Greengage

Crogsland Road, London Borough of Camden
Arboricultural Method Statement, February 2018

QA

Crogsland Road – Arboricultural Method Statement

Issue/Revision:	Draft	Final
Date:	January 2018	February 2018
Comments:		
Prepared by:	Naomi Foot	Naomi Foot
Signature:		
Authorised by:	Mitch Cooke	Mitch Cooke
Signature:		
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CONTENTS

1.0 EXECUTIVE SUMMARY

1.1 Greengage Environmental Ltd ('Greengage') was commissioned by Galliford Try on behalf of London Borough of Camden to prepare an Arboricultural Method Statement (AMS) in accordance with the *BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations* for the redevelopment of a site located off Crogsland Road in Camden, North London (hereafter 'the site').

1.2 It is understood that planning permission has been granted for redevelopment of vacant site by the erection of a 6-storey building comprising a day centre (Class D1) on the ground floor and 38 extra-care residential flats (Class C3) on the upper floors, plus roof terraces, communal gardens and minibus parking, subject to a number of planning conditions.

1.3 Condition 8 specifically relates to trees and states:

"'*Prior to the commencement of any works on site, details demonstrating how trees to be retained shall be protected during construction work shall be submitted to and approved by the Council in writing. Such details shall follow guidelines and standards set out in BS5837:2012 "Trees in Relation to Construction". All trees on the site, or parts of trees growing from adjoining sites, unless shown on the permitted drawings as being removed, shall be retained and protected from damage in accordance with the approved protection details*."

1.4 This AMS has been produced detailing any proposed tree works and special construction techniques, to ensure all relevant trees are adequately managed, protected and subsequently retained throughout the development, in order to satisfy Condition 8 of the approved planning application.

1.5 The Tree Schedule (Appendix 1.0) gives BS5837 survey details on all trees within the scope of this report. The Tree Constraints Plan (Appendix 2.0) details the tree population as surveyed on the existing site layout. The Tree Protection Plan (Appendix 3.0) details the tree protection measures to be employed.

1.6 This report is in accordance with the BS5837 Tree Survey & Arboricultural Impact Assessment[1] produced by Greengage to support the planning application.

2.0 BACKGROUND

Site Description

2.1 The assessment site covers an area of approximately 0.2 hectares (ha) and is centred on National Grid Reference TQ282843, OS Co-ordinates 528297, 184302.

2.2 The majority of the Crogsland Road site is a derelict land currently being used as a car park. Dense buddleia runs along the western border with some more scattered patches at the northern end. The southern part of this section of the site is occupied by a small block of woodland.

2.3 The site is set in an urban environment with residential housing extending to the north, east and west. Commercial buildings associated with Chalk Farm Road sit to the south with the railway line beyond. Haverstock School directly borders the Crogsland Road site to the west. Green space in the in the vicinity of the site is predominantly restricted to soft landscaping and private gardens associated with the residential housing. In the wider area there are more significant expanse of green space such as Primrose Hill 650m to the southwest and Regents Park 840m to the south. The Regents Canal runs 480m to the southeast.

BS5837 Tree Survey

2.4 The BS5837 tree survey was undertaken on the 5th and 17th July 2014 to survey trees, hedges and vegetation following guidance in the British Standard. The crowns and stems were inspected from the ground using the 'Visual Tree Assessment' (VTA) method; no invasive techniques were used at this stage.

Description of Development

2.5 Subject to a number of conditions, planning permission has been granted for redevelopment of vacant site by the erection of a 6-storey building comprising a day centre (Class D1) on the ground floor and 38 extra-care residential flats (Class C3) on the upper floors, plus roof terraces, communal gardens and minibus parking, subject to a number of planning conditions.

3.0 ARBORICULTURAL METHOD STATEMENT

WORKS PHASING

3.1 This Arboricultural Method Statement makes a number of recommendations for Crogsland Road, LB Camden. For convenience, all of the recommendations in this report have been listed in Table 3.1.

3.2 In order to ensure a successful tree retention and development it is critical that all of these recommendations are carried out in a similar order to that outlined below.

Table 3.1 Works Phasing Programme

Recommendation	Phase / Timing	Arboricultural Consultant Input	Completed?
Appoint Arboricultural Clerk of Works (ACoW) to oversee all arboricultural issues on site.	Pre-commencement	NA	
On-site meeting(s) to discuss and mark out tree protection measures/ any site issues with construction team, site manager, (Tree Officer) etc.	Pre-commencement	Site attendance Liaison with team	
Undertake facilitation pruning and felling (contractor).	Pre-commencement	Site attendance to oversee works	
Erect tree protection fencing to BS5837:2012 specifications as appropriate.	Before plant machinery enters the site	Site attendance to sign off	
Implement reporting progress for all unforeseen arboricultural incidents.	During Construction	Prepare reporting document to keep on-site	
Implement use of progress sheet to build up evidence base of good practice on site.	During Construction	Complete/check during site attendance	
Monitoring site visits (i.e. monthly) by ACoW to ensure continued compliance.	During Construction	Regular site attendance, production of file notes and circulation to team – every month	
Works within the RPA of retained trees will be observed.	During Construction	Site attendance to oversee key site activities	
Post development inspection/ completion meeting to identify any required remedial actions.	Post Construction	Site attendance and recommendations	
General maintenance/ remedial tree works if necessary.	Post Construction	NA	

ARBORICULTURAL CLERK OF WORKS

3.3 A suitably qualified arboriculturalist will be appointed to act as an Arboricultural Clerk of Works (ACoW). The ACoW will be engaged to monitor and oversee the implementation of the works required in this method statement.

3.4 The role of the ACoW is a formal one with onsite presence and site visits to make decisions to be implemented quickly. In the case of this development the following occasions are where the ACoW will be required:

- Initial meeting (usually the pre-commencement meeting) – to ensure all required tree protection is in place, and to discuss any required amendments with the Site Manager to which the local planning officer or Tree Officer will be invited to attend;
- Monitoring visits – Regular informal inspections to ensure that all tree protection measures are being maintained, and to inform the Site Manager where appropriate measures are not in place;
- Supervision during works within the RPAs of retained trees as detailed within the tree protection plan; and
- Completion meeting – To inspect trees to assess for any required works and to confirm that the development has been sufficiently completed, and the tree protection measures can be removed.

3.5 The ACoW will also be the first contact for arboricultural advice for any issues that arise which are not detailed in this report, such as extra tree works, any required work within the Root Protection Areas (RPAs) of the trees onsite, any damage that has occurred to any of the trees or any breach of the tree protection measures onsite.

