Draft
Arboricultural method statement

TREES

at and adjacent to

39 Rosslyn Hill
Hampstead
London
NW3 5UJ

for

Mr J Cohen and Ms A Lindsay

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job no.: 267

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1. Intoduction

1.1 This method statement sets out measures for the protection of 5 trees standing within and immediately adjacent to the rear garden of 39 Rosslyn Hill, Hampstead, London NW3 5UJ

1.2 The trees covered by this method statement are listed in the **Pre-contract tree works schedule** in **Appendix b** and their locations are shown on the **Tree protection plan** in **Appendix a.**

1.3 The proposed development comprises:

- An extension to the lower ground floor level of the existing dwelling
- Associated external works

1.4 The measures contained in this method statement are based on the advice and guidance set out in *BS5837: 2012: Trees in relation to design, demolition and construction – Recommendations.*

2. Status

2.1 Status

2.1.1 This method statement forms a part of the building contract and its requirements are an integral part of the contract specification and schedule of works.

2.1.2 A copy of the method statement must be available for inspection on site at all times.

2.1.3 All persons working on site should be aware of the importance of avoiding damage to trees and should observe the necessary precautions. A guidance leaflet is included in this method statement in **Appendix c**.

3. Preparatory works prior to construction

3.1 Tree works

3.1.1 Preparatory tree works are listed in the **Tree works schedule** in **Appendix b** and should be carried out prior to the start of the main contract

3.1.2 All works will be carried out in accordance with BS3998:2010: *Recommendations for Tree Work* by an appropriately qualified tree work contractor.

3.1.3 All arisings are to be taken off-site to an approved tip.

3.2 Protective measures: fencing

3.2.1 The extent and location of tree protection fencing is shown on the **Tree protection plan** in **Appendix a**. Fencing must be erected before any site works take place. It is particularly important that no demolition, soil stripping, breaking out of existing hard surfaces, re-grading or other excavation takes place before protection fencing has been erected.

3.2.2 The British Standard recommends a scaffold framework with braced uprights at no more than 3m intervals. Subject to the agreement of the local authority, fencing using temporary steel mesh fencing panels (for example Heras Roundtop or equivalent - also sometimes referred to as GS7 or HSG 151 fencing) or plywood panels are also fit-for-purpose as long as the panels are attached to uprights driven or dug into the ground at no more than 3m spacings and braced as specified in the British Standard. A 1:20 detail of The British Standard specification for protective fencing is included at the end of this statement in **Appendix c.**

3.2.3 Areas separated from the construction site by protective fencing are **Construction Exclusion Zones (CEZ).**

3.2.4 **CEZs** are total exclusion areas. All of the following will be excluded:

- Animals
- Pedestrians
- Vehicles and construction equipment
- Materials and equipment storage
- Contamination from materials used outside the **CEZ** – (for example spillage of diesel or other toxic liquids)
- Surface water runoff from outside the **CEZ**

3.2.5 Clearly legible, weatherproof signs will be fixed to the perimeter fencing of each **CEZ** clearly setting out the access restrictions set out above. An example is included at the end of this statement in **Appendix c.**

3.3 Protective measures: ground protection areas

3.3.1 Ground protection layers will be installed in the areas indicated on the **Tree protection plan** in **Appendix a** at the same time as protective fencing for the phase in question (see **3.2** above) is erected. It is particularly important that no demolition, soil stripping, breaking out of existing hard surfaces, re-grading or other excavation takes place before ground protection layers have been installed

3.3.2 Existing tarmac or other hard surfacing is acceptable as a ground protection layer.

3.3.3 Where the ground protection layer will have to carry **vehicular traffic**, it will consist of Eve K Trakpanel heavy duty interlocking aluminium temporary road sections (or equivalent) laid on an average 50mm deep layer of Type 1 fill to provide a level surface.

3.3.4 For **pedestrian traffic only**, ground protection may consist of side butted scaffold boards laid on a geo-textile membrane and a compressible layer (9mm Miothene or equivalent). . Where necessary, local irregularities in the ground surface will be made up with Type 1 fill prior to the installation of the ground protection layer. A typical detail is included in **Appendix c**

3.3.5 Tracked or wheeled equipment used for installing ground protection layers will not exceed a ground bearing pressure of 0.3kgf/cm^2

3.3.6 Each successive section of ground protection will be laid by personnel and machinery working from the immediately preceding section or from existing hard surfacing.

3.4 Approval prior to start of works

3.4.1 Approval for the location and method and standard of construction of tree protection fencing will be obtained from the local authority prior to start of works.

