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Arboricultural Impact Assessment

- Tree Survey
- Tree Protection Plan
- Arboricultural Method Statement

At:-

RBC Gypsy & Traveller Transit Site
Island Road
Reading
RG2 0RP

On behalf of:-

HCC Property Services
3 Minsters House
Winchester
Hampshire
SO28 8UL

Prepared by:

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Survey Date:	2 nd July 2020 22 nd October 2021
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Project no:	1529

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1 BACKGROUND

- 1.1** This Arboricultural Impact Assessment has been instructed by HCC Property Services to specify tree protection measures and assess the arboricultural impact of the proposed construction of a Gypsy and Traveller Transit Site at Island Road, Reading.
- 1.2** Trees were surveyed, with findings shown in the Tree Schedule in Appendix B and plotted on the Tree Protection Plan in Appendix A. This also shows tree protection measures, which are specified in the Arboricultural Method Statement in section 5 below. The arboricultural impact is assessed in section 6, which assumes that these measures are followed.
- 1.3** The tree survey was undertaken, and this report has been prepared, by Simon Stephens MA Oxon, Dip Arb (RFS), MArborA, C Env, MICFor a Registered Consultant with the Arboricultural Association, with over 20 years relevant experience.
- 1.4** This survey and report have been prepared in accordance with the recommendations of BS 5837:2012, Trees in relation to design, demolition and construction - Recommendations.
- 1.5** Documentation supplied:
 - Topographical Survey
 - SJ Stephens Associates, Tree Constraints Plan, drawing no: 1539-01
 - HCC Property Services, Proposed Site Plan: drawing no EO3883-HCC-00-XX-DR-A-1500 P1-00

2 SURVEY DETAILS AND SCOPE

- 2.1 The site survey included trees and shrubs, within and immediately adjacent to the red line boundary, with a stem diameter over 75mm at 1.5m height, as shown located on the Tree Protection Plan, included as Appendix A.
- 2.2 Tree inspection took place from ground level with the use of binoculars, sounding hammer and metal probe using the Visual Tree Assessment method (Mattheck & Breloer 1994). The presence and condition of bark and stem wounds, cavities, decay, fungal fruiting bodies and any structural defects that could increase the risk of structural failure were noted.
- 2.3 Tree diameters were measured using a girthing tape and tree heights were measured using a hypsometer. Where use of a tape was restricted by site factors, diameters were estimated, with the diameter recorded in the tree schedule as eg “est 300”.
- 2.4 At the time of the surveys, the weather was fine with no restrictions to visibility. Broadleaf trees were in leaf. In places, dense undergrowth restricted access to tree stems.
- 2.5 Tree details are shown on the Tree Protection Plan included as Appendix A. Tree locations have been taken from the topographical survey provided. Where not included on the topographical survey, they have been determined by measuring distances from features shown on the plan, using a laser measuring device. The following information was recorded for each tree, and is shown in the Tree Schedule included as Appendix B:
 - **Number:** an identity number for each tree, prefixed with a “T”, which cross references locations shown on the plan with the schedule in Appendix B. Where a number of trees are located close together and are similar in character and management requirements, they have been treated as a Group under a single number, prefixed with a “G”.
 - **Species:** common name.
 - **Tree height:** approximate height in metres.
 - **Stem diameter:** diameter in millimetres, taken at 1.5m above ground. Where there are a number of stems, stem diameters are recorded in the condition column.
 - **Branch spread:** approximate spread in metres to N,S,E and W of the trunk. The approximate branch spread is drawn on the plan.
 - **Canopy clearance:** approximate height of the canopy above ground. Where a significant, low lateral branch is present, its height and direction of growth is included in the Condition column.
 - **Age class:** Young, Semi-mature, Early mature, Mature, Over-mature, Veteran.
 - **Condition:** features that affect the safe useful life expectancy and amenity of the tree, including the presence of decay or any physical defect.
 - **Management Recommendations:** recommendations to ensure the health and safety of the tree, within the future development.
 - **Estimated Remaining Contribution:** <10 years, 5-15 years, 10-20 years, 15-30 years, 20-40 years, >40 years.

- **Category grading:** tree classification taken from BS 5837:2012, Trees in relation to design, demolition and construction (see Appendix C for details), as follows:
 - Category U: Unsuitable for retention, trees with less than 10 years life expectancy, normally recommended for removal (Red)
 - Category A: high quality trees, able to make a substantial contribution for at least 40 years, normally retained unless there is an over-riding reason for removal and appropriate mitigation. (Green)
 - Category B: moderate quality trees, able to make a significant contribution for at least 20 years, normally retained. (Blue)
 - Category B/C: an intermediate category between categories B and C (not specifically described in BS5837). Trees, which should be retained wherever possible, providing retention does not unreasonably constrain the layout. (Blue)
 - Category C: low quality, in adequate condition to remain for at least 10 years, or young trees <150mm stem diameter. Trees which can be removed to allow the desired layout or new planting. (Grey)

For category A, B and C trees, a subcategory has been allocated, providing information on the reasons for selection of a specific category, as follows:

- Subcategory 1: mainly arboricultural values.
 - Subcategory 2: mainly landscape values.
 - Subcategory 3: mainly cultural values, including conservation.
- Trees have been classified irrespective of the possible proximity to future construction. The BS 5837 category is colour coded, as indicated above, on the plan included as Appendix A.
- **Protection Distance:** the protection distance in metres required to provide the Root Protection Area recommended in BS 5837, assuming a circular area centred on the tree.
- **Root Protection Area (RPA):** the area in m², as recommended in BS 5837, to provide sufficient rooting area to ensure tree survival and which, in most situations, should be fenced off to prevent root damage from construction activities.

