MARSHALL

CONSTRUCTION GROUP

# Development at Dearne Valley Park Way, Barnsley

# Planning Ref 2021/0479

## Response to Condition 3

## Tree Protection Details

**March 2025**

## Planning Condition No 3

'No development or other operations being undertaken on site shall take place until the following documents in accordance with British Standards 5837:2012 Trees in relation to design, demolition and construction – Recommendations have been submitted to and approved in writing by the Local Planning Authority:

- Tree protective barrier details
- Tree protection plan
- Arboriculture method statement

Thereafter all works on site shall be carried out in accordance with the approved details for the duration of the construction period.'

## Response and Supportive Evidence

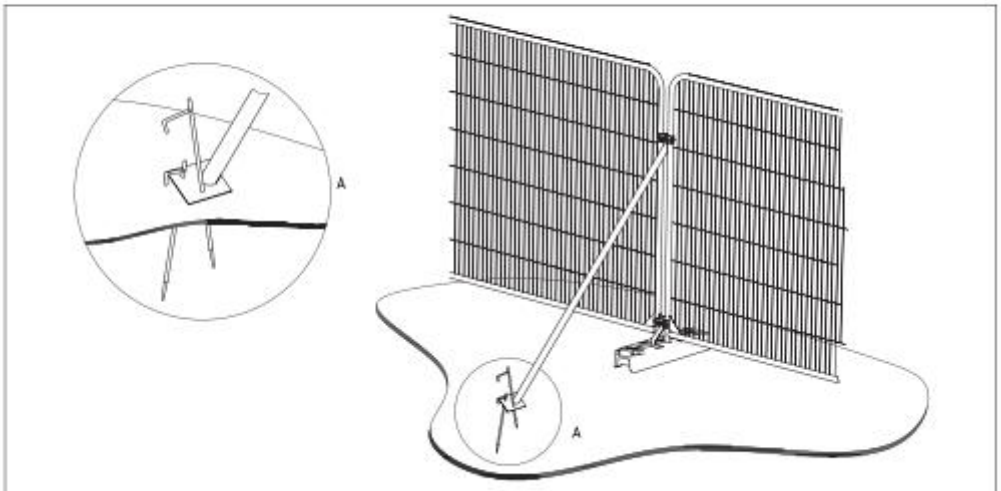
In relation to the above noted Planning Condition, prior to main construction works commencing, tree protection fencing is to be erected in accordance with the following approved documentation;

- Rosetta Arboricultural Impact Assessment.
- Rosetta Arboricultural Impact Assessment Plan (3784/2/A).
- Rosetta Arboricultural Method Statement.

Tree protection fencing is to be installed to the locations as detailed on the above referenced approved Rosetta Arboricultural Impact Assessment Plan (3784/2). The fencing will be erected in accordance with BS 5837:2012 fig.3, which consists of Herras fencing and stabilizer struts, as below figure;

BRITISH STANDARD BS 5837:2012

Figure 3 Examples of above-ground stabilizing systems




a) Stabilizer strut with base plate secured with ground pins

Brooks Ecological are to be appointed to undertake the necessary Prestart Inspection of the site prior to any tree pruning and felling works taking place. Also, this inspection will include a review of the installed and erected tree protection fencing in accordance with the above, in which a report will be provided and submitted as evidence.

## APPENDICES

**A.** Rosetta Arboricultural Method Statement.
**B.** Rosetta Arboricultural Impact Assessment Plan (3784/2/A).

# DEARNE VALLEY PARKWAY, BARNSLEY
## for Gregory Property Group

# ARBORICULTURAL IMPACT ASSESSMENT

ROSETTA LANDSCAPE DESIGN
Chartered Landscape Architects

Swallow's Nest, Main Street
Askham Richard, YORK, YO23 3PT

Telephone [redacted]

Email: [redacted]
Web: www. rosettalandscape.co.uk

# CONTENTS

## 1.0 BACKGROUND

1.1 Brief

This arboricultural impact assessment has been commissioned by Gregory Property Group to support an application to Barnsley Metropolitan Borough Council for commercial development on site.

1.2 Documents Provided

To assist in the production of this report we have been provided with a copy of an illustrative layout (drawing no.15-315-[P]111) produced by architects The Harris Partnership; we have also carried out a tree survey to BS5837:2012.