Pre-Commencement Site Meeting

3.6 A pre–commencement site meeting will be undertaken prior to any onsite works commencing. This meeting will enable the Site Manager and the ACoW to review the tree works undertaken and the tree protection fencing to ensure all parties are satisfied that the proposals will not impact the trees to be retained onsite and that the measures are feasible with the construction works. The Tree Officer will be invited to attend the meeting if desired. Once the tree protection measures have been confirmed as acceptable, they can be "signed off" on the progress sheet.

Monitoring Visits

3.7 Regular informal site visits will then be undertaken following this by the ACoW to ensure protective measures are in place and file notes will be prepared and filed. It is recommended these monitoring visits are completed on a monthly basis for the duration of the construction process.

3.8 On each visit, the ACoW will conduct a site walkover to check the maintenance of the tree protection measures and to assess the condition of the trees. These visits will also give the opportunity of the Site Manager/construction staff to discuss any arboricultural issues with the ACoW.

3.9 Following each visit, a short file note will be produced by the ACoW and circulated to the team for a record of best practice.

Reporting Process

3.10 If during the construction any damage to either the tree or the RPA is sustained, this should be reported to the Site Manager immediately. At the earliest possible time the Site Manager will inform the ACoW, who will undertake a site visit to assess the impact on the tree and make recommendations for any required works.

3.11 Possible damage to the tree or RPAs could be: collision damage to crowns of retained trees by site vehicles; excavation within RPA; dumping of soil / materials within the RPA; Chemical / cement spillage into Root Protection Area or fire damage to the crown / stem of the trees.

Progress Sheet

3.12 During the various stages of the development a record of the completion of the various tree protection works will be updated. This will then provide the planning officer / tree officer with sufficient evidence that all practicable steps have been taken to prevent damage to the trees.

3.13 A separate progress sheet will be completed for each completed operation. The original will be kept, with the copy of this document that will be retained by the Site Manager in the site office. Once completed, a copy will be sent to the ACoW and the planning officer.

PRE-DEVELOPMENT WORKS

Summary of Retention Strategy

3.14 With major alterations to the site layout, a number of trees have been identified as requiring removal to facilitate the scheme as approved under the consented development. Several trees will be retained through crown reductions and tree protection measures.

3.15 It is proposed that all offsite trees (T1-T9) will be retained and several site trees will be protected and incorporated into the scheme.

3.16 All other trees are proposed to be removed. This includes:

- G1 mixed species (Category B group) to facilitate construction of the new building;

- T14, T16 and T17 silver birch (1 Category B and 2 Category C) to facilitate construction of the new building and landscaping;
- T19 small-leaved lime (1 Category B) to allow

3.17 As such, in total, the proposed scheme will result in the loss of 3 Category B trees/group and 2 Category C trees. Without suitable mitigation through new tree planting, there would be a minor loss of tree stock and amenity value at the site. The enabling felling is summarised in table 3.2 below.

Enabling Felling

3.18 All tree works are to be undertaken in accordance with *BS3998:2010 'Tree work - Recommendations*.

Table 3.2 Trees to be removed

Tree no.	Species	Proposed Tree Works	Reason	BS Category
G1	*Acer campestre; Betula pendula; Buxus sempervirens*	Removal	Facilitate scheme	1 no. B
T14; T16 & T17	*Betula pendula*	Removal	Facilitate scheme	1 no. B 2 no. C
T19	*Tilia cordata*	Removal	Facilitate scheme	1 no. B

Facilitation Pruning

3.19 All tree works are to be undertaken in accordance with *BS3998:2010 'Tree work - Recommendations*.

Table 3.3 Trees to undergo pruning

Tree no.	Species	Proposed Tree Works	Reason	BS Category
T18	*Magnolia sp.*	Reduction predominantly on western side/ establish overall symmetry	Construction working space; ongoing management	1 no. B

Tree Protection

3.20 Prior to any construction or vehicular movement tree protective measures will be in place around all retained trees. The ACoW will check this prior to the commencement of works. It shall be set out as per the detail on the Tree Protection Plan (TPP) located at Appendix 3.0.

3.21 These protective measures ensure suitable protection of trees and associated soils. The key method of tree protection is through the use of fencing and ground protection.

3.22 Tree protection shall be set out as per the detail on the tree protection plan; it shall be identified as such using signage (Appendix 4.0).

Fencing

3.23 The tree protection fencing will primarily comprise 2.0m weldmesh panels around site trees secured in place with uprights driven into the ground. Once erected, this will not be moved or relocated without prior approval from the ACoW, or unless specified in this report.

3.24 T18 is planted in close proximity to the proposed development; scaffolding is likely to be required, therefore the standard above outlined fencing tree protection approach will not be practically applicable. alternatively, individual tree protection is required to ensure the practical and singular protection of stems on a site with such constrained parameters.

3.25 Plywood shuttering (1cm thickness) will be installed surrounding the individual tree to 1.5 in height. The box-shape will incorporate much of the RPA to avoid compaction.

3.26 The location of tree protection fencing is shown on the TPP at Appendix 3 alongside further detail regarding the specification of tree protection fencing (Appendix 4).

3.27 The tree protection area behind the tree protection fencing (the Construction Exclusion Zone) will be sacrosanct throughout development and no access will be allowed to this area including for example the storage of or moving of materials or machinery.

3.28 In the Construction Exclusion Zone, there will be no excavations or increases in soil level without prior written approval from the Council. The location of protective fencing is illustrated on the appended Tree Protection Plan, which should also be displayed within the site offices.

3.29 The fencing will be secured with uprights driven into the ground to prevent movement of the protective fencing and ensure its rigid installation.

3.30 There will be clear and visible signs (Appendix 4.0) attached to the protective fencing with the following "Tree Protection Area – Keep Out" and the area will be regarded as

sacrosanct by everyone. This will be checked prior to the commencement of work by the ACoW and throughout the course of development.

3.31 The tree protection fencing denotes the Construction Exclusion Zone. Therefore, the following must be carefully considered when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Any transit or traverse of plant in close proximity to trees should be conducted under the supervision of a banks person to ensure that adequate clearance from trees is maintained at all times.

3.32 Material that will contaminate the soil such as concrete mixing, diesel oil and vehicle washing should not be discharged within 10m of the tree stems.

3.33 No fire shall be lit, or liquids disposed of within 10m of an area designated as being fenced off or otherwise protected in the scheme.