3 SURVEY LIMITATIONS

- 3.1 No internal decay devices, or other invasive tools to assess tree condition, were used.
- 3.2 No soil excavation or root inspection was carried out.
- 3.3 This survey has not considered the effect that trees or vegetation may have on the structural integrity of future building through subsidence or heave.

- 3.4** The tree survey has been undertaken for planning purposes. Although any obvious structural defects have been noted, a Tree Hazard Assessment has not been carried out. Mature trees close to highly populated areas or public highways should normally be checked for safety annually, by a suitably qualified person.

4 LEGAL PROTECTION OF TREES

- 4.1** The Reading Borough Council website was viewed on 03-11-2021, showing that there is a Tree Preservation Order protecting woodland between Island Road and the A33. Before any tree work is undertaken ahead of receipt of planning approval, the council should be contacted to confirm whether trees on the site are included in the Tree Preservation Order.
- 4.2** Once planning permission has been granted, provided the application clearly shows any trees to be removed or pruned, this overrides protection provided by Tree Preservation Orders or Conservation Areas, provided the work is necessary to implement the approved development. If not essential, a separate tree work application will need to be submitted for trees protected by a Tree Preservation Order.

5 ARBORICULTURAL METHOD STATEMENT

5.1 Site Overview

- 5.1.1** The proposal is for the construction of Gypsy and Traveller Transit Site at Island Road. Due to flood concerns ground levels across the site will be lifted and a retaining wall constructed alongside the river. The proposed site plan is included as Appendix F and has been added to the survey drawing, along with tree details, to create the Tree Protection Plan attached as Appendix A. A swale is proposed to the south of the site.
- 5.1.2** There are a mixture of Goat willow and crack willow growing alongside the river to the west of the site. Just outside the eastern boundary, within the sewage treatment site, there is a bund containing a range of tree species including white willow and ash.

5.2 Tree Work

- 5.2.1** Details of proposed tree works are included in the Tree Schedule included as Appendix B.
- 5.2.2** Ten trees are proposed for removal, as detailed in section 6.1 below.

- 5.2.3 In addition, three early mature crack willow (T1, T2 and T3) will be topped at 1.8m and allowed to re-shoot.
- 5.2.4 All tree work must be undertaken to the standards set out in BS 3998:2010 Tree work – Recommendations.

5.3 Root Protection Areas

- 5.3.1 Root Protection Areas are shown for all trees in the tree schedule included as Appendix B. They are also shown for all retained trees, as circular areas centred on the trunk, on the Tree Protection Plan included as Appendix A. Where there are physical obstructions to root growth the Root Protection Area should be shown as an equivalent area that is more likely to reflect actual root growth. The Root Protection Area shows the area around a tree in which all construction activity must normally be excluded, unless appropriate protection measures are implemented.

5.4 Tree Protection Fencing

- 5.4.1 Tree Protection Fencing must be erected where shown on the Tree Protection Plan, included as Appendix A. This will provide full protection of the Root Protection Areas of all retained trees within the site, other than for:
- areas hatched in blue on the Tree Protection Plan, where No-Dig Construction must be used, as described in section 5.5 below, to protect underlying roots.
 - areas cross hatched red on the Tree Protection Plan, where there will be excavation at the edge of Root Protection Areas, but where hand excavation must be used, as described in section 5.7, to minimise potential root damage.
- 5.4.2 Tree works can be completed before Tree Protection Fencing is erected, however no contractors plant or vehicles must be allowed to track within the Root Protection Areas unless ground protection panels are laid.
- 5.4.3 Tree Protection Fencing must be from weldmesh panels, at least 2m high, securely fixed, with wire or scaffold clamps, to a rigid framework. This framework must be constructed from scaffold tubes with vertical tubes, at a maximum interval of 3m and driven into the ground at least 0.6m. The structure must be well braced to resist impacts, constructed as per Figure 2 of BS5837:2012, which is reproduced in Appendix D.
- 5.4.4 After erection of Tree Protection Fencing and installation of ground protection, 2 days notice must be given to the Local Planning Authority before demolition or construction, including any ground work, starts on site.

