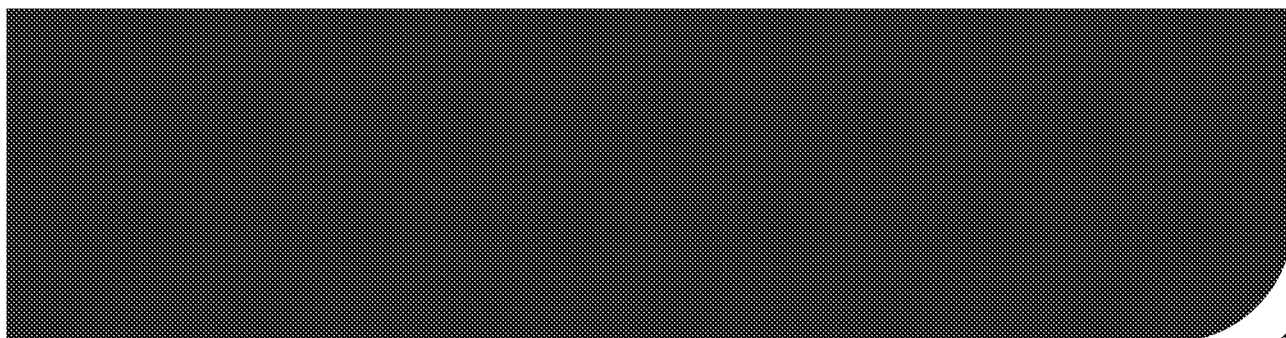




Site Guidance Note 2: Fencing protected trees



SGN 2: Summary guidance for site operatives

Administration

1. Unauthorised damage to protected trees is a criminal offence and could lead to enforcement action.
2. Work under the normal site risk assessment procedures and comply with the wider site safety rules.
3. Brief operatives entering root protection areas ("RPAs") by the supervising arboriculturist before work starts.