1.3 Tree Status

The interactive map on the local planning authority's website shows that that no trees are included within a Tree Preservation Order and the site does not lie within a Conservation Area.

## 2.0 SURVEY DETAILS

2.1 A site visit was undertaken on 01 Jun 2021 and observations are noted within the tree report prepared following this visit.

2.2 The drawing accompanying the tree report (3784/1) shows the position, canopy spread and root protection area (RPA) of the trees; drawing 3784/2 attached to this report shows these details in relation to the illustrative layout.

## 3.0 IMPACT ASSESSMENT

### 3.1 Context

3.1.1 Following the guidance of BS5837:2012 proposals for any site should ideally aim to incorporate those trees which are identified as 'A' and 'B' whereas 'C' category trees will not usually be retained where they may adversely affect the layout. The attached drawing shows part of a group of 'B' category trees removed. However, these were previously approved for removal as part of a projected highways improvement which is not now proceeding.

3.1.2 BS 5837:2012 states that when considering the layout of the site, and the retention of significant trees, proposals should generally be kept outside of both their Root Protection Area (RPA) and canopy spread. However, it allows for the possibility of encroaching into these areas with piled footings, access roads, footpaths, and parking areas assuming existing ground levels can be maintained, and the appropriate construction methods can be employed. This is particularly relevant where existing buildings and/or surfacing extend within the RPAs of the trees.

### 3.2 Site Proposals (see drawing 3784/2)

3.2.1 With regard to built form, the sketch layout shows the construction of three large buildings on site, together with parking and circulation areas, all of which would be accessed from an existing roundabout to the east of Rockingham Roundabout.

3.2.2 With respect to the current proposed site layout all trees to the north and east could be retained insofar as the construction process is concerned, whilst part of the group to the south (and one insignificant group – G1- in the centre) would require removal. All trees shown retained on the attached plan would lie clear of any construction works.

### 3.3 Services and Other Considerations

3.3.1 Details of services to dwellings are not available currently. However, it is assessed that all these could be laid within the access road or vehicle circulation areas serving the new buildings; if this were the case none would pass through the rooting zones of retained trees.

### 3.4 Potential Impact on Trees

3.4.1 There is only one potential impact on trees, namely a number would need to be removed to adequately accommodate the proposed development as presently shown.

## 4.0 MITIGATION MEASURES

4.1 The following trees lying within the site boundary would need to be removed to allow the development to proceed (all shown on attached drawing 3784/2).

G1 2nr Goat Willow

G5 Oak, Silver Birch, Wild Cherry, Ash, Alder, Field Maple. Goat Willow, Hawthorn, Hazel. (Around 50% of the total area is proposed for removal).

G10 Hawthorn (two rows of overgrown hedge)

T11 Goat Willow

4.2 As indicated above, once the trees above have been removed, those retained should not be adversely affected by construction works to any significant extent. Notwithstanding this assessment, it is recommended that, following excavation, if any roots are encountered these should be cut cleanly with a hand saw and exposed root ends covered with damp hessian to minimise desiccation until the excavation can be backfilled (which should ideally be undertaken within one working day).

4.3 Prior to any building work on site undertake any essential work to retained trees on arboricultural grounds that would improve safety and benefit their future growth. This is an opportunity to undertake arboricultural work (e.g., removal of damaged limbs and dead wood, pruning as appropriate and cutting back unwanted understorey growth) that would benefit the trees on site.

4.4 Erect Tree Protection Fencing where construction work takes place in proximity to retained trees; the alignment of such fencing should be undertaken in line with BS 5837:2012.

4.5 To offset the removal of trees it is recommended to plant replacement trees to offset their loss. These would be shown on the appropriate landscape drawing in due course.

## 5.0 GENERAL GUIDELINES, TERMS AND CONDITIONS

5.1 Any tree work should be carried out by qualified Arboricultural Contractors with at least £1million Public Liability Insurance cover.

5.2 Tree work must be carried out to BS3998:2010 which specifies recommendations for tree work.

5.3 The acceptance of this report constitutes an agreement with the terms and guidelines listed within this report.

5.4 No liability can be accepted by the consultant in respect of the trees unless the recommendations within this report are carried out under his supervision. Nor shall the consultant be responsible for events which happen after the time of the survey due to factors which were not evident at the time.

