LPA Ref: 10/01642/OUT 6th November 2013 | PC | D.0341



OUTLINE PLANNING APPLICATION FOR NEW SETTLEMENT (CONDITION 17)

PHASE 1A, HEYFORD PARK, UPPER HEYFORD

ARBORICULTURAL METHOD STATEMENT & TREE PROTECTION PLAN

ON BEHALF OF DORCHESTER GROUP

TOWN & COUNTRY PLANNING ACT 1990 (AS AMENDED)
PLANNING AND COMPULSORY PURCHASE ACT 2004

Pegasus Group

Pegasus House | Querns Business Centre | Whitworth Road | Cirencester | Gloucestershire | GL7 1RT T 01285 641717 | F 01285 642348 | W www.pegasuspg.co.uk

Birmingham | Bracknell | Bristol | Cambridge | Cirencester | East Midlands | Leeds | Manchester

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1. INTRODUCTION & SCOPE

- 1.1 This report has been prepared on behalf of Dorchester Group and has been prepared in order to discharge condition 17 of Application No 10/01642/OUT which states that "No works or development shall take place in connection with each phase or sub phase of the development until a scheme for the protection of existing trees, hedgerows or such other landscape features as may exist that are identified for retention has been agreed in writing with the local planning authority"
- 1.2 This report comprises an arboricultural method statement for trees which could potentially be affected by the proposed the Phase 1A demolition works on land to the south of Camp Road.
- 1.3 It is anticipated that tree removal and installation of tree protection barriers relating to the Dorchester Phase 1A demolition works will take place as soon as possible after November 2013 and before March 2014 in order to avoid the bird nesting/breeding season in accordance with Condition 49.
- 1.4 Provided that the suggested tree protection measures and arboricultural working methods are put in place it is considered that the proposed demolition works can be carried without causing damage to the retained trees.



2. BACKGROUND INFORMATION

Statutory Tree Protection

- 2.1 The site is located within the Upper Heyford conservation area and as a consequence LPA approval is required before carrying out any works to any tree with a diameter of 75mm or more (measured at 1.5 metres above ground level) above and beyond the works detailed in this document. For such work a Section 211 Notice will be required. This will have a maximum six weeks determination period.
- 2.2 Any standing dead tree may be removed following the submission of a 5 day Notice of Intent.
- 2.3 It has been confirmed by Jon Brewin (CDC Tree Officer) that a Forestry Felling Licence will not be required to carry out the specified treeworks required to facilitate the demolition works approved under application No 10/01619/CAS.

Statutory Wildlife Protection

- 2.4 Trees which contain holes, splits, cracks and cavities could potentially provide a habitat for bats and birds. It is recommended that any tree works should only be carried out following a detailed climbing inspection to the tree to ensure that protected species or their nests/roosts are not disturbed. If any are found, the project manager, site owner or consulting arboriculturalist should be informed and appropriate action taken as recommended by a Statutory Nature Conservation organisation such as Natural England.
- 2.5 It is advised that tree/hedgerow works are carried out with the understanding that birds will nest in trees, hedges and shrubs between March and August. Ideally, operations should be avoided during this period. Any necessary work should only be carried out following a preliminary check of the vegetation.
- 2.6 For information, the Wildlife and Countryside Act 1981, The Countryside and Rights of Way Act 2000 and the Habitat Regulations 1994 (with their subsequent amendments), form the basis of the statutory legislation for flora and fauna in Britain.



3. ARBORICULTURAL METHOD STATEMENT

Tree Works

- 3.1 The trees to be retained are listed in the Survey Schedule of Retained Trees (Appendix 1). The tree reference numbers relate to the 2013 tree survey drawings produced by Pegasus (D0292_154).
- 3.2 Trees to be removed are listed in the Tree Retention/Removal Schedule (Appendix2). This schedule also includes other tree works such as crown lifting and access facilitation pruning. Trees to be removed shall be clearly marked with white paint before the treeworks contractor starts work on site.
- 3.3 Reputable arboricultural contractors will be invited to tender for the scheduled tree works. The appointed contractor will provide written proof of the credentials of the employees selected to carry out the tree work. These details will be forwarded to the LPA tree officer before any work starts on site.
- 3.4 All tree works shall be carried out in accordance with BS3998:2010 Recommendations for Treeworks. Trees to be removed shall be felled at ground level leaving a stump (300mm high). All chippings (except for stump grinding) and felled timber shall be removed from site.
- 3.5 No fires will be allowed on site.