3.34 At the end of the project the fencing will be removed on completion of site works and after confirmation by the ACoW.

3.35 A detailed TPP (Appendix 3.0) will be located within the site cabins throughout the course of development. This will include details of the fencing specification and location for which the fence will be erected. This plan will be printed at no less than A1 in size to ensure easy reading of all the detail contained within.

Ground Protection

3.36 No requirements for temporary ground protection as a protection measure at the site have been identified within this method statement.

Avoiding Crown and Stem Damage

3.37 Care and vigilance must be taken to avoid crown and stem damage when working with machinery near the retained trees, both on and offsite. Plant machinery with booms, jibs and counterweighs/ tall or wide loads should be controlled by banksman to maintain adequate clearance. Machinery will remain outside of the Construction Exclusion Zone as denoted by fencing and signage.

CONSTRUCTION PHASE

Construction Management and Site Logistics

3.38 A Construction Management Plan (CMP) has not yet been produced. This document gives details on several matters that are key in ensuring the protection of trees, including site construction access, storage of materials and location of site offices. These items are discussed below with recommendations from an arboricultural perspective and have been incorporated into the CMP. The Site Logistics Plan extracted from the CMP can be found at Appendix 5.

Site Construction Access

3.39 In accordance with section 5.5.6 of the BS5837, all site access routes will be outside of the RPAs of retained trees and all tree protection measures will remain in place throughout the construction phase.

Storage of Materials

3.40 An area outside of the RPAs of any on and offsite trees will be allocated for storage of materials. Materials will only be stored in the designated areas and there will be no storage of materials within the RPAs of retained trees. Tree protection measures will remain in place throughout the construction phase.

Site Offices and Welfare

3.41 In accordance with section 5.5.6 of the BS5837, all site offices and welfare facilities will be located outside of the RPAs of retained trees.

Proposed Works Within Root Protection Areas

New Landscaping

3.42 New hard surfacing and soft landscaping is proposed adjacent to all retained trees. The new hard surfacing will be constructed of brick paving for pedestrian use only. As such, there will be no impact upon water availability, gaseous exchange or soil compaction, assuming the following methods are adhered to.

3.43 Ground preparations and installation of the hard surfacing will need to be carried out in a sensitive way with regards to the adjacent trees. This will be carried out under the presence of the appointed ACoW to ensure any potential impacts upon the trees are avoided.

3.44 There will be no excavation into the sub materials or reduction in levels; if levelling to the ground is required, this will be achieved through filling in gaps with up to 100mm of good quality topsoil and levelling with hand tools.

3.45 Any roots over 25mm that have grown above the existing/final floor level will be considered for removal by the ACoW. If appropriate, the roots will be cleanly severed with a sharp tool (e.g. pruning knife).

3.46 Should there be a delay in installing the new landscaping, any exposed roots will be protected from desiccation by damp hessian and the tree protection barriers must be re-aligned outside of the RPA until works are complete.

New Tree Planting

3.47 Detailed landscaping proposals have not yet been provided, however the intention is to maximise new tree planting opportunities within soft landscaped areas across the site.

3.48 Six new trees will be planted along the Crogsland Road frontage and four new trees will be planted within the landscaped area to the south of the proposed building, alongside hedge and ground cover planting.

3.49 A selection of native species, characteristic of the area, should be incorporated into the scheme to provide a sustainable tree stock for the future.

3.50 The proposed tree planting, combined with the low hedgerow and shrubs, will fully mitigate the loss of trees and inherent amenity and landscape value.

3.51 All new tree planting shall be implemented following appropriate guidance in the *BS8545: 2014 Trees: from necessary to independence in the landscape – Recommendations*[2]. We recommend any new trees that fail within the first 5 years following development are replaced to ensure the long-term maintenance of the planting strategy.

4.0 CONCLUSIONS

4.1 The BS5837 tree survey identified a number of trees within the scope of this report which could potentially be impacted by the redevelopment of the site located off Crogsland Road in LB Camden.

4.2 A number of trees have been highlighted for retention through the implementation of tree protection and special construction techniques as detailed within the AMS.

4.3 The method for retention of the trees is described through the above techniques. This method statement provides detail of the measures and steps required to retain the trees through and post development.

4.4 If the recommendations in this report are adhered to, all relevant trees will be effectively retained throughout development and new tree planting has been provided to mitigate for any tree loss.

Limitations

4.5 This report includes information on only the trees that were inspected and the condition they were observed in at the time of survey. The condition of trees can change, and as such any findings from this report should be held valid to inform for purposes of development for no longer than 12 months from the survey date.

4.6 No guarantee can be given for the structural integrity of any trees on site as a full hazard assessment has not been made. Inaccessible trees will have best estimates made about location, physical dimensions and characteristics.

– END –

APPENDIX 1.0: TREE SCHEDULE

a

Tree No	Species	Height (m)	Stem Diameter (mm)	RPA radius (m)	Crown Spread				Age Class	Condition		Recommended works	Estimated years remaining	Grade Category
					N	E	S	W		P	S			
T1	Common Alder	14	300	0.3	3	4	4	3	EM	G	Part of linear group. Leaning South. Low branches over road/footpath. Low crown over street lamp. Ground level raised within RPA. Some minor deadwood pre- sent.	None required	20+	B
T2	Magnolia	5	100	0.1	2	2	3	2	M	F	Poor previous pruning, constrained by peers.	None required	10+	B
T3	Silver Birch	12	220	0.2	2	3	3	2	EM	G	Located adjacent to fence, crown will obstruct security camera.	None required	20+	C
T4	Common Alder	14	325	0.3	4	5	2	3	EM	G	Low limb over road and street lamp.	Crown lift to 3m over foot- path. Prune clear of road light.	20+	B
T5	Common Alder	15	300	0.3	3	4	3	3	EM	G	Low crown over street lamp. Ground level raised within RPA.	Crown lift to 3m over foot- path. Prune clear of road light.	20+	B

Project: Crogsland Road, CRRC
Client: Galliford Try
Project Number: 551015
Date: 26/01/2017
Greengage Environmental