5.5 Relationships between trees and other objects such as buildings are rarely static and can at times change quite unpredictably. It should therefore be understood that the inspection and monitoring of the condition of trees is a continuing requirement which, in this instance, is recommended on an annual basis.

mp/ROSETTA LANDSCAPE DESIGN
10 June 2021

projects/docs/3787-aia-10jun21

**This drawing has been prepared for the purpose of planning approval.**

LEGEND

- Site boundary
- Existing tree (to be retained)
- Existing tree (to be removed)
- Root protection area of retained trees in line with BS 5837:2012

DEARNE VALLEY PARKWAY

Unit 1

Unit 2

Unit 3

G1

G3

G5

G7

T2

T4

T6

T8

T9

Base: The Harris Partnership 'Proposed Site Plan', 15315-(P)111 received 30May21

| | | | |
|---|---|---|---|
| PROJECT | Dearne Valley Parkway, Barnsley | | |
| TITLE | Trees in Relation to Development | | |
| CLIENT | Gregory Property Group | | |
| DATE | 10 Jun 21 | SCALE 1 : 500 | SHEET A1 |
| DRAWN | MP/jr | DRAWING NO | 3784/2 |
| CHECKED | MP | REVISION | - |

ROSETTA LANDSCAPE DESIGN
Chartered Landscape Architects

Swallow's Nest, Main Street
Askham Richard, York, YO23 3PT

Telephone +44 (0)1904 500410

Email design@rosettalandscape.co.uk
Web www.rosettalandscape.co.uk

# DEARNE VALLEY PARKWAY, BARNSLEY
## for Commercial Development Projects Limited

# ARBORICULTURAL METHOD STATEMENT

ROSETTA LANDSCAPE DESIGN

Landscape Architects

Swallow's Nest, Main Street
Askham Richard, YORK, YO23 3PT

Telephone [redacted]

Email: [redacted]
Web: www. rosettalandscape.co.uk

# CONTENTS

See drawings 3784 / 1A & 2A and refer to the Tree Survey document dated 02 Jun 21.

## 1.0 INTRODUCTION

1.1 This Method Statement has been drawn up to assist Barnsley Metropolitan Borough Council and the developer in overseeing the construction of the proposed housing development.

1.2 The document seeks to describe the site and its tree cover, list those trees which are proposed for removal due to the development, those which need to be removed for technical reasons and those which are to remain.

1.3 It describes the proposals for ensuring that the trees that are to remain would survive the development and thrive after the development.

1.4 The development and timing of construction operations are described, together with materials which would be used in order to maximise tree protection.

1.5 The document also includes a section of useful telephone numbers and addresses.

1.6 This Statement will be included as part of the specification and schedule of works issued to the building contractor and will form part of the contract. The Statement will be available on site for inspection.

## 2.0 SITE DESCRIPTION

2.1 The study site is located on the northern edge of the settlement of Hoyland Common which itself lies around 6km to the south of Barnsley town centre. It is bounded to the north by the A6195 Dearne Valley Parkway (beyond which lie commercial units) and to the west by Sheffield Road. To the south – towards the eastern end and beyond a retaining wall - lies land in commercial use; an open paddock abuts the site towards the western end. A band of tree and shrub planting abuts the site to the east beyond which lies open land.

2.2 The site is presently not in active use though it is understood to be formerly part of the Rockingham Colliery site with the ground having been subsequently remediated. Ground is relatively level at around 450 metres Above Ordnance Datum (AOD) falling gradually across the site from south to north. Beyond the site boundary ground rises gradually to the south and east and falls away gradually to the north and west.

2.3 The interactive map on the local planning authority's website shows that that no trees are included within a Tree Preservation Order and the site does not lie within a Conservation Area.