- 5.4.5 Tree Protection Fencing must be maintained and retained for the duration of the works, or until such time as agreed in writing with the Local Planning Authority.
- 5.4.6 Weatherproof notices must be fixed to the Tree Protection Fencing, and maintained, stating:-

TREE PROTECTION AREA

KEEP OUT

TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS
CONTRAVENTION MAY LEAD TO CRIMINAL PROSECUTION
THE FOLLOWING MUST BE OBSERVED BY ALL PERSONS:

- The Protection Fence must not be moved
- No person or machine must enter the area
- No materials or spoil must be deposited
 - No excavation must be permitted

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN
PERMISSION OF THE LOCAL PLANNING AUTHORITY

5.5 No-Dig Construction Areas

- 5.5.1 The No-Dig areas, shown hatched blue on the Tree Protection Plan included as Appendix A, must be constructed without excavation apart from the removal of turf/organic matter, which must be carried out by hand. Excavators, dumpers and other site traffic must not be allowed to track on the No-Dig areas until roots are protected by the No-Dig surfacing or by ground protection panels.
- 5.5.2 Where existing soft areas within No-Dig Construction areas are to be replaced by new hard surfacing, they must be constructed without excavation apart from the removal of turf/organic matter, which must be carried out by hand. Engineering details must avoid localised compaction, using both a two dimensional geogrid, and a three dimensional cellular confinement system as integral components of the sub-base. A typical section is shown on the Tree Protection Plan included as Appendix A. As well as being fit for purpose, the design and methodology must protect tree roots, by ensuring the following:-
- topsoil/turf can be removed carefully by hand to a maximum of 75mm, but less if roots are found nearer the surface.
 - following leveling with soil or sand, a permeable, non-woven geotextile membrane, must be laid.
 - a suitable two dimensional geogrid, such the TriAx Geogrid supplied by Tensar International (www.tensar.co.uk), or the Biaxial Geogrid supplied by Geosynthetics Ltd (www.geosyn.co.uk), must be laid over the entire area and underneath the edging.
 - pressure treated timber edging boards, supported by driven stakes must be used.
 - a suitable cellular confinement system must then be laid to manufacturers instructions on top of the geogrid. Products that might be considered include Geoweb, supplied by Greenfix (www.greenfix.co.uk) or Cellweb, supplied by Geosynthetics Ltd (www.geosyn.co.uk). The depth of the system must be adequate to take the maximum axle weight, as per manufacturers guidance.

- the cellular confinement system must be filled with clean (no fines), washed angular, 20/40mm, stone to provide load support, while allowing air and moisture to permeate to the root zone.
- a further permeable, non-woven geotextile membrane, such as TreetexT300, or an alternative approved product which has similar oil trapping qualities, must be laid over the cellular confinement system.
- a porous, surfacing material, free from contaminants, must then be laid. Either sand bedding and block paving, gravel or permeable tarmac would be suitable.
- removed turf/topsoil can be used to grade surrounding ground levels.

5.5.3 No-Dig construction will result in an increase in levels. However, if a further increase in levels is required, additional layers of the cellular confinement system can be added to the section detail provided.

5.5.4 Site traffic, including pedestrians, must not be allowed on the No-Dig areas until roots are protected by the No-Dig surfacing, or unless suitable ground protection has been laid. If access is required across No-Dig areas for plant, before the No-Dig surfacing is laid, ground protection panels must be laid. Either Trakmats (supplied by the Marwood Group, www.marwoodgroup.co.uk), Groundtrax panels (see www.groundtrax.com), Ground-Guards, as supplied by Greentek (www.greentek.org.uk), or a similar approved product, must be used, laid on top of a compressible layer of sand or woodchips, laid onto a geotextile. If access is required for pedestrians, 25mm plywood or side butting scaffold boards must be laid, on top of a compressible layer of sand or woodchips, laid onto a geotextile.

5.6 Hand Dig Areas

5.6.1 The Hand Dig trenches, shown cross-hatched red on the Tree Protection Plan, must be dug to a depth of 0.9m by hand, neatly severing any roots found, using secateurs or a hand saw. Any further excavation required, either to a greater depth or further from the trees, can be carried out with an excavator, since it is unlikely that further significant live roots will be found.

5.6.2 Heavy-duty polythene must be used to line the side of the trench adjacent to the trees, before concrete for foundations is poured, to avoid the toxic effects of cement on tree roots.

5.6.3 On no account must use of an excavator be used in the top 0.9m of the Hand Dig areas, which would rip roots and cause unnecessary damage.

5.7 General measures

5.7.1 No construction activity whatsoever, including routing of underground services, storage of materials or on-site parking, must be allowed within Root Protection Areas, other than that specifically described above.

- 5.7.2 No mixing or storage of cement, concrete, oil, fuel, bitumen or other chemicals must be permitted within 10m of the trunk of any retained trees, nor in any position where the slope of the ground could lead to contamination of the Root Protection Area.
- 5.7.3 Fires must not be lit in a position where their flames could extend to within 10m of foliage, branches or trunk.
- 5.7.4 Landscape works carried out within Root Protection Areas must be undertaken with great care so as not to damage shallow roots. Tractor mounted rotovators or other heavy mechanical cultivation must not be used within the Root Protection Areas.
- 5.7.5 If any tree shown for retention is removed, uprooted or destroyed, another tree must be planted in the same location, at a size and species to be agreed in writing with the Local Planning Authority.
- 5.7.6 A copy of this report and the Tree Protection Plan must be kept on site and must be fully understood by the Site Agent.