4. Works during development

4.1 Storage of materials

4.1.2 Phytotoxic materials (diesel for example) will all be stored in a bunded tank or other purpose-built containment compound at least 5m away from any **CEZ.**

4.2 Safe positioning of lifting and handling equipment

4.2.1 Lifting and handling equipment (eg cranes and excavators) must be located in such a way that, when in use, no part of the equipment extends into or across any **CEZ.**

4.3 Demolition

4.3.1 Demolition of existing buildings and retaining structures, by machine or hand, must be away from the boundary fences of adjacent **CEZs** into the footprint of the to-be-demolished building ('top down: pull back').

4.4 No fires on site

4.4.1 No fires will be lit anywhere on site.

4.5 Excavation

4.5.5 Roots which extend into the footprint of the proposed lower ground floor extension will be cut cleanly at their point of origin or flush with face the excavation from which they enter the footprint area, with a sharp saw or loppers to minimise damage and promote recovery.

4.6 Removal of protective fencing

4.6.1 When the main construction programme is complete and prior to the start of external works and making good, protective fencing may be dismantled.

5 Summary of methods

5.1 Conflicts and remedial actions

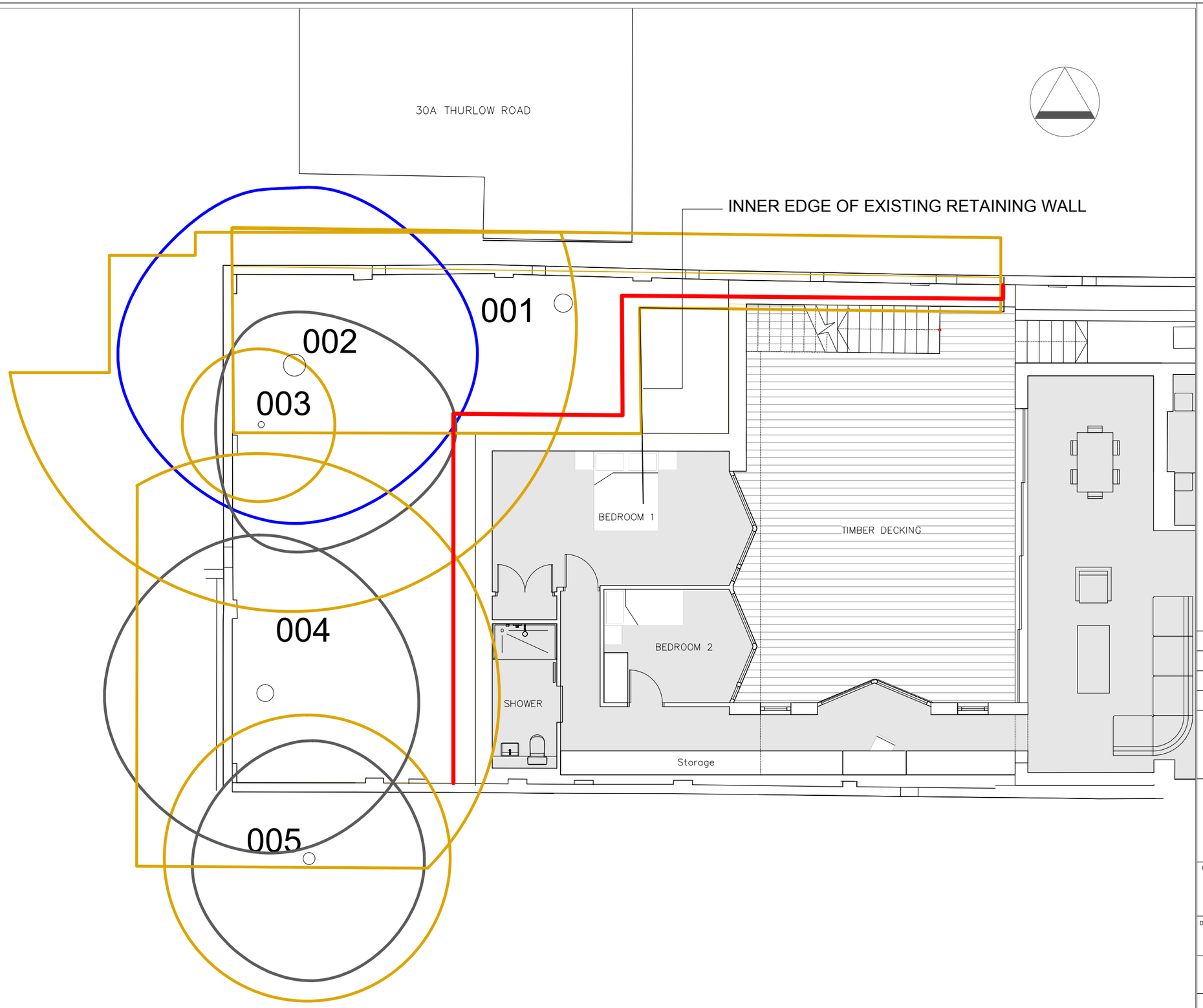
5.1.1 The main potential sources of damage to trees are listed in **Table 1** below together with the remedial measures that should be adopted to minimise or avoid damage.