## 3.0 TREES AFFECTED BY DEVELOPMENT

3.1 The majority of trees on site are due to remain and are listed as follows:

***T2*** ***Poplar***
***G3*** ***Oak, Silver Birch, Lombardy Poplar, Alder, Scots Pine Goat Willow, Hawthorn, Hazel***
***T4*** ***Ash***
***G5*** ***Oak, Silver Birch, Wild Cherry, Ash, Alder, Field Maple. Goat Willow, Hawthorn, Hazel. (Around 50% of the total area is proposed to be retained).***

***T6 Ash***
***G7 3nr Hawthorn***
***T8 Smooth-leaved Holly***
***T9 Hawthorn***
***T12 Silver Birch***

3.2 There are no trees recommended for removal on arboricultural grounds.

3.3 Those trees that are to be removed for development purposes are as follows:

***G1 2nr Goat Willow***
***G5 Oak, Silver Birch, Wild Cherry, Ash, Alder, Field Maple. Goat Willow, Hawthorn, Hazel. (Around 50% of the total area is proposed for removal).***
***G10 Hawthorn (two rows of overgrown hedge)***
***T11 Goat Willow***

## 4.0 TREE REMOVAL

4.1 The first operation on the site will be the removal of all trees thus scheduled.

4.2 These works will be undertaken with care to avoid damage to adjacent specimens due for retention.

## 5.0 REMEDIAL WORK

5.1 When all the felling is completed, the necessary tree surgery will be carried out.

5.2 This will principally involve only the general removal of deadwood from the crowns of trees and the removal of the lowest limbs (light crown lift) of some trees.

5.3 All work will comply with British Standard 3998 (2010).

5.4 In addition to this the following works are required within the development and are to comply with British Standard 3998 (2010):

***T4 Ash - Monitor annually for ash dieback***
***T6 Ash - Monitor annually for ash dieback***

## 6.0 PROTECTIVE FENCING

6.1 Prior to machinery entering the site for any building, levelling or site clearance purposes, all trees listed to be retained within the development will be fenced off in a continuous line around their crowns; or where practical, in accordance with British Standard (BS) 5837: 2012: clause 7.1 and 7.2 (see Appendix A and drawing 3784/2A).

6.2 The fencing will be constructed with a framework of scaffolding poles driven 600mm into the ground, braced together and backstays will then be added at 3m centres. Onto this will be attached a continuous line of welded mesh panels. Alternatively Ply or corrugated sheet metal panels may be used to be securely fixed to the frame with wire or scaffold clamps in accordance with BS 5837: 2012.

6.3 Where fence installation into soft ground is not possible an alternative specification of fencing described as acceptable within the BS (see Fig.3, Appendix A) is the use of welded mesh panels ('Heras' or similar) on

rubber or concrete feet supported on the inner side by stabiliser struts on a base plate secured with ground pins (or on a block tray if sitting on retained hard surfacing).

6.4 Site notices on fencing will be used in the form of pre-printed laminated waterproof signs A3 in size fixed securely to fencing panels on each enclosure at 9m intervals. The signs will clearly read:

**PROTECTED TREE ZONE**
**NO STORAGE OR OPERATIONS WITHIN FENCED OFF AREAS**

6.5 Failure to comply with the above requirements could lead to enforcement action, including the issuing of a Stop Notice, until the matter has been remedied. Where damage has occurred to legally protected trees, the owner of the site may be liable for prosecution.

## 7.0 SITE INSPECTION

7.1 After tree felling and remedial work to trees have been completed (and following erection of the protective fencing), the developer's arboriculturist will visit the site. The reasons for this visit are firstly to check that the work to the trees is satisfactory, secondly to check the protective fencing, and thirdly to meet with the local authority's tree officer to ensure that they are also satisfied.

7.2 Any necessary amendments and improvements to the protective fencing agreed at this meeting will be undertaken following confirmation of the agreed changes in writing.

## 8.0 DEVELOPMENT PHASE

8.1 After all the felling, pruning and fencing has satisfactorily been completed, the developer can commence the on-site preparation works and construction can begin.

8.2 During the development phase the developer's arboriculturist will visit the site on a regular basis to check the protective fencing and make any recommendations on any maintenance required to it.

8.3 The local authority's tree officer will have reasonable access to the site to report any problem areas directly to the developer's arboriculturist who will then visit the site and make recommendations to the developer on how best to rectify the situation.

## 9.0 DEVELOPMENT NEAR TREES

9.1 In the unlikely event that the tree protection fence needs to be moved during the development, a meeting will be called to which the local authority's tree officer will be invited. This is to agree that the methods and new position of the tree protection fencing are adequate and meet with the local authority's approval.