Other relevant SGNs

4. Monitor works in RPAs by the supervising arboriculturist (See SGN 1 Monitoring tree protection).

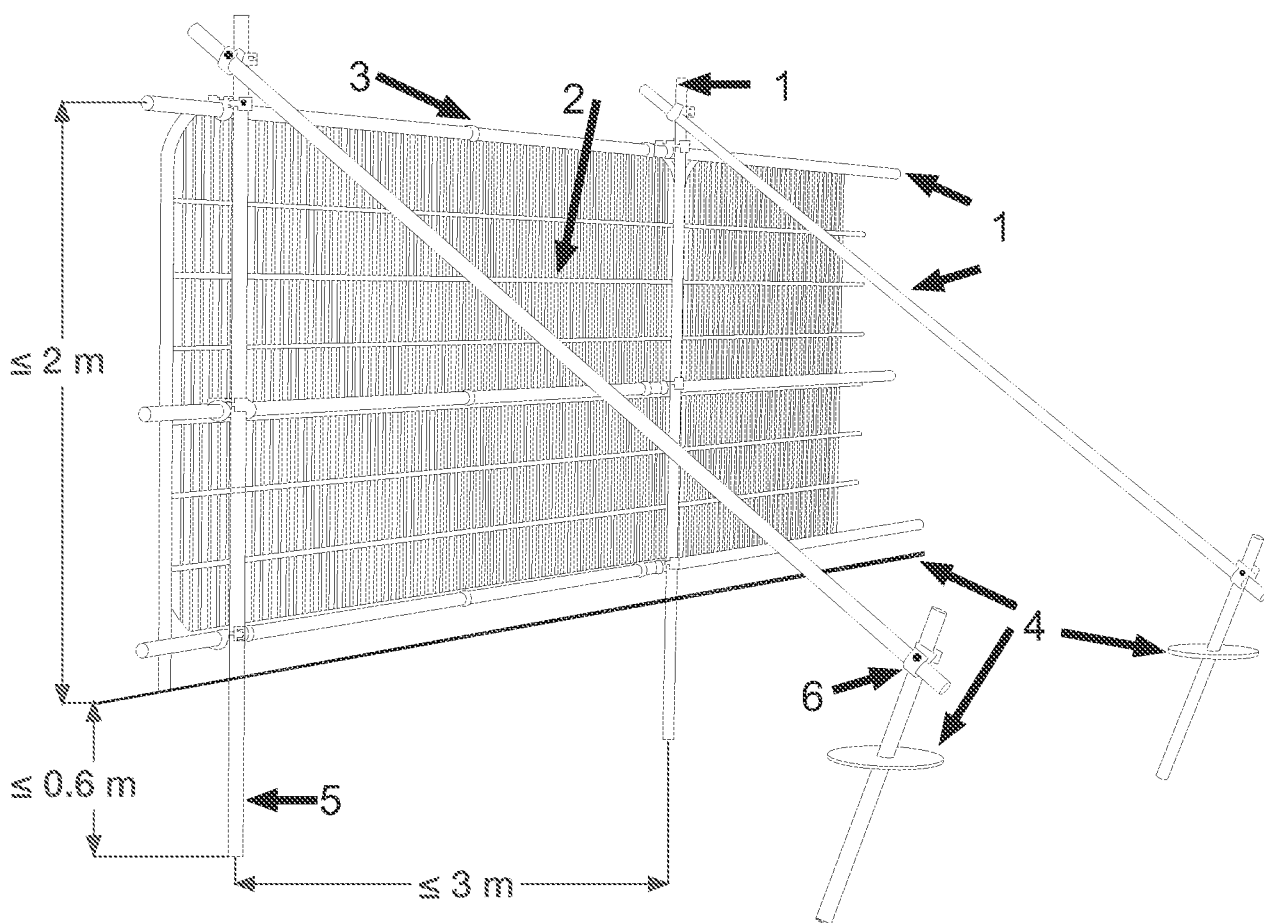
Important reminders

5. Fencing will be fit for purpose, i.e. prevent unauthorised incursions and activities within RPAs.
6. Fencing will be installed at the locations shown on the tree protection plan.
7. Fencing locations will not be altered without prior approval of the supervising arboriculturist.
8. Fencing will not be removed at the end of the construction activity without prior approval of the supervising arboriculturist.

SGN 2: Explanatory notes and examples

Purpose

SGN 2 describes where the temporary protective fencing will be installed, what form it can take and how long it should remain in place to effectively protect the RPAs of trees to be retained, based on the recommendations in BS 5837 (6.2 & 7.3).



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

SGN 2-01 Protective fencing recommendations taken from figure 2 of BS 5837.

SGN 2: Explanatory notes and examples

General principles and clarifications

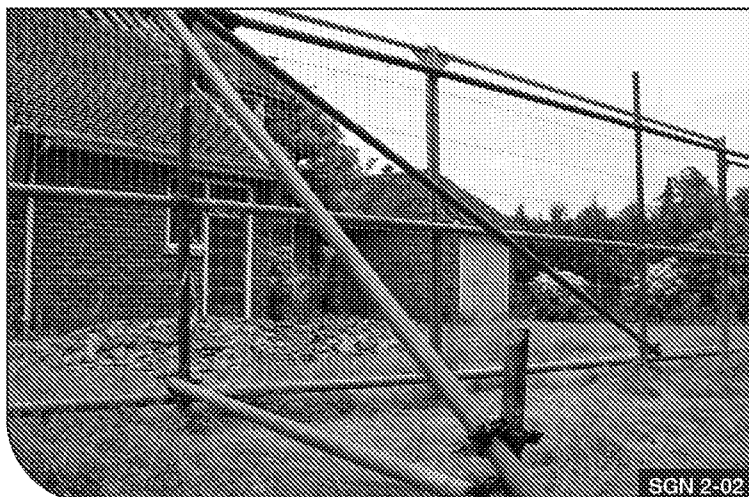
The fencing will be installed at the locations shown on the tree protection plan and agreed by the local planning authority before any construction activity starts on site. It will remain in place until there is no risk of harm from the development activity.

