning authority.





Hard Surfacing Within the Root Protection Area

All new hard surfacing within the root protection area (RPA) is to be constructed using a three-dimensional cellular confinement system (for example Cellweb TRP), incorporating geotextile or impermeable barriers as appropriate and installed using a 'no-dig' technique, as detailed in BS837:2012 Section 7.4.

For areas of new hard surfacing, the design will not permit excavation into the soil other that the removal, using hand tools, of any turf layer or other surface vegetation.

The removal of any existing hard surfaces will be carried out with care, using hand tools as much as possible. Where this is not practicable, a small excavator will used to remove the top surface, working backwards from the existing tarmac in order that no vehicles drive on the underlying soil, once exposed.

For new hard surfaces, the underlying soil structure will be protected from compaction during construction by a combination of appropriate temporary ground protection and by 'rolling out' the new surface by working forward from the surface as it is constructed.

The structure of the hard surface will be designed to avoid localised compaction and in all cases, a structural engineer should confirm that the design is suitable for the anticipated vehicle loads it will be subjected to. The finished tarmac surface will be permeable and able to resist deformation by tree roots.

LEGEND:

- TX-A — Category A - Trees of High Quality
- TX-B — Category B - Trees of Moderate Quality
- TX-C — Category C - Trees of Low Quality
- TX-U — Category U - Trees Unsuitable for Retention
- Tree Protection Fencing
- 'No-dig' / 3D cellular confinement system to be used for new hardstanding.

RammSanderson ARBORICULTURE

Client :
Country Court Care

Project:
Goodfellows School, Spalding Common

Drawing Title :
Tree Protection Plan

Drg No.	Rev :
RSE_1750_TPP	V1

Drn By :	Scale :	Date :
RCP	1:250@A2	09/08/2018

RammSanderson Ltd
East Midlands: Osprey House, Merlin Way, Ilkeston, DE7 4RA T: 0115 930 2493
West Midlands: Chase View Barn, Dunston Business Village, Stafford, ST18 9AB T: 01785 711 575
Yorkshire: The Former Library, 10 Leeds Road, Sheffield, S9 3TY
www.rammsanderson.com