Barriers and Ground Protection

- 3.6 The tree protection barriers shall be installed before the tree works and demolition works commence. The protected areas shall be regarded as sacrosanct (construction exclusion zones) and once installed should not be removed or altered without prior consent of the local planning authority. The Tree Protection Plan is attached at Appendix 3.
- 3.7 Where access is required by the tree works contractor to remove or carry out works to individual trees within protected areas the site manger will temporarily remove the fencing required. No demolition works will take place within 50 metres of the removed fencing and the fencing will be reinstalled as soon as the tree works have been completed.
- 3.8 Barriers should be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained trees.



- 3.9 The tree protection barrier shall comprise 2 metre tall welded mesh Heras panels supported on concrete or rubber feet. The fence panels shall be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The distance between the fence couplers should be at least one metre and should be uniform throughout the fence. The panels shall be supported on the inner side by stabilizer struts, which will be attached to a base plate secured with ground pins. Where the fencing is to be erected on hard surfacing or it is otherwise unfeasible to use ground pins e.g. due to the presence of underground services, the stabilizer struts should be mounted on a block tray.
- 3.10 On completion of erecting the fencing all weather notices (minimum A4 size) shall be attached to the barrier with words such as "Construction Exclusion Zone No Access" (Appendix 5).
- 3.11 Tree Protection barriers should be maintained to ensure that they remain rigid and complete. The site manager will be responsible for making good any damage to the tree protection fence as soon as possible after any damage occurs and will if necessary cordon off the area from construction work until the damage is repaired.
- 3.12 It should be confirmed by the project arboriculturalist that the barriers have been correctly set out on site prior to the commencement of any other operations.

Ground Protection

- 3.13 All plant and vehicles engaged in demolition works should either operate outside the RPA, or run on ground protection. Where such protection is required it shall be installed prior to the commencement of operations.
- 3.14 Where vehicular access for demolition is required within RPAs this should be facilitated by a set back in the alignment of the tree protection barrier. In such cases existing hard surfacing should be retained to act as temporary ground protection. Where the set back of the tree protection barrier would expose unmade ground to construction damage new temporary ground protection should be installed.
- 3.15 Removal of existing hard surfaces retained specifically to provide vehicular access across RPAs shall take place at the end of the demolition works and shall be carried out using hard operated machinery only. RPAs which thereby become



exposed must be enclosed by barriers or protected with ground protection to BS5837:2012.

- 3.16 New temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of the underlying soil and could comprise one of the following:
 - Pedestrian movements only a single thickness of scaffold boards placed either on top of a driven scaffold frame so as to form a suspended walkway, or on top of a compression resistant layer e.g. 100mm woodchip laid onto a geotextile membrane
 - Pedestrian operated plant up to gross weight of 2 t proprietary interlinked ground protection boards placed on a compression resistant layer e.g. 150mm woodchip laid onto geotextile membrane
 - Wheeled or tracked vehicles exceeding 2t gross weight proprietary system such as cellular confinement system designed to take likely loading

Additional Precautions Outside Construction Exclusion Zone

- 3.17 The planning of site operations shall take into account heavy machinery in order that it can operate without coming into contact with retained trees. Such contact could result in serious damage and might make their safe retention impossible. Consequently any transit or traverse of plant in proximity to trees shall be conducted under the supervision of a banksman, to ensure that adequate clearance from trees is maintained at all times.
- 3.18 In general roots shall be grubbed out by mechanical excavators. However, a stump grinder shall be used where there is a possibility of damaging existing underground services which are to be retained.