5.8 Bat roosts

- 5.8.1 The current legislation makes it a criminal offence to disturb, damage or destroy any bat roost or hibernation area. Contractors must be reminded of their responsibilities and should contact the relevant authorities if any signs of bats are found.

5.9 Birds

- 5.9.1 The current legislation makes it a criminal offence to disturb nesting birds. The nesting season is generally assumed to be from 1st March to 31st July, however this can vary depending on species and location. During these months a careful inspection must be made before work commences and works must be postponed if active nests are found.

5.10 Arboricultural Supervision

5.10.1 A qualified Arboricultural Consultant must be retained during the period of construction to carry out the following:

- to liaise with the contractor, prior to construction or demolition starting on site, to ensure this Arboricultural Method Statement is fully understood and can be complied with in full. If any revisions are required, a revised Arboricultural Method Statement must be approved by the Local Planning Authority, prior to construction or demolition starting on site.
- as necessary, to advise on any issues at the request of the local planning authority, the developer, architect or contractor.

The details of each site visit must be recorded using a site visit proforma, with copies circulated to the contractor, developer and the local authority Tree Officer within 3 working days of the visit.

6 ARBORICULTURAL IMPACT ASSESSMENT

6.1 The following trees, categorized as per BS 5837 (see Appendix C for details), are proposed for removal:

- Category U – unsuitable for retention: T36.
- Category C – low quality:
 - T9 – a 6m elder
 - T13 – a 2m thorn which is engulfed in bramble
- Category B/C – between categories B and C:
 - T7, T9a and T11 – multi-stem goat willow, up to 8m in height. T7 and T9a will be cut to ground level and allowed to re-shoot.
 - T8 and T14 – thorn of up to 6.5m in height
- Category B – moderate quality:
 - T4 – a 3.5m thorn showing good shape and vigour
 - T12 – a 4.5m thorn showing good shape and vigour

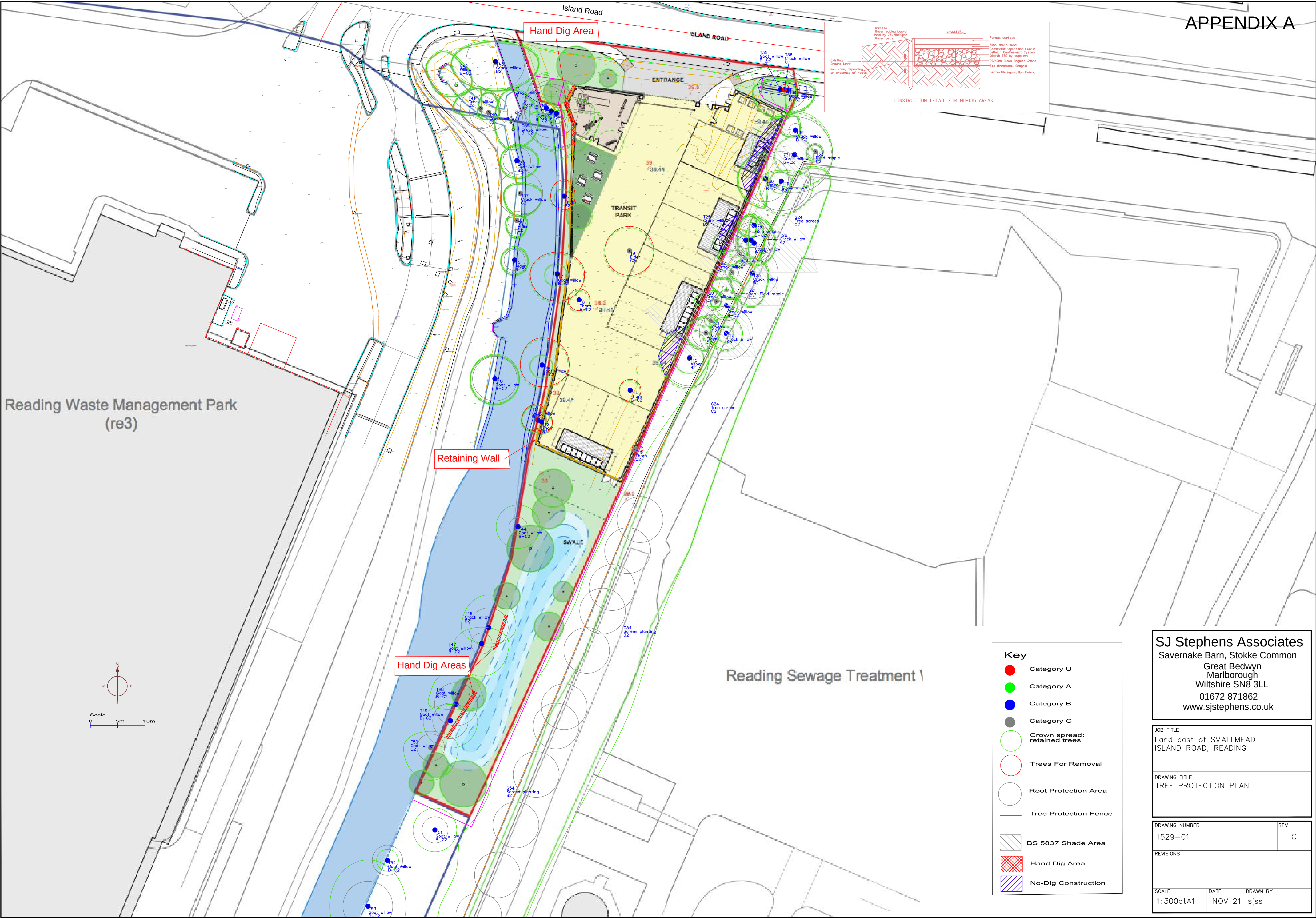
6.2 No trees of any particular significance are proposed for removal and new building has been kept back from trees to provide adequate separation distances to ensure their future sustainability.