G: Good
F: Fair
P: Poor
SM: Semi mature
EM: Early mature
M: Mature
Y: Young

b

T6	Silver Birch	11	260	0.3	3	4	2	2	SM	F	Leaning east. Kink in stem at 2m, poor previous pruning. Asymmetric crown.	Crown lift to 3m over foot- path.	10+	C
T7	Wild Cherry	11	325	0.3	4	3	5	5	M	F	Stem divides below 1.5m Unbalanced crown shape. Crown distorted due to group pressure. Thin crown, low leaf density/	None required	<10	C
T8	Silver Birch	8	150	0.2	2	2	3	2	Y	G	Crown distorted due to group pressure.	None required	20+	B
T9	Silver Birch	12	280	0.3	1	2	2	3	EM	G	Crown distorted due to group pressure. Low branches over road/footpath.	Crown lift to 3m over foot- path.	20+	B
T10	Silver Birch	11	260	0.3	3	3	2	3	EM	G	Crown distorted due to group pressure. Low branches over road/footpath.	Crown lift to 3m over foot- path.	20+	B
T11	Silver Birch	13	250	0.3	2	3	3	2	EM	G	Crown distorted due to group pressure.	None required	20+	B

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c

T12	Silver Birch	8	180	0.2	2	3	2	2	SM	G	Leaning east. Unbalanced crown shape. Crown distorted.	Crown lift to 3m over foot- path.	10+	C
T13	Silver Birch	12	350	0.4	3	5	4	5	M	G	Largest stem of the birch trees	None required	20+	B
T14	Silver Birch	9	260	0.3	4	2	3	6	EM	F	Limited longterm prospects. Poor shape and form. Stunted habit, leaning west.	None required	<10	C
T15	Silver Birch	12	300	0.3	3	4	3	4	EM	G	Low branches over road/footpath.	Crown lift to 3m over foot- path.	20+	B
T16	Silver Birch	12	300	0.3	3	4	3	4	EM	G	Low branches over road/footpath.	Crown lift to 3m over foot- path.	20+	B
T17	Silver Birch	11	190	0.2	3	4	2	3	SM	P	Dieback in crown. Low bud/leaf density. Unbalanced crown shape. In decline, limited long term prospects.	None required	<10	C

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d

T18	Magnolia	9	325	0.3	4	5	4	4	M	G	Tree located within hard surface area. Stem divides above 1.5m. Low branches over road/footpath. Branches restricting highway light. Prominent tree in the locality. Stem very close to palisade fence.	Crown lift to 3m over foot- path.	20+	B
T19	Small leaved lime	12	300	0.3	5	4	4	4	EM	G	Stem divides above 1.5m. Low branches over road/footpath. Branches restricting highway light. Limited rooting area, located between tarmac and pavement adjacent to palisade fence.	Crown lift to 3m over foot- path.	20+	B
G1	Field Maple, Silver Birch, Box	7							Y-EM	G	A linear feature of young trees adjacent to the tennis court. 11 obvious stems with box and hazel under storey.	Thin to best stems	20+	B
End of Records														

G: Good
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SM: Semi mature
EM: Early mature
M: Mature
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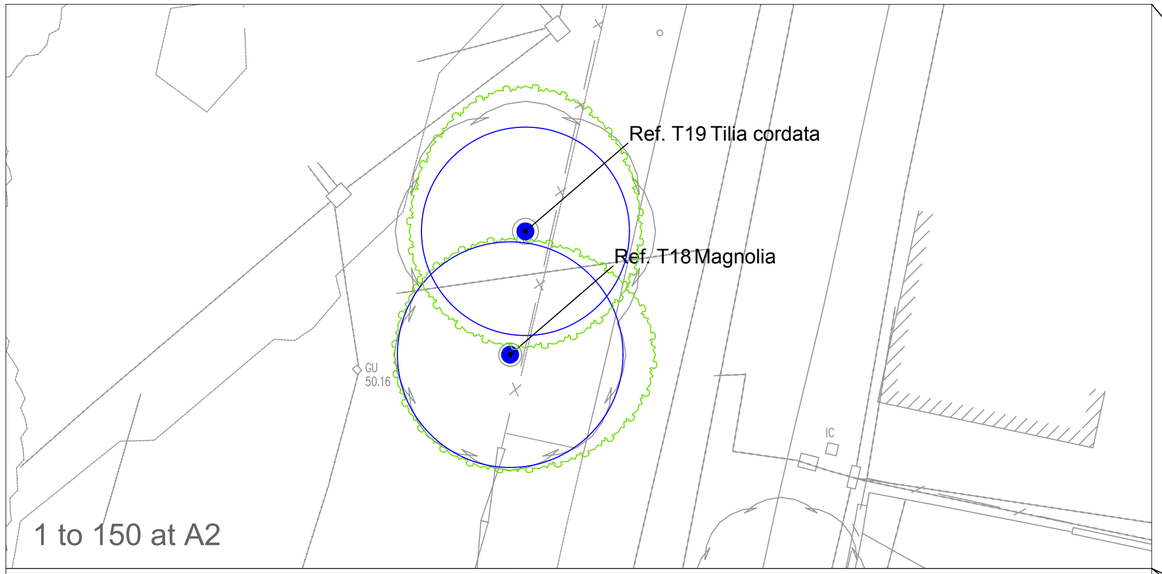
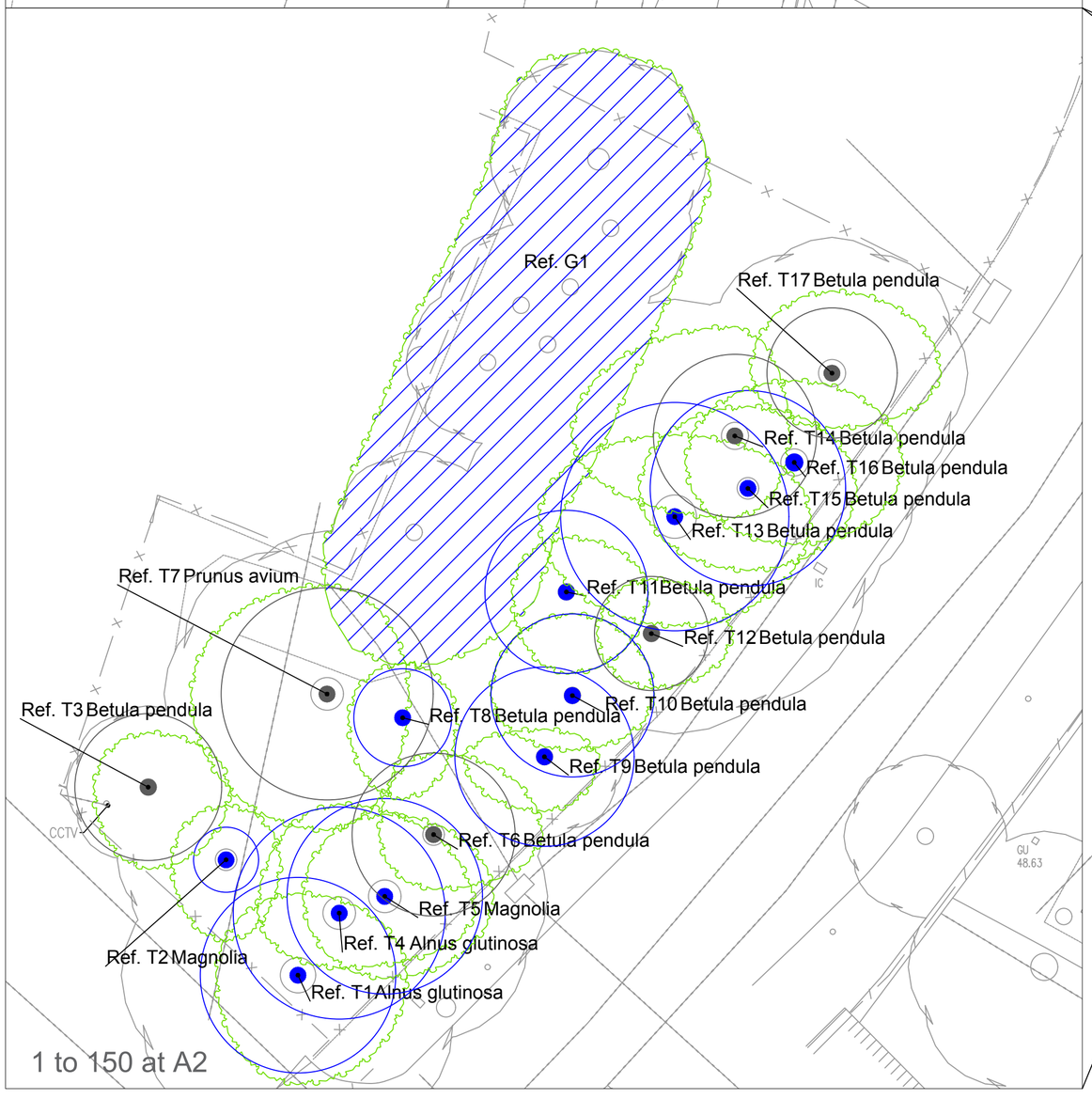
APPENDIX 2.0: TREE CONSTRAINTS PLAN