Site Monitoring

- 3.19 The project arboriculturalist shall visit and monitor the site at regular intervals during the demolition works. Following each visit an email report will be sent to the site manager and the local authority tree officer. The suggested programme of visits is indicated below but will be reviewed once the sequencing of tree removal and demolition is finalised;
 - Induction of tree works contractors



- Interim visit to check progress of tree works
- Check that tree works have been completed as specified
- Induction of groundworkers and demolition team
- Check that tree protection barriers have be installed as specified
- Interim visit to check progress of demolition works
- Supervision of works within tree protection barriers
- Check that demolition works have been completed

Avoiding Physical Damage to Tree Roots

- 3.20 To avoid damage to tree roots existing ground levels should be maintained within the RPA.
- 3.21 Where the removal of underground structures such as service ducts exposes roots these should immediately be wrapped or covered to prevent desiccation and to protect them from rapid temperature changes. Any wrapping should be removed prior to backfilling, which should take place as soon as possible.
- 3.22 Roots smaller than 25mm diameter may be pruned back, making a clean cut with a suitable sharp tool, except where they appear in clumps. Roots appearing in clumps, or of over 25mm diameter, should only be severed after consultation with the project arboriculturalist.
- 3.23 Prior to backfilling retained roots should be surrounded with topsoil or uncompacted sharp sand or other loose inert granular fill before soil is replaced. This material should be free of contaminants and other foreign objects potentially injurious to tree roots. Builders sand should not be used because of its high salt content which is toxic to tee roots.

Demolition Within RPAs

3.24 Where the removal of hard surfaces and underground service ducts is to take place within construction exclusion zone the work shall be undertaken using hand operated tools. In no circumstance shall heavy machinery enter construction exclusion zone. In such cases it will be necessary to temporarily gain access to the construction exclusion zone and the work shall be carried out under the



supervision of the project arboriculturalist. Where necessary remedial groundworks shall be carried out to fill excavations with topsoil to ensure that roots are not left exposed. Remedial works shall be carried out as soon as possible after the demolition works and when the demolition and remedial works have been completed the protection fence shall be reinstalled.

- 3.25 Where an existing hard surface or service duct is scheduled for removal within an RPA care should be taken not to disturb tree roots that might be present. Handheld tools should be used to remove the existing surface working backwards over the area, to avoid working over exposed ground. Material removed shall be replaced with topsoil in order to maintain the former ground levels within the RPA.
- 3.26 Where retained trees stand next to structures to be removed, the demolition should be undertaken inwards within the footprint of the existing building often referred to as "top down, pull back". Where RPAs fall within the footprint of existing buildings and the erection of the tree protection fence is not possible a temporary high visibility barrier shall be installed no more than 1 metre away from the building elevation during the demolition works. As soon as the demolition works for that building have been completed the full specification tree protection barrier shall be installed.

Tree Protection During Demolition

- 3.27 Where demolition works cause a significant build up of dust on foliage it will be necessary to hose down trees at the end of each working day.
- 3.28 In the event of accidental damage occurring to retained trees the site manager will immediately inform the project arboriculturalist who will visit the site as soon as practically possible and provide advice on remedial works as necessary. The project arboriculturalist will send a report by email to the LPA tree officer informing him of all such occurrences.