6.3 Trees alongside the river will be removed to allow installation of the new retaining wall. Where possible, these will be cut to ground level and allowed to re-shoot. Trees on the western side of the river will not be affected, maintaining screening of the recycling site further to the west.

- 6.4** Protection measures have been specified to protect the Root Protection Area of all retained trees, other than for:-
- the crack willow, T1, T2 and T3, where foundations for the retaining wall will cause extensive root damage. However, rather than removing the trees, it is considered preferable to reduce them to 1.8m stumps and allow them to re-shoot and adapt.
 - T46, T48 and T49 where there will be excavation at the edge of the Root Protection Areas for a new swale. Hand digging has been specified to minimise the damage and these trees are likely not to be severely affected.
- 6.5** Although preservation of Root Protection Areas is deemed to protect tree roots, in some cases buildings may need to be set further back to ensure the future sustainability of trees. If buildings are too close to trees, future occupiers may be likely to seek the reduction, or removal of trees, if they are cutting out excessive sunlight or providing a claustrophobic or threatening environment.
- 6.6** Section 5.2.2 of BS 5837:2012 states that “an indication of potential direct obstruction of sunlight can be illustrated by plotting a segment with a radius from the centre of the stem equal to the height of the tree, drawn from due North West to due East, indicating the shadow pattern through the main part of the day.” Shading patterns for key trees have been shown on the plan. This shows that new accommodation will be shaded in the afternoons. However, given the transitory nature of usage, shading is unlikely to be a issue.
- 6.7** Provided the recommendations in this report are followed, the arboricultural impact of this development on existing trees is considered acceptable. Arboricultural supervision has been included to assist with tree protection measures and a landscape plan, including new tree planting around the swale and the play area, can be conditioned.

7 REFERENCES

- *BS5837:2012 Trees in relation to design, demolition and construction – Recommendations.*
- *BS3998:2010 Tree Work. Recommendations.*
- *Common sense risk management of trees (FCMS024). Published by the National Tree Safety Group (www.ntsgroup.org.uk)*
- *The use of Cellular Confinement systems near Trees: a guide to good practice Arboricultural Association Guidance Note 12.*



Key

- Category U
- Category A
- Category B
- Category C
- Crown spread: retained trees
- Trees For Removal
- Root Protection Area
- Tree Protection Fence
- BS 5837 Shade Area
- Hand Dig Area
- No-Dig Construction

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JOB TITLE
Land east of SMALLMEAD
ISLAND ROAD, READING