Tree Constraints Plan showing existing layout with BS5837:2012 tree categories & Root Protection Areas



1 to 150 at A2

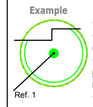


1 to 150 at A2

1:500

10m 0 10m 20m 30m 40m 50m

Example



-Canopy extent - patterned line
-Category key - coloured stem and canopy hatch
-BS5837:2012 calculated root protection area - red line showing root incursion
-Tree No. - tag

Category A

Trees of high quality with an estimated remaining life expectancy of at least 40 years.

Category B

Trees of moderate quality with an estimated remaining expectancy of at least 20 years.

Category C

Trees of low quality with an estimated remaining life expectancy of at least 10 years, or a stem diameter below 150mm.

Category U

Dead or dying trees with less than 10 years estimated remaining contribution - not suitable for retention.

Tree Group or Hedge

Group of trees or hedge. Canopy extent shown as green patterned line. Category key given as coloured hatch.

No.	Revision/Issue
1	551015nfJan18__Crogsland_TCP.dwg

Greengage

64 Great Suffolk Street
SE1 0BL
Tel: 0203 544 4000

Project Name and Address

Charlie Ratchford Resource Centre
Crogsland Road
Camden
London, NW1 8HF

Project: Belmont Street, CRRC

Date: 26/01/2018

Scale: 1 to 500 at A2 (main drawing)

Sheet: 1 of 1

N

APPENDIX 3.0: TREE PROTECTION PLAN

Tree Protection Plan showing proposed layout with tree protection measures

Arboricultural Method Statement

Pre-commencement meeting will be held between the ACoW and site manager to discuss tree works, protection measures and the constraints to the development.

All tree pruning and removal works will be undertaken by a contractor prior to commencement of activities and under instruction from the ACoW in line with BS3998.

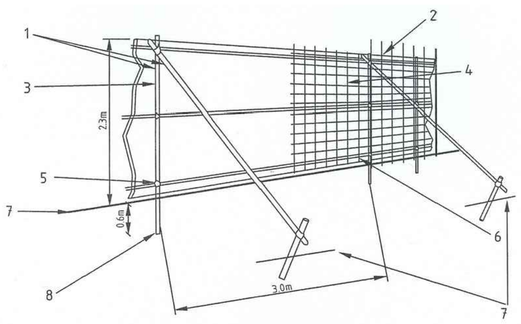
Tree protection fencing will be installed as set out in this drawing prior to any heavy plant machinery entering the site and will be signed off by the ACoW. Appropriate signage (Figure 1) will be installed on the fencing at 5m intervals.

Any contentious work within the RPAs of retained trees (e.g. soft and hard landscaping) will be completed with ACoW site presence.

There shall be no excavation or ground level changes within the RPAs of retained trees with the exception of that agreed and stated in the AMS.