Source of damage	**Remedial actions**	**See**	**Trees at risk**
Damage to tree stems and foliage	Erect protective fencing; plan construction activities to avoid damage to overhead branches:	Sections: 3.2 4.2, 4.3, 4.4 **Tree protection plan**	T001-004
Damage by surface compaction from site traffic/storage of materials	Install ground protection layers	Section: 3.3 **Tree protection plan**	Trees on access route
Damage from spillage of toxic materials	No phytotoxic materials to be stored within 5m of any retained tree	Section: 4.1	T001-004
Damage to tree roots	Observe restrictions applying to **CEZs**	Sections: 3.2, 3.3 4.1 - 4.4 **Tree protection plan**	T001-004

Table 1: Summary of Potential Damage Sources and Remedial Measures

Appendix a

Tree protection plan



KEY

001

EXISTING TREE

Trees are coloured on plan to correspond to the Retention Categories specified in: *BS5837:20 12 Trees in relation to design, demolition and construction - Recommendations* as follows:

Category A - GREEN
Category B - BLUE
Category C - GREY
Category U - RED

003

ROOT PROTECTION AREA as defined in *BS5837:2012 Trees in relation to design, demolition and construction - Recommendations*

TREE PROTECTION FENCING

REVISION	CHCK'D	APP'D	DATE

Client:

MR J COHEN AND Ms A LINDSAY

Job Title:

39 ROSSLYN HILL
HAMPSTEAD
LONDON
NW3 5UJ

Drawing Title:

TREE PROTECTION PLAN

Drawing Number:	Scale:
267.03.00	1:100 (A3)
Date:	Drawn by:
07.08.14	RS

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Appendix b

Pre-contract tree works schedule

Pre-contract tree works schedule

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Tree No.	Species	Height (m)	Diam (cm)	Crown Spread (m)				Crown Height (m)	Item
				N	E	S	W		
001	Pear *(Pyrus communis)*	12	460	5	4	3	4	2/3	No action required
002	Pear *(Pyrus communis)*	11	530	4.5	4.5	4	4	3/3	No action required
003	Variegated Holly (*Ilex aquifolium 'Argentomarginata'*)	8	160	2.5	5	3	1	1/0	No action required
004	Pear *(Pyrus communis)*	11	430	4	4	4	4	3/2	No action required
005	Ash (*Fraxinus excelsior*)	12	300 @ 1m est	3	3	3	3	1/3	No action required