DRAWING TITLE
TREE PROTECTION PLAN

DRAWING NUMBER	REV
1529-01	C

REVISIONS		
SCALE	DATE	DRAWN BY
1:300atA1	NOV 21	sjs

Tree/ Group No.	Species	Height (m)	Stem Diam. at 1.5m (mm)	Branch Spread (m)				Canopy Clearance (m)	Age Class	Observations	Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Protect- ion Distance (m)	Root Protect. Area (m2)
				N	S	E	W								
T1	Crack willow	10.5	340	6.5	1	1	4	2	Early mature	Twin stems from base- 190,280mm- both leaning to north west.	Pollard to 1.8m	15-30	B-C2	4.1	52
T2	Crack willow	10.5	410	3	7	8	4	1	Early mature	Four stems from base- 100, 190,240,260mm.	Pollard to 1.8m	15-30	B2	4.9	76
T3	Crack willow	10.5	520	0.5	8	8	0.5	0.5	Early mature	Four stems from base- 250,270, 370mm- fourth stem removed- all leaning to east.	Pollard to 1.8m	15-30	B-C2	6.2	122
T4	Thorn	3.5	190	3	2.5	2	2.5	0.2	Mature	Reasonable vigour.	Remove to facilitate development	20-40	B2	2.3	16
T5	Alder	8	160	2.5	2.5	2.5	2.5	0	Semi- mature	Twin stems from base- 100,120mm.		15-30	B-C2	1.9	12
T6	Alder	6	140	1	3	2	2	1	Early mature	Twin stems from base- 90, 110mm- both leaning to south. Dieback.		5-15	C2	1.7	9
T7	Goat willow	7.5	440	4	5	5	5	0.3	Mature	Six stems from base- average 180mm. Growing at edge of river.	Cut to ground level and allow to reshoot	15-30	B-C2	5.3	88
T8	Thorn	5	100	2	2	2	2	1	Early mature	Showing good vigour.	Remove to facilitate development	20-40	B-C2	1.2	5
T9	Elder	6	180	4.5	4.5	4.5	4.5	0	Mature		Remove to facilitate development	10-20	C2	2.2	15
T9a	Goat willow	8	320	5	4	5	4	0.3	Mature	Approximately 16 stems from base- average 80mm. Growing on edge of river.	Cut to ground level and allow to reshoot	15-30	B-C2	3.8	46
T10	Goat willow	7.5	340	4.5	4.5	4.5	4.5	0	Mature	Approximately 8 stems from base- average 120mm.		15-30	B-C2	4.1	52
T11	Goat willow	6	140	3	2	1.5	3	0.5	Early mature	Twin stems from base- 80,120mm.	Remove to facilitate development	15-30	B-C2	1.7	9
T12	Thorn	4.5	130	2	2	2	1	0.5	Early mature	Good vigour.	Remove to facilitate development	20-40	B2	1.6	8
T13	Thorn	2.3	70	1	0.5	1.5	0.5	0.5	Semi- mature	Engulfed in bramble. Could develop.	Remove to facilitate development	15-30	C2	0.8	2
T14	Thorn	6.5	130	2	2	2	2	1.4	Early mature	Twin stems from base- 70,110mm. Good vigour.	Remove to facilitate development	15-30	B-C2	1.6	8
T15	Aspen	12	430	5.5	5.5	3.5	5.5	1	Early mature	Bifurcates at 1.5m. Good vigour.		20-40	B2	5.2	84
T16	Elder	5	220	3	3	1	3.5	0.6	Mature	Six stems from base- average 90mm.		10-20	C2	2.6	22
T17	Crack willow	10.5	410	3	3	3	3	3	Early mature	Twin stem from base- 280,300m- tight fork.		20-40	B2	4.9	76
T18	Cherry	5	100	1	1	1	3	1.8	Semi- mature	Tight fork at 1.5m.		10-20	C2	1.2	5
T19	Crack willow	10	230	3	2	2	2	4	Early mature	Drawn up.		15-30	B-C2	2.8	24

Island Road, Reading

Appendix B
BS 5837: 2012 Tree Schedule

Tree/ Group No.	Species	Height (m)	Stem Diam. at 1.5m (mm)	Branch Spread (m)				Canopy Clearance (m)	Age Class	Observations	Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Protect- ion Distance (m)	Root Protect. Area (m2)
				N	S	E	W								
T20	Crack willow	7.5	150	2	1	1	4	1.8	Semi- mature	Bark wound to main stem.		10-20	C2	1.8	10
G21	3no. Field maple	7	80-100					1	Semi- mature	Leaning to west.		10-20	C2	1.2	5
T22	Crack willow	2.5	100	0.5	1	0	4	1.5	Semi- mature			10-20	C2	1.2	5
T23	Crack willow	12	est 390	3	6	3	4	3.5	Early mature	Growing in adjacent site and leaning to south west over site.		20-40	B2	4.7	69
G24	Tree screen	7-10	90-150					1.5	Semi- mature	Tree screen planted on bund in adjacent site. Including wide range of native species.		>40	C2	1.8	10
T24	Wild cherry	7	120	1	2	1	4	0.3	Semi- mature	Growing under canopy of willow.		15-30	C2	1.4	7
T25	Crack willow	9	370	2	3	0	6	1	Early mature	Leaning to west.		20-40	B2	4.4	62
T26	Crack willow	9	270	5	4	2.5	2.5	4	Early mature			20-40	B2	3.2	33
T27	Crack willow	9	290	5	4	4	1	4	Early mature	Leaning to north east.		15-30	B-C2	3.5	38
T28	Filed maple	7	110	2	2	0.5	3	1.2	Semi- mature			20-40	B-C2	1.3	5
T29	Crack willow	9	450	2	6	6	4	2	Early mature	Three stems from 1m- 130, 300,310mm.		20-40	B2	5.4	92
T30	Aspen	4.5	350	5	5	0.5	5	0.6	Early mature	leaning to west. Top has recently broken out.		15-30	B-C2	4.2	55
T31	Crack willow	9	582	8	6	7	8	1.5	Early mature	Seven stems from base- average 220mm. Stem to north has broken out in past and is reshooting. Liable to further breakout.		15-30	B-C2	7.0	153
T32	Crack willow	6	100	3	1	1	2.5	0.6	Semi- mature	Leaning to north.		15-30	B-C2	1.2	5
T33	Field maple	6.5	110	1.5	1.5	1.5	1.5	1.6	Semi- mature	Good potential.		>40	C2	1.3	5
T34	Goat willow	6	280	2	4	5	0.5	1	Mature	Leaning to east. Growing in ditch. Engulfed in bramble.	Remove bramble.	15-30	B-C2	3.4	35
T35	Goat willow	6.5	290	2	5	3	5	1	Mature	Seven stems from base- average 110mm.		15-30	B-C2	3.5	38
T36	Crack willow	6	120	1	1	1	1	3	Semi- mature	Twin stem from base- 60,100mm. Extensive dieback.	Remove.	<10	U	1.4	7
T37	Crack willow	5	340	2	4	4	3	0	Early mature	Approximately 14 stems from base- average 90mm. Some dieback.		10-20	C2	4.1	52
T38	Goat willow	8	210	3	3	4	3	0.3	Mature	Bifurcates at 1.3m. Good form.		20-40	B2	2.5	20