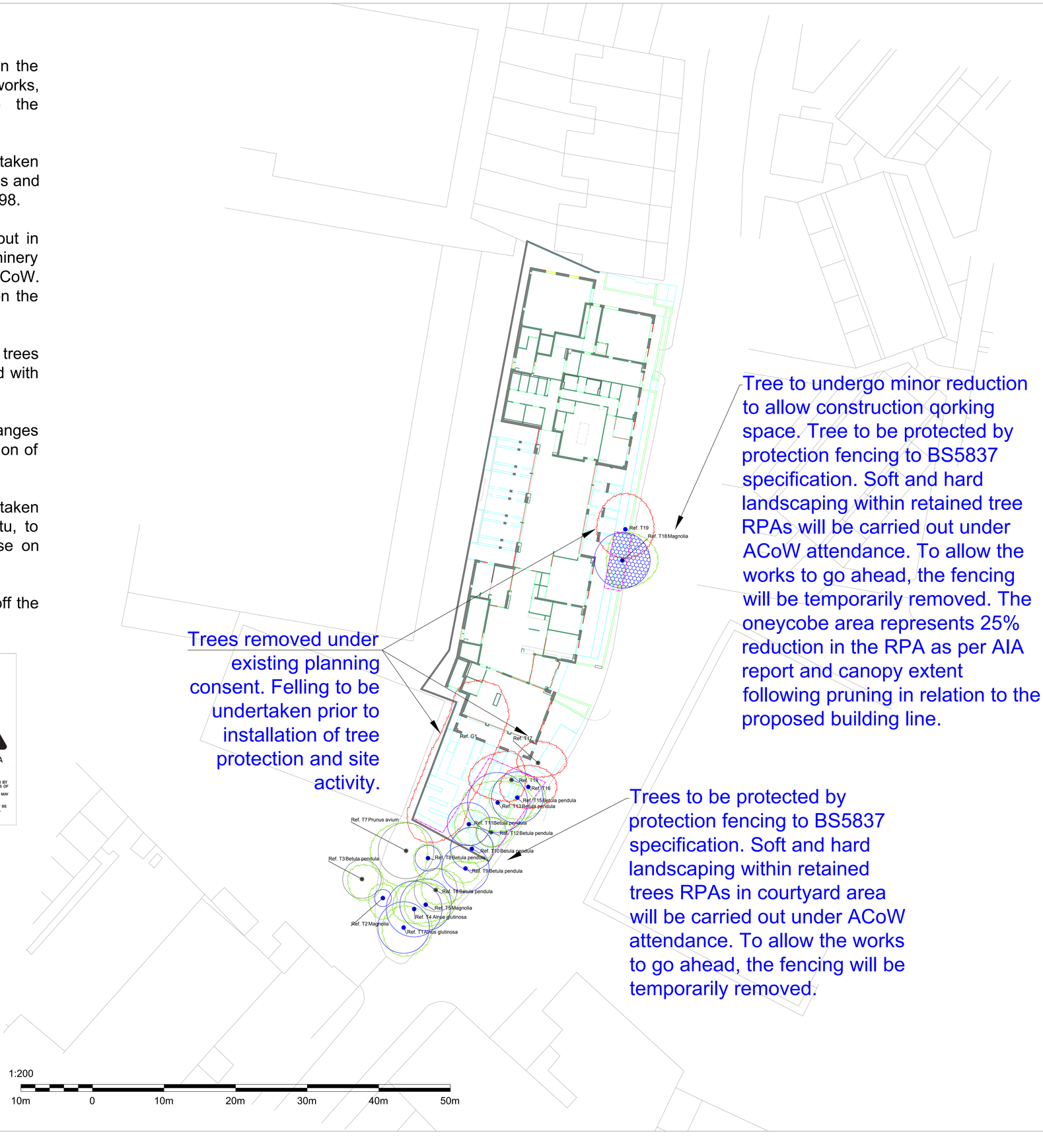
Regular monitoring visits (monthly) shall be undertaken to ensure the protection measures remain in situ, to review the condition of retained trees and advise on any remedial actions required.

On completion, the ACoW will attend site to sign off the scheme.



1 Standard scaffold poles
2 Uprights to be driven into the ground
3 Panels secured to uprights with wire ties and, where necessary, standard scaffold clamps
4 Weldmesh wired to the uprights and horizontals
5 Standard clamps
6 Wire twisted and secured on inside face of fencing to avoid easy dismantling
7 Ground level
8 Approx. 0.6m driven into the ground

Figure 2. – Protective fencing for RPA



Tree to undergo minor reduction to allow construction qorking space. Tree to be protected by protection fencing to BS5837 specification. Soft and hard landscaping within retained tree RPAs will be carried out under ACoW attendance. To allow the works to go ahead, the fencing will be temporarily removed. The oneycobe area represents 25% reduction in the RPA as per AIA report and canopy extent following pruning in relation to the proposed building line.

Trees removed under existing planning consent. Felling to be undertaken prior to installation of tree protection and site activity.

Trees to be protected by protection fencing to BS5837 specification. Soft and hard landscaping within retained trees RPAs in courtyard area will be carried out under ACoW attendance. To allow the works to go ahead, the fencing will be temporarily removed.

Tree to be Retained
-Canopy extent - patterned line
-Category key - coloured stem and canopy hatch
-BS5837:2012 calculated root protection area - red line showing root incursion
-Tree No. - tag
Ref. 1

Tree to be Removed
Trees identified as requiring removal either due to sound arboricultural practice or to facilitate the development

Tree Protection Measures
Tree protection fencing to BS5837 specification.

No.	Revision/Issue
1	551015nf26Jan18__Crogsland_TPP.dwg

Greengage
64 Great Suffolk Street
SE1 0BL
Tel: 0203 544 4000

Project Name and Address
Charlie Ratchford Resource Centre
Crogsland Road
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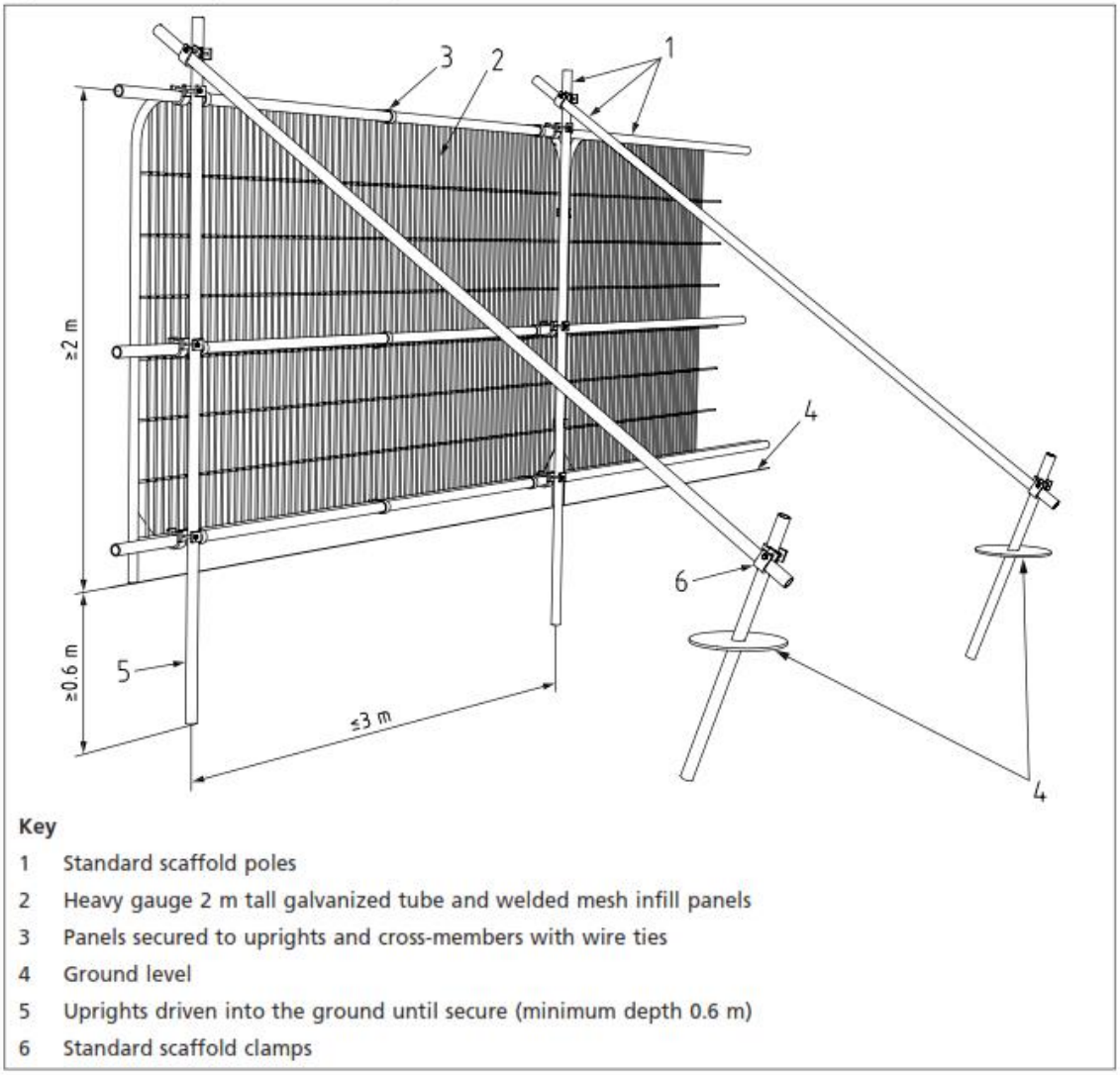
London, NW1 8HF