9.2 Any other process which will require the movement of the protective fence line will require the presence of the developer's arboriculturist and the local authority's tree officer throughout the process. This work will therefore require to be carried out immediately following the removal of fencing (ideally within a single working day).

9.3 The following procedures will be adopted where construction work is required within the canopy zone of any retained tree ('protected zone'):

9.3.1 Prior to any work commencing within protected zones the contractor and developer's arboriculturist will meet on site to discuss appropriate procedures.

9.3.2 Excavations within protected zones will be backfilled with subsoil and good quality topsoil as soon as possible to minimise root desiccation.

## 10.0 REMOVAL OF HARD MATERIAL FROM BENEATH TREE CANOPIES

10.1 Where hard surfaces are to be found beneath the canopies of existing trees these will be removed as detailed below:

10.1.1 Carefully break up hard surface by mechanical or hand means radially from the stem of each tree to minimise root damage. The depth of material thus removed will be kept to a minimum and in no case exceed 200mm. This will probably include only the wearing course and base course thus leaving the sub-base intact around the rooting zone.

10.1.2 Foundations of new retaining structures will incorporate where possible the existing foundations of the walls to minimise disturbance to tree roots.

10.1.3 The existing material will be levered up to minimise removal of the root mat beneath the existing surface. A geotextile membrane will be used to protect tree roots.

10.1.4 Remove material thus loosened again radially from the stem of the tree. Any machinery must be located beyond the canopy limit of the tree with a hydraulic arm used to reach under the canopy and retrieve material. Care must be taken at this stage not to excavate any deeper than the layer of loosened material.

10.2 Care will be taken not to incur damage to the branching structure of the tree using the hydraulic arm.

10.3 No machinery will track over the ground beneath the tree canopies, to avoid compaction of the rooting zone.

## 11.0 SERVICES

11.1 All service runs will be aligned to pass beneath the surface of the roads and pavements where possible.

11.2 Should the need arise to dig within the protective fence lines at any time, the developer's arboriculturist will be present, and hand digging will be used.

11.3 All work to services on site will be undertaken in line with the NJUG "Guidelines for Planning, Installation and Maintenance of Utility Services in Proximity to Trees".

11.4 Fencing will be constructed at 2 metres from either side of the proposed sewers to permit access for excavation. Following construction, the excavation will be backfilled with clean subsoil (and topsoil to depth of surrounding areas) as quickly as possible – ideally within one working day. Any exposed roots will be covered with damp hessian to prevent desiccation.

## 12.0 REMOVAL OF THE PROTECTIVE FENCING

12.1 When the development is complete, all drainage and service runs are in place and the main site machinery has been removed, temporary protective fencing will be dismantled. This must be done with great care and will need to be supervised to avoid heavy machinery being used.

## 13.0 COMPLETION MEETING

13.1 Upon completion of all the works specified above and procedures also specified, the developer's arboriculturist will invite the local authority's tree officer to meet on site to discuss the process and to agree on any remedial works required.

# APPENDIX

BS 5837: 2012 (ABSTRACT)

## 6.2 Barriers and ground protection

### 6.2.1 General

**6.2.1.1** All trees that are being retained on site should be protected by barriers and/or ground protection (see **5.5**) before any materials or machinery are brought onto the site, and before any demolition, development or stripping of soil commences. Where all activity can be excluded from the RPA, vertical barriers should be erected to create a construction exclusion zone. Where, due to site constraints, construction activity cannot be fully or permanently excluded in this manner from all or part of a tree's RPA, appropriate ground protection should be installed (see **6.2.3**).

**6.2.1.2** Areas of retained structural planting, or designated for new structural planting, should be similarly protected, based on the extent of the soft landscaping shown on the approved drawings.

**6.2.1.3** The protected area should be regarded as sacrosanct, and, once installed, barriers and ground protection should not be removed or altered without prior recommendation by the project arboriculturist and, where necessary, approval from the local planning authority.

**6.2.1.4** Where required, pre-development tree work may be undertaken before the installation of tree protection measures, with the agreement of the project arboriculturist or local planning authority if appropriate (see also **8.8.1**).