APPENDIX 1 SURVEY SCHEDULE OF RETAINED TREES

Date May-13 Site: UPPER HEYFORD PHASE 1A								Surveyor: PC/DP					Client: DORC			Job no:									
								S	Spread	t			Crown clearance heigh												
Ref No	Species	Height	Esti mat e	Stem dia	Esti mate	ı N	Esti mat e	s	Esti mat e		Esti nat e W	Esti mat e	1st branch		1st branch direction	Canopy	Esti mat e	Life stage	General observations Physiological and structural condition. Preliminary management recommendations	Structural Condition	Physiological Condition	ULE	Quality grading	RPA radius	RPA area
G294	Maple (Norway)	11	-	400	-	0	T -	0	-	0	- 0	-	N/A	-	N/A	1	-	М	5 trees. Generally good. Remove basal growth from tree three. Raise canopies to 2m.	High	High	20+	B2	4.8	72
G414	Cypress sp.	13	-	370	-	0	-	0	-	0	- 0	-	N/A	-	N/A	2.5	-	М	Screening value. Good group.	High	High	40+	B2	4.4	62
T419	Maple (Norway)	7	-	400	-	4	-	4	-	4.5	- 5	-	2.5	-	South west	2	-	М	Minor deadwood, good shape.	Medium	Medium	20+	B1	4.8	72
T420	Cypress sp.	12	-	1000	-	3	-	5	-	4	- 3	-	N/A	-	N/A	0.5	-	М	Edge of parking court. Slight discolouration on leaves.	Medium	Medium	20+	B1	12.0	452
T421	Maple (Norway)	11	-	330	-	4.5	-	3	-	3	- 5	-	3	-	North	1.5	-	М	Suppressed to south east. Weak fork 2.5m. Minor deadwood.	Medium	High	20+	B1	4.0	49
T422	Plane (Oriental)	13	-	500	-	3	-	7	-	8.5	- 7	-	2	-	East	2	-	М	Suppressed to north. In planting area within parking court. Minor hanging deadwood.	Medium	Medium	20+	B1	6.0	113
T423	Cypress sp.	15	-	860	-	3	-	3.5	-	4	- 3.5	5 -	N/A	-	N/A	0.5	-	M	Minor discolouration. In planting bed in parking court.	Medium	Medium	20+	C1	10.3	335
T424	Maple (Norway)	8	-	210	-	2	-	3	-	3	- 4	-	1.5	-	North	2	-	EM	Suppressed to north by cypress. Dieback in crown, leaf discolouration.	Medium	Low	20+	C1	2.5	20
T428	Ash (Common)	13	-	490	-	0	-	0	-	0	- 0	-	N/A	T -	N/A	0.5	-	М	Offsite ash. Ivy into canopy. Hawthorn in canopy.	Medium	Medium	20+	B1	5.9	109
T429	Cypress sp.	12	-	500	-	0	-	0	-	0	- 0	-	N/A	-	N/A	0.5	-	М	Suppressed by fencing.	Medium	Medium	20+	C1	6.0	113
T430	Lime (Small-leafed)	15	-	600	-	5	-	6	-	6	- 7	-	2	-	South	0	-	М	Suppressed by building to north and east. Minor deadwood.	Medium	Medium	40+	B1	7.2	163
T431	Lime (Small-leafed)	11	-	380	-	5.5	-	4.5	-	5	- 5	-	3	-	North	1.5	-	М	Edge of parking court, pushed up paving to north. Good tree.	High	High	40+	B1	4.6	65
T433	Sycamore	8	-	400	-	6	-	5	-	5	- 5	-	2	-	South west	2	-	М	Longitudinal crack 1m long to east. Minor deadwood.	Medium	Medium	20+	B1	4.8	72
G437	Maple (Norway)	8	-	260	-	0	-	0	-	0	- 0	-	N/A	-	N/A	2	-	М	Two trees. Northern tree dieback in canopy, minor deadwood. In planting area within parking court.	Medium	Medium	20+	C1	3.1	31
T439	Sycamore	15	-	440	-	6	-	6	-	6.5	- 5.5	- 6	2.5	-	West	0.5	-	М	Weak fork at 3m including branch coalescence. Potential fibre buckling.	Medium	Medium	20+	C1	5.3	88
T441	Maple (Norway)	15	-	440	-	0	-	0	-	0	- 0	-	N/A	-	N/A	2	-	М	Three trees. Middle tree forks at 2m, included bark. Southern tree branches ripped off. Northern tree root girdling. Deadwood, touching building to east.	Medium	Medium	20+	C2	5.3	88
T442	Whitebeam	7	-	380	-	5	-	5	-	6	- 4.5	5 -	1.5	-	East	1	-	М	Helical growth, multiple pruning wounds not occluded, minor deadwood. Minor branch rubbing at 3m. Good shape.	Medium	Medium	20+	B1	4.6	65
T443	Sycamore	12	-	350	-	6	-	6	-	7	- 5.5	5 -	2	-	East	0.5	-	М	Multiple pruned branches to north west. Minor deadwood.	Medium	Medium	20+	C1	4.2	55
T445	Cypress sp.	15	-	900	-	4	-	3	-	3.5	- 3	-	N/A	-	N/A	1.5	-	М	Rounded shape, screening value.	Medium	Medium	20+	C1	10.8	366
T446	Sycamore	7	-	350	-	3.5	-	3		3	- 3	<u> </u>	N/A	-	N/A	0.5	-	EM	Offsite, growing through fence.	Medium	Medium	40+	C2	4.2	55
T447	Cypress sp.	15	-	700	-	4	-	4	-	4	- 4	-	N/A	-	N/A	2	-	М	Screening value	Medium	Medium	20+	B2	8.4	222
G448	Cypress sp.	15	-	700	-	4	-	0	-	0	- 0	-	N/A	-	N/A	1.5	-	М	Screening value. Seventeen trees.	Medium	Medium	20+	B2	8.4	222