Project: Belmont Street, CRRC
Date: 26/01/2018
Scale: 1 to 200 at A1
Sheet: 1 of 1
N

APPENDIX 4.0: EXAMPLE TREE PROTECTION FENCING AND SIGNAGE

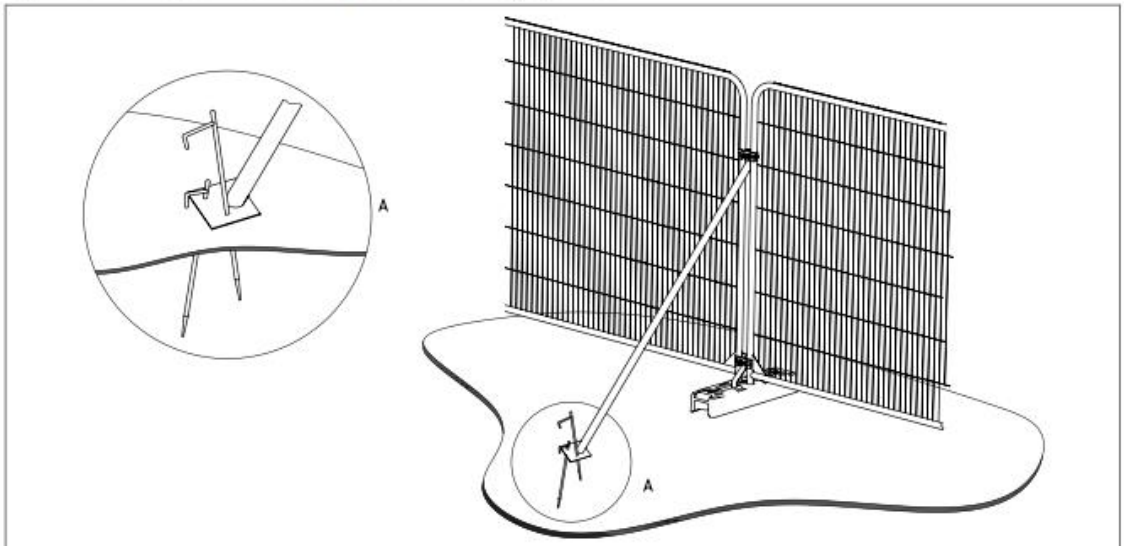
Figure 2 **Default specification for protective barrier**



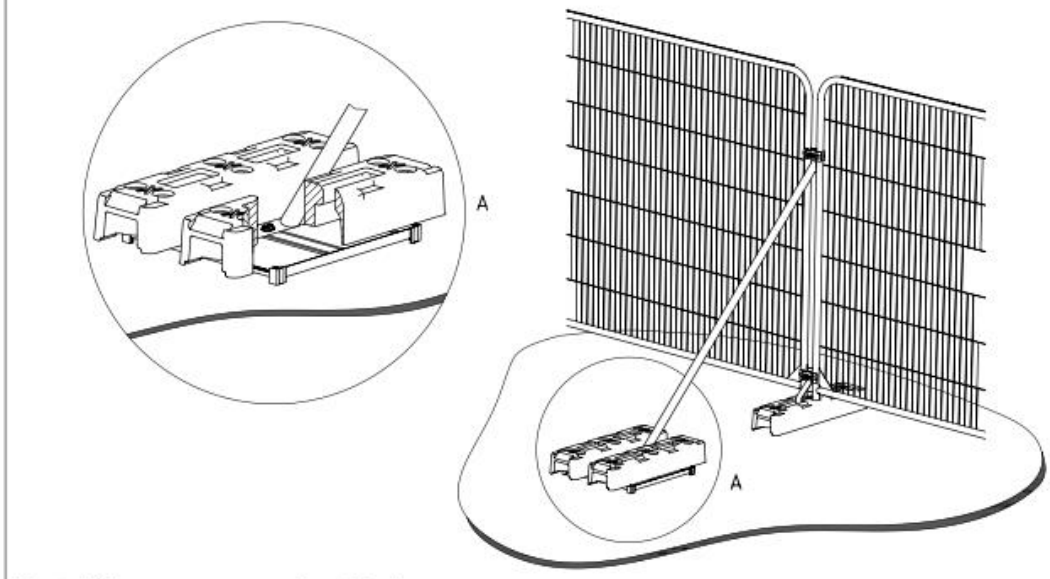
Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized 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