**6.2.1.5** It should be confirmed by the project arboriculturist that the barriers and ground protection have been correctly set out on site, prior to the commencement of any other operations.

### 6.2.2 Barriers

**6.2.2.1** 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 tree(s). Barriers should be maintained to ensure that they remain rigid and complete.

**6.2.2.2** The default specification should consist of a vertical and horizontal scaffold framework, well braced to resist impacts, as illustrated in Figure 2. The vertical tubes should be spaced at a maximum interval of 3 m and driven securely into the ground. Onto this framework, welded mesh panels should be securely fixed. Care should be exercised when locating the vertical poles to avoid underground services and, in the case of the bracing poles, also to avoid contact with structural roots. If the presence of underground services precludes the use of driven poles, an alternative specification should be prepared in conjunction with the project arboriculturist that provides an equal level of protection. Such alternatives could include the attachment of the panels to a free-standing scaffold support framework.

**6.2.2.3** Where the site circumstances and associated risk of damaging incursion into the RPA do not necessitate the default level of protection, an alternative specification should be prepared by the project arboriculturist and, where relevant, agreed with the local planning authority. For example, 2 m tall welded mesh panels on rubber or concrete feet might provide an adequate level of protection from cars, vans, pedestrians and manually operated plant. In such cases, the fence panels should 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 1 m and should be uniform throughout the fence. The panels should be supported on the inner side by stabilizer struts, which should normally be attached to a base plate secured with ground pins (Figure 3a). Where the fencing is to be erected

on retained 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 (Figure 3b).

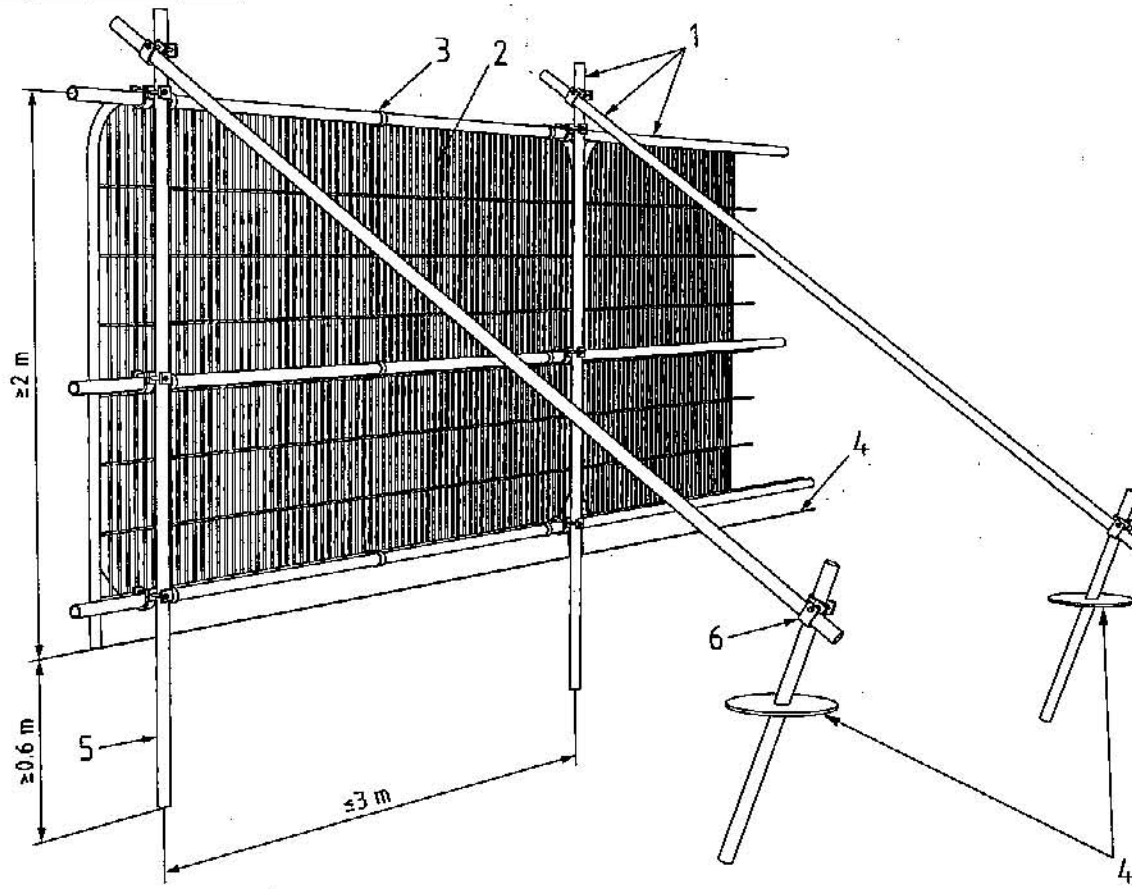
*NOTE 1 Examples of configurations for steel mesh perimeter fencing systems are given in BS 1722-18.*