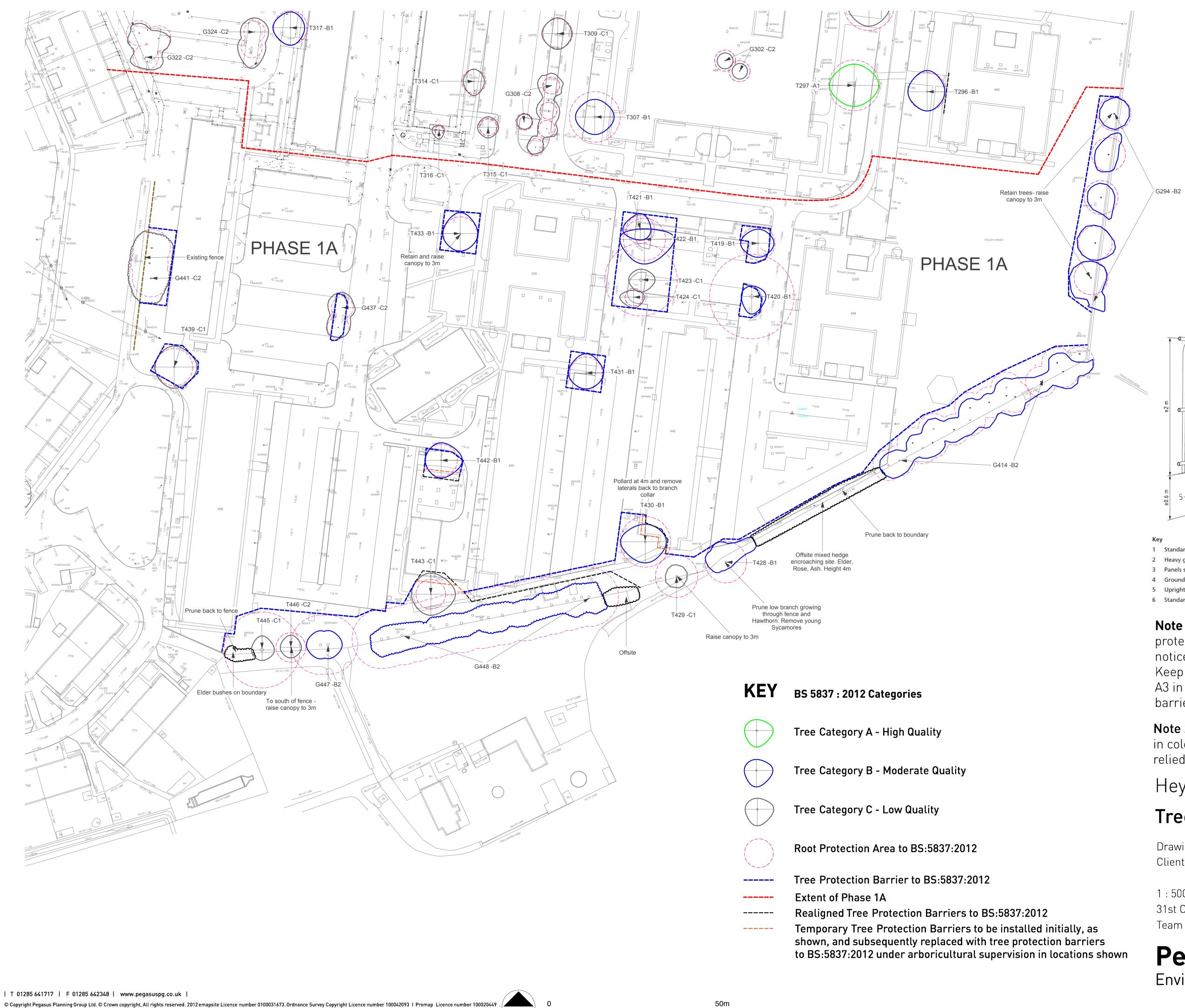
APPENDIX 2 TREE RETENTION/LOSS SCHEDULE

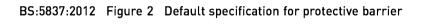
Tree Retention/Loss Schedule Dorchester Phase 1A

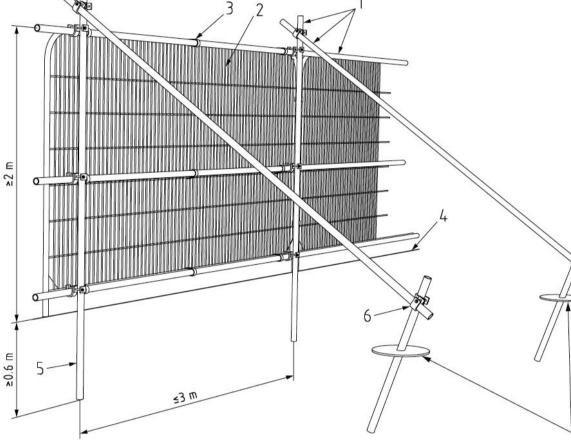
Tree No	Species	Retain	Remove	Tree Work Schedule
G294	Maple x6			Retain 5 northern trees -Remove
				southernmost tree - Remove
				basal growth and raise canopies
				to 3 metres -
T295	Cypress			Remove and grub out roots
T323	Sycamore			Remove and grub out roots
G414	Cypress x17			No work required
G415	Sycamore x2			Remove two trees and grind out
	, , , , , , , , , , , , , , , , , , , ,			stumps
G416	Rowan x3			Remove and grub out roots
T417	Cypress			Remove and grub out roots
T418	Cypress			Remove and grub out roots
T419	Maple			No work required
T420	Cypress			No work required
T421	Maple			No work required
T422	Plane			No work required
T423	Cypress			No work required
T424	Maple			No work required
T425	Hornbeam			Remove and grub out roots
G426	Hawthorn x3			Remove and grub out roots
T427	Maple and			Remove and grub out roots
,	goat willow			Themove and grab out roots
	x3			
T428	Ash			Prune back hawthorn and
				remove low ash branch growing
				through fence- remove small
				self-set sycamores
T429	Cypress			Raise canopy to 3 metres
T430	Lime			Pollard at between 4 and 5
				metres – remove low laterals to
				branch collar
T431	Lime			No work required
G432	Whitebeam			Remove and grub our roots
	x4			
T433	Sycamore			Raise canopy to 3 metres
T434	Sycamore			Remove and grub out roots
G435	Hawthorn x2			Remove and grub out roots
T436	Sycamore			Remove and grub out roots
G437	Maple x2			No work required
T438	Maple			Remove and grub out roots
T439	Sycamore			No work required
T440	Sycamore			Remove and grub out roots
G441	Maple x3			No work required
T442	Whitebeam			No work required
T443	Sycamore			Raise canopy to 3 metres
T444	Cypress			Remove and grub out roots
T445	Cypress			No work required
T446	Sycamore			Raise canopy over site to 3
	,			metres
G447	Cypress x2			No work required
G448	Cypress x17			No work required



APPENDIX 3 TREE PROTECTION PLAN







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

Note 1: All weather notices to be attached to tree protection barriers. All weather information notices to read 'Construction Exclusion Zone -Keep out

A3 in size. To be attached to tree protection barriers

Note 2: The original of this drawing was produced in colour - a monochrome copy should not be relied upon.