Figure 3 **Examples of above-ground stabilizing systems**



a) Stabilizer strut with base plate secured with ground pins

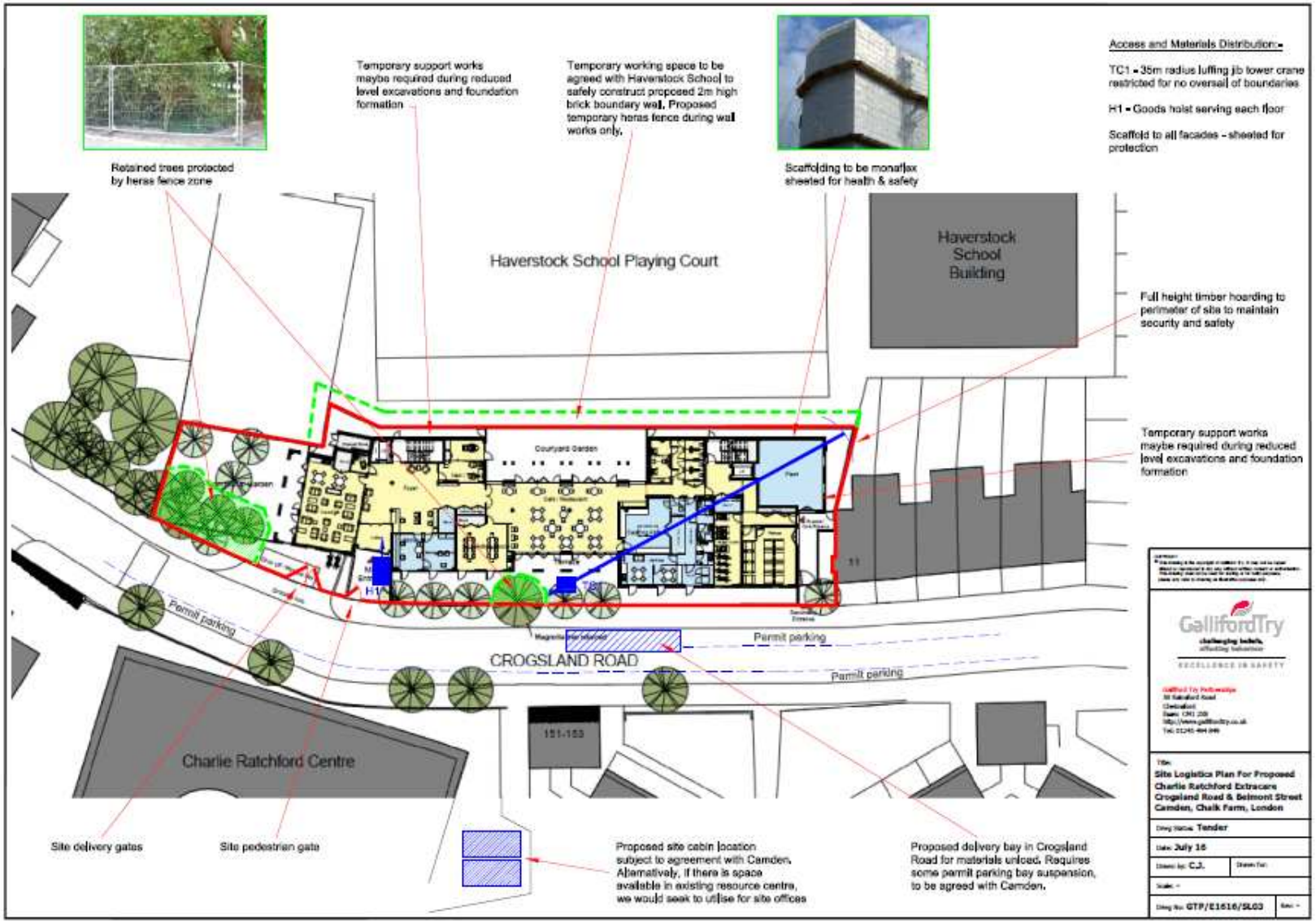


b) Stabilizer strut mounted on block tray


TREE PROTECTION AREA
KEEP OUT !
(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A TREE PRESERVATION ORDER.
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION.
ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY.


TREE PROTECTION AREA
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND ARE SUBJECTS OF A TREE PRESERVATION ORDER
(TOWN & COUNTRY PLANNING ACT 1990)
CONTRAVENTION OF TREE PRESERVATION ORDERS MAY LEAD TO CRIMINAL PROSECUTION
THE FOLLOWING MUST BE OBSERVED BY ALL PERSONS:-
THE PROTECTIVE FENCING MUST NOT BE REMOVED
NO PERSON SHALL ENTER THE PROTECTED AREA
NO MACHINE OR PLANT SHALL ENTER THE PROTECTED AREA
NO MATERIALS SHALL BE STORED IN THE PROTECTED AREA
NO SPOIL SHALL BE DEPOSITED IN THE PROTECTED AREA
NO EXCAVATION SHALL OCCUR IN THE PROTECTED AREA
ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY
KEEP OUT!

APPENDIX 5.0: SITE LOGISTICS PLAN


Retained trees protected by heras fence zone
Temporary support works maybe required during reduced level excavations and foundation formation
Temporary working space to be agreed with Haverstock School to safely construct proposed 2m high brick boundary wall. Proposed temporary heras fence during wall works only.
Scaffolding to be monaflex sheeted for health & safety
Access and Materials Distribution:-
TC1 - 35m radius luffing jib tower crane restricted for no oversail of boundaries
H1 - Goods hoist serving each floor
Scaffold to all facades - sheeted for protection
Haverstock School Playing Court
Haverstock School Building
Full height timber hoarding to perimeter of site to maintain security and safety
Temporary support works maybe required during reduced level excavations and foundation formation
Courtyard Garden
Permit parking
CROGSLAND ROAD
Permit parking
Permit parking
151-153
Charlie Ratchford Centre
Site delivery gates
Site pedestrian gate
Proposed site cabin location subject to agreement with Camden. Alternatively, if there is space available in existing resource centre, we would seek to utilise for site offices
Proposed delivery bay in Crogsland Road for materials unload. Requires some permit parking bay suspension, to be agreed with Camden.
GallifordTry
challenging beliefs.
EXCELLENCE IN SAFETY
Site Logistics Plan For Proposed Charlie Ratchford Extracare Crogsland Road & Belmont Street Camden, Chalk Farm, London
Tender
July 16
C.J.
GTP/E1616/SL03

REFERENCES

[1] Greengage (2015) Charlie Ratchford Resource Centre – Tree Survey, Implications Assessment and Constraints Centre [doc ref. 550544tl13May15FV02_AIA_Camden_CRRC, dated May 2015]

[2] British Standards Institution. (2014). 8545: *Trees: from necessary to independence in the landscape – Recommendations*. London: BSI.