Tree/ Group No.	Species	Height (m)	Stem Diam. at 1.5m (mm)	Branch Spread (m)				Canopy Clearance (m)	Age Class	Observations	Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Protect ion Distance (m)	Root Protect. Area (m2)
				N	S	E	W								
G39	Crack willow	6-9	100-200	6	5	5	3	1.2	Early mature	Five multi stem trees growing at edge of river- all leaning.		15-30	B-C2	2.4	18
T40	Crack willow	8	290	4	1	2	2	2	Early mature	Approximately 10 stems from base- average 90mm.		10-20	C2	3.5	38
T41	Crack willow	4	310	4	1	0	5	0	Early mature	Approximately 5 stems from base- all leaning to west- two broken.		10-20	C2	3.7	43
G42	Willow	8	200-300					0	Early mature	Mixture of varieties growing in culvert.		15-30	B-C2	0.4	0
T43	Crack willow	9	450	4	5	8	8	1	Early mature	Two main stems from 1.5m- 310,330mm. Attractive tree.		20-40	B2	5.4	92
T44	Goat willow	11	140	4	4	4	4	0	Mature	Growing at edge of river.	Prune lateral branches, only as necessary to construct swale	15-30	B-C2	1.7	9
T46	Crack willow	12.5	est 300	6	3	5	5	0	Early mature	Good vigour.	Prune lateral branches, only as necessary to construct swale	20-40	B2	3.6	41
T47	Goat willow	12	est 160	3	6	5	5	0	Mature		Prune lateral branches, only as necessary to construct swale	15-30	B-C2	1.9	12
T48	Goat willow	11	330	6.5	1	5	5	0	Mature	Nine stems from base- average 110mm.	Prune lateral branches, only as necessary to construct swale	15-30	B-C2	4.0	49
T49	Goat willow	11	270	3	5	5	5	0	Mature	Seven stems from base- average 100mm. Good vigour.	Prune lateral branches, only as necessary to construct swale	15-30	B-C2	3.2	33
T50	Goat willow	11	210	3	6	5	5	0	Mature	Declining vigour. Growing within river.	Prune lateral branches, only as necessary to construct swale	5-15	C2	2.5	20
T51	Goat willow	10	est 200	4	4	4	4	1	Mature			15-30	B-C2	2.4	18
T52	Goat willow	10	230	2	2	2	2	1	Early mature	Eight stems from base- average 80mm.		15-30	B-C2	2.8	24
T53	Goat willow	10	380	8.5	8.5	7	7	0.5	Mature	Approximately 18 stems- average 90mm.		15-30	B-C2	4.6	65
G54	Screen planting	10-19	100-350					1	Early mature	Majority white willow, with ash and goat willow. Trees planted on 1.6m bund with closest line 2m from fence. Occasional aspen, cherry and hazel.		20-40	B2	4.2	55

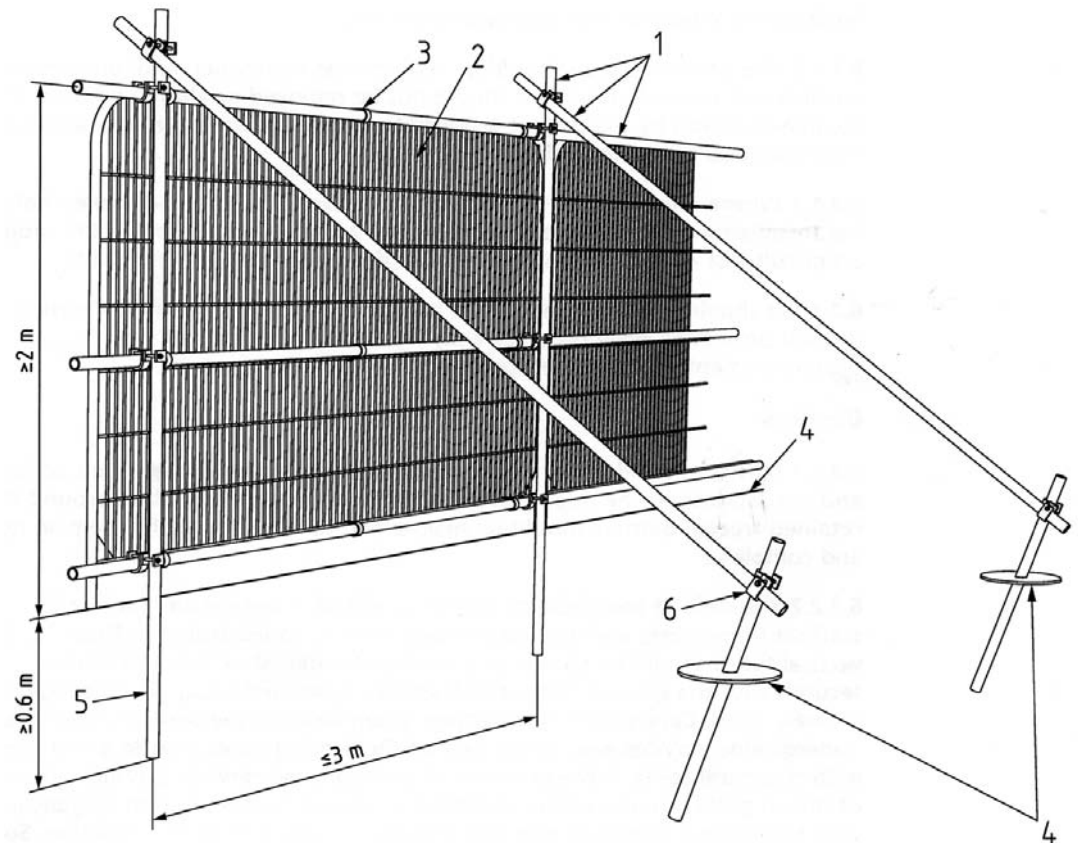
BS 5837:2012, Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
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	- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline - Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>			Canopy coloured red
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
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)	Canopy coloured 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	Canopy coloured 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	Canopy coloured grey