Heyford Park - Phase 1A

Tree Protection Plan

Drawing Ref: **D.0341_7-A** Client : **Dorchester Group**

1 : 500 @ A1 31st October 2013 Team PC/DP

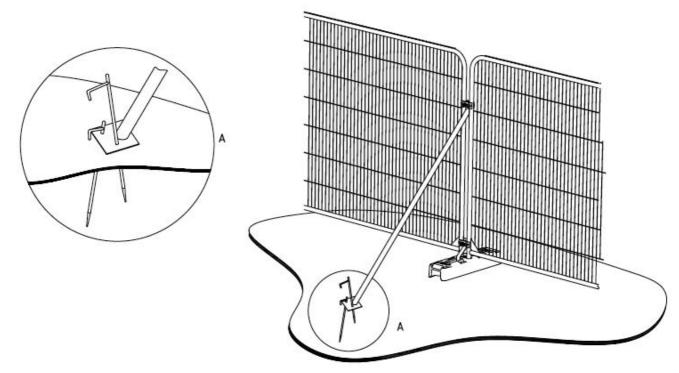




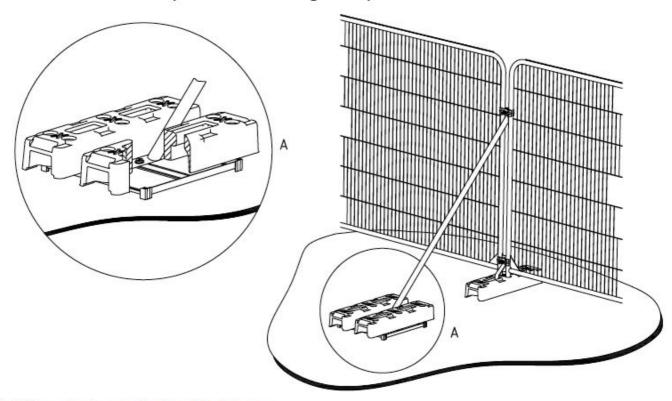
APPENDIX 4

TREE PROTECTION BARRIER DETAIL (BS5837:2012)

BS:5837:2012 Figure 3 Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins



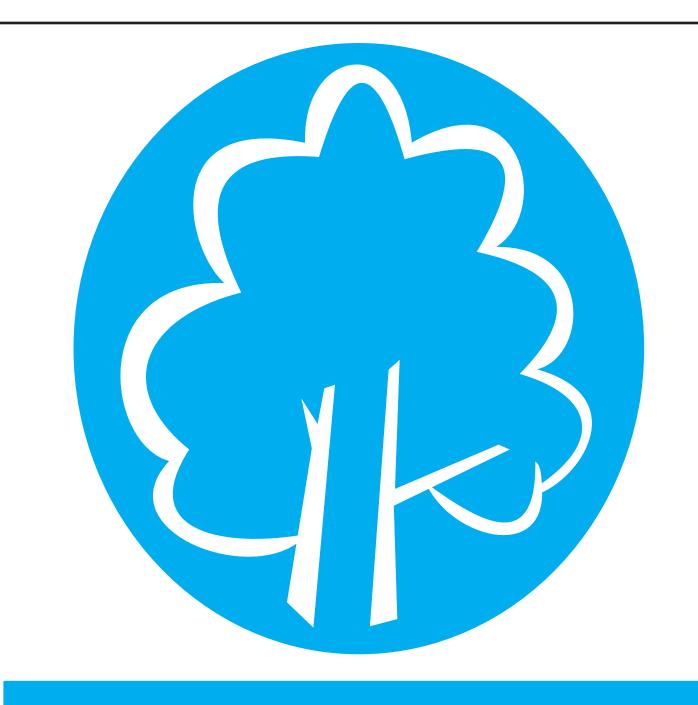
b) Stabilizer strut mounted on block tray

For more details refer to BS:5837:2012 'Trees in relation to design, demolition and construction - Recommendations' p.21





APPENDIX 5 CONSTRUCTION EXCLUSION ZONE NOTICE



PROTECTIVE FENCING. THIS
FENCING MUST BE
MAINTAINED IN ACCORDANCE
WITH THE APPROVED PLANS
AND DRAWINGS FOR THIS
DEVELOPMENT.



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