*NOTE 2 It might be feasible on some sites to use temporary site office buildings as components of the tree protection barriers, provided these can be installed and removed without damaging the retained trees or their rooting environment.*

**6.2.2.4** All-weather notices should be attached to the barrier with words such as:

"CONSTRUCTION EXCLUSION ZONE – NO ACCESS".

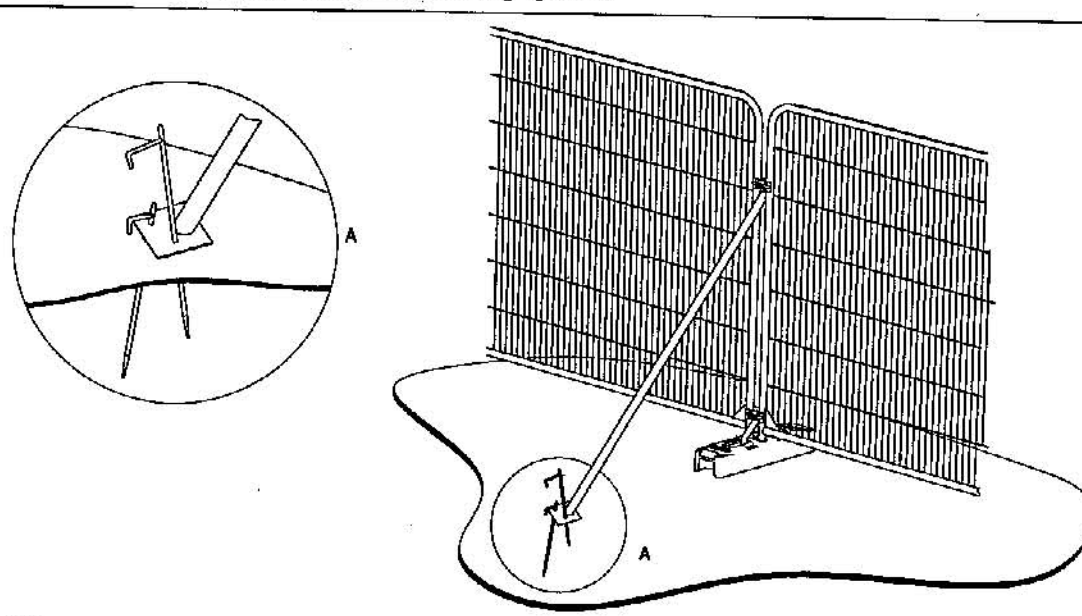
Figure 2 **Default specification for protective barrier**