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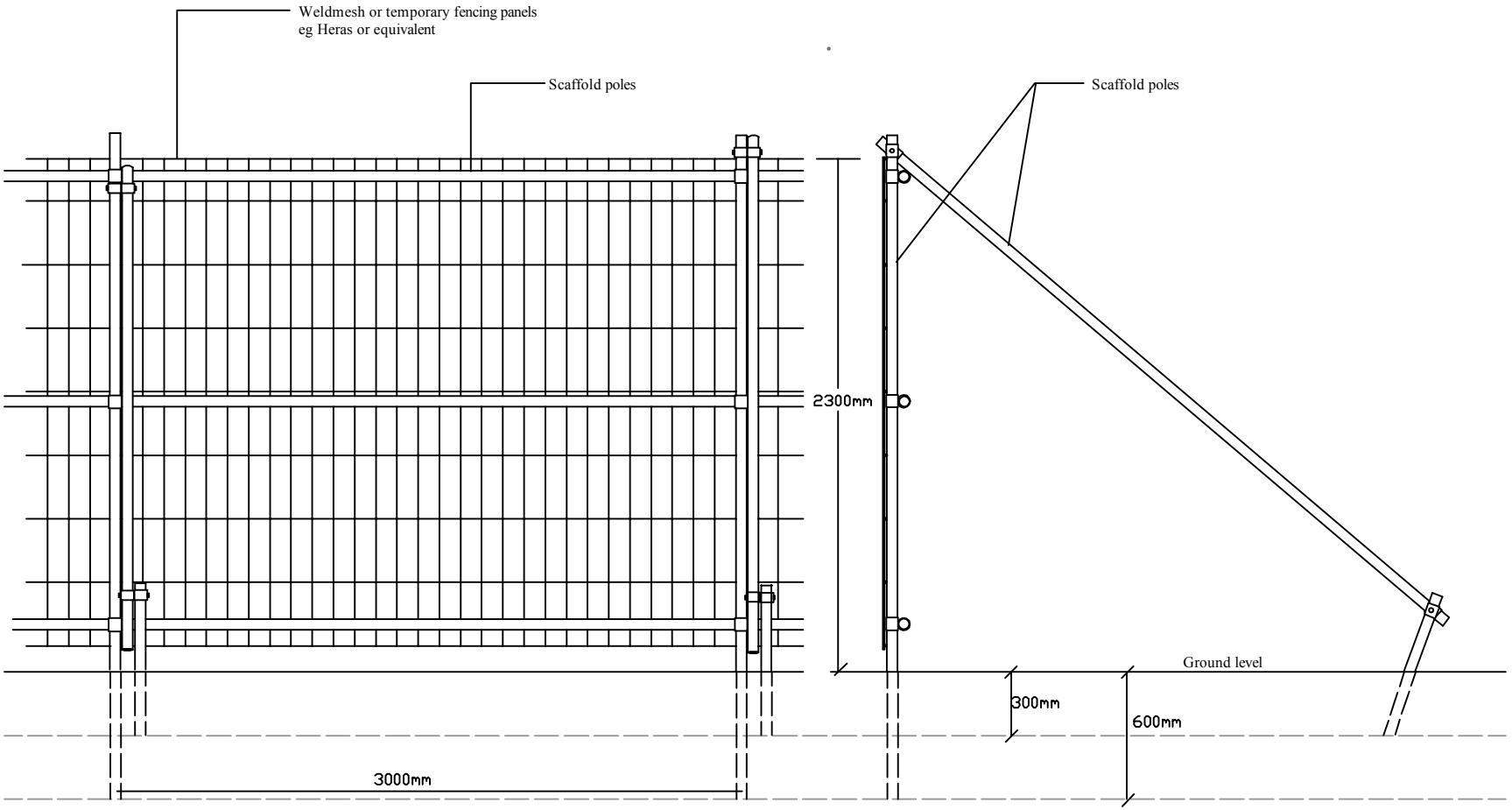
Appendix c

Protective fencing detail
Tree protection notice
Tree protection notes



Excerpt from *BS5837:2005 Trees in relation to construction - Recommendations*

Barriers should consist of a scaffold framework comprising a vertical and horizontal framework, well braced to resist impacts, with vertical tubes spaced at a maximum interval of 3m.

Onto this, weldmesh panels should be securely fixed using wire or scaffold clamps. Weldmesh panels on concrete or rubber feet are nor resistant to impact and should not be used

NOTE: The above is preferred because it is readily available, resistant to impact, can be re-used and enables inspection of the protected area

BS5837:2012 Protective Fencing Detail
Scale: 1:20 [A4]

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TREE PROTECTION ZONE

KEEP OUT

NO DIGGING OR TRENCHING
NO STORAGE OF PLANT AND MATERIALS
NO VEHICULAR ACCESS
NO FIRES TO BE LIT
NO CHEMICALS TO BE STORED OR HANDLED IN THE VICINTY OF THIS ZONE
AVOID PHYSICAL DAMAGE TO TREES

REPORT DAMAGE TO TREES OR FENCING IMMEDIATELY

39 ROSSLYN HILL
HAMPSTEAD
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CARE OF TREES

TREE PROTECTION NOTES

Trees are thin skinned and easily damaged

Their roots spread widely and run close to the ground surface.

All of the following can cause serious damage:

- Heavy traffic over and the storage of heavy materials above tree roots
- Direct damage to stems and branches from badly handled construction equipment,
- Root damage caused by unnecessary excavation
- Leakage of toxic liquids and powders above roots and close to tree stems.

Please keep the trees on site safe by following these simple rules carefully and in full.

There is a protective fence round each retained tree. These fenced-off areas are CONSTRUCTION EXCLUSION ZONES (CEZ). Don't enter any CEZ unless authorised to do so

In Construction Exclusion Zones

- Don't store any materials
- Don't use heavy machinery
- Don't handle toxic materials
- Stick to the planned work programme. Don't undertake unscheduled variations
- Don't light fires
- Report any damage to protective fencing to the Site Manager

Work Planning

Plan your work so that construction machinery does not come into contact with and cause damage to branches and stems of retained trees.

Appoint someone to supervise movement of machinery and equipment close to CEZs

Tell the Site Manager if tree pruning is needed to get machinery in, out or around the site. Don't do it yourself