Figure 2

Key

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



Examples of above-ground stabilising systems

Figure 3a

Stabiliser strut with base plate secured with ground pins

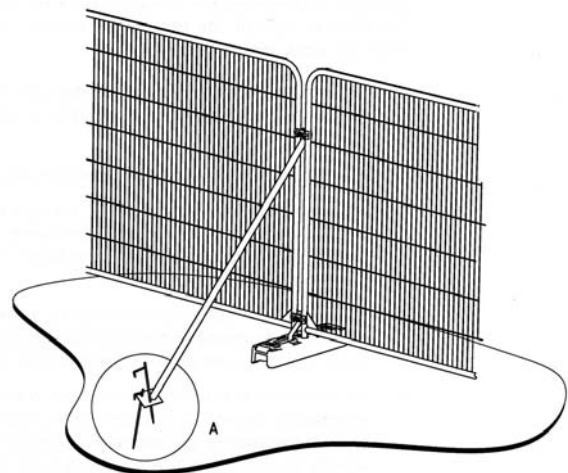
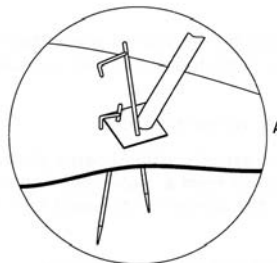
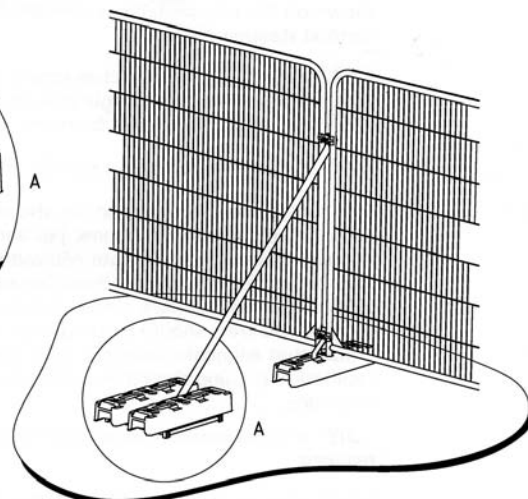


Figure 3b

Stabiliser strut mounted on block tray







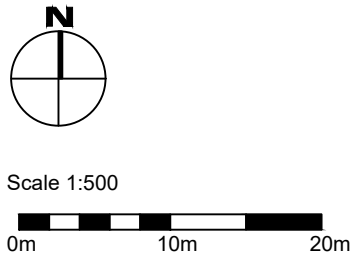
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Notes:

- KEY**
- Site Boundary
 - RBC Ownership Boundary Outside Site
 - Existing Spot Level
 - Proposed Spot Level
 - Existing Trees Retained
 - Existing Trees Removed
 - Proposed New Trees
 - 2m High Brick Boundary Wall
 - Sliding Gate
 - Raising Barrier
 - Pedestrian Gate Access
 - Sanitary Block
 - Sluice
 - Turf
 - Concrete with Pitch Markings
 - Woodchip to Playground
 - Tarmacadam
 - Natural Habitat with Wild Flower Meadow Areas



P1.00	PLANNING	2021-11-24	WL	NC
Rev	Description	Date	By	Chkd

HCC Property Services,
Three Minsters House,
76 High Street, Winchester SO23 8UL
tel: (01962) 847801

PROJECT NAME
RBC Gypsy & Traveller Transit Site

SHEET NAME
Proposed Block Site Plan

SCALE 1:500 @ A1	DRAWN LT	CHKD XXX	APRV XXX
DRAWING No. project code - originator - volume - level - type - role - number	version		
E03883-HCC-00-XX-DR-A-1500	P1	00	
SUITABILITY code description			

A2 APPROVED FOR PLANNING STAGE