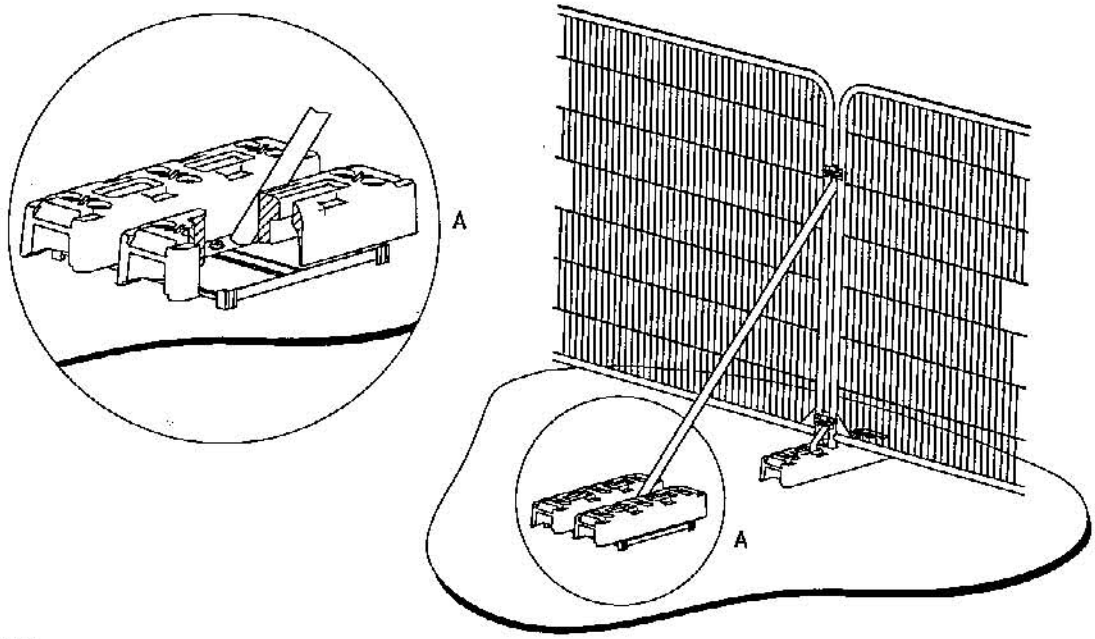

**Key**

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

### 6.2.3 Ground protection during demolition and construction

**6.2.3.1** Where construction working space or temporary construction access is justified within the RPA, this should be facilitated by a set-back in the alignment of the tree protection barrier. In such areas, suitable existing hard surfacing that is not proposed for re-use as part of the finished design should be retained to act as temporary ground protection during construction, rather than being removed during demolition. The suitability of such surfacing for this purpose should be evaluated by the project arboriculturist and an engineer as appropriate.

**6.2.3.2** Where the set-back of the tree protection barrier would expose unmade ground to construction damage, new temporary ground protection should be installed as part of the implementation of physical tree protection measures prior to work starting on site.

**6.2.3.3** New temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil.

*NOTE The ground protection might comprise one of the following:*

*a) for 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. 100 mm depth of woodchip), laid onto a geotextile membrane;*

*b) for pedestrian-operated plant up to a gross weight of 2 t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane;*

*c) for wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.*

**6.2.3.4** The locations of and design for temporary ground protection should be shown on the tree protection plan and detailed within the arboricultural method statement (see **6.1**).

**6.2.3.5** In all cases, the objective should be to avoid compaction of the soil, which can arise from the single passage of a heavy vehicle, especially in wet conditions, so that tree root functions remain unimpaired.

### 6.2.4 Additional precautions outside the exclusion zone

**6.2.4.1** Planning of site operations should take sufficient account of wide loads, tall loads and plant with booms, jibs and counterweights (including drilling rigs), in order that they can operate without coming into contact with retained trees. Such contact can result in serious damage to the trees and might make their safe retention impossible. Consequently, any transit or traverse of plant in proximity to trees should be conducted under the supervision of a banksman, to ensure that adequate clearance from trees is maintained at all times. Access facilitation pruning should be undertaken where necessary to maintain this clearance.

*NOTE In some instances, local planning authority consent for pruning might be required.*

**6.2.4.2** Fires on sites should be avoided if possible. Where they are unavoidable, they should not be lit in a position where heat could affect foliage or branches. The potential size of a fire and the wind direction should be taken into account when determining its location, and it should be attended at all times until safe enough to leave.

*NOTE Local environmental health authorities might have specific restrictions.*

**6.2.4.3** Any materials whose accidental spillage would cause damage to a tree should be stored and handled well away from the outer edge of its RPA.

## 6.3 Site monitoring

Wherever trees on or adjacent to a site have been identified within the tree protection plan for protective measures, there should be an auditable system of arboricultural site monitoring. This should extend to arboricultural supervision whenever construction and development activity is to take place within or adjacent to any RPA.

*NOTE Existing planning regulations include the provision for local authorities to enforce planning requirements. The project arboriculturist appointed by the developer can help monitor site activity, but enforcement is the responsibility of the local authority.*