No fencing will be moved from its agreed location, removed, or temporarily dismantled, without consulting the supervising arboriculturist. Furthermore, the condition of the fencing will be regularly monitored by the supervising arboriculturist to ensure it remains fit for purpose, i.e. sufficient to prevent unauthorised access or activities within the RPAs of retained trees.

The minimum specification for the fencing will be as shown in figure 2 of BS

5837, or an equivalent design that effectively restricts access to the RPAs it protects. The precise form of the fencing can vary, provided it is fit for purpose. More specifically, behind the fencing, there will be no unauthorised vehicular access; no repeated pedestrian access; no fires; no storage of excavated debris, building materials, chemicals, or fuels; no mixing of cement; no service installation or excavation; no raising or lowering of soil levels; and no excessive cultivation for landscape planting.

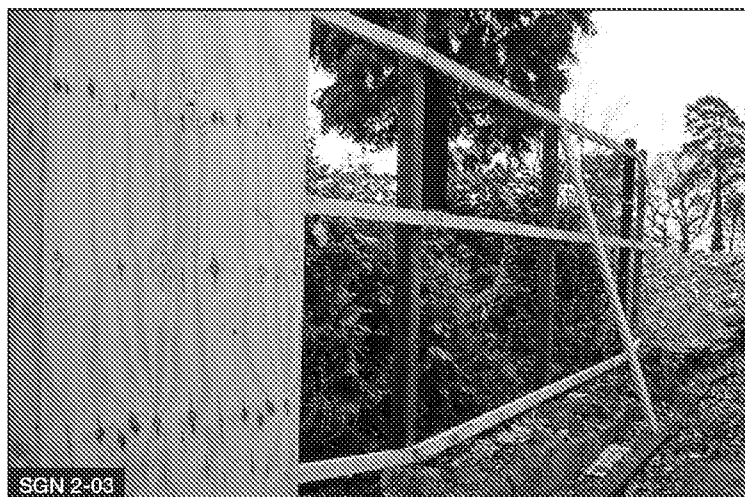
Any variations to these restrictions will be agreed by the supervising arboriculturist.



Heras fencing wired to scaffold braced posts is a robust and effective interpretation of the BS specification.

SGN 2: Explanatory notes and examples

Board specification on secure wooden posts is a suitable alternative to the standard braced scaffold design.



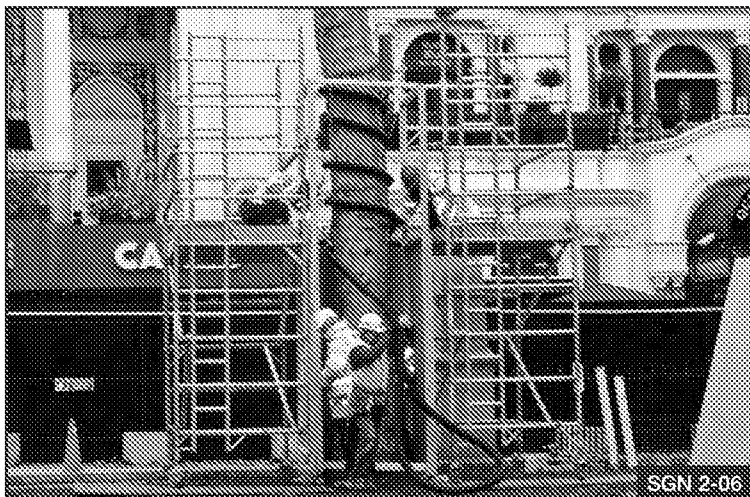
Boards following the line of existing hard standing, enclosing the vulnerable RPA within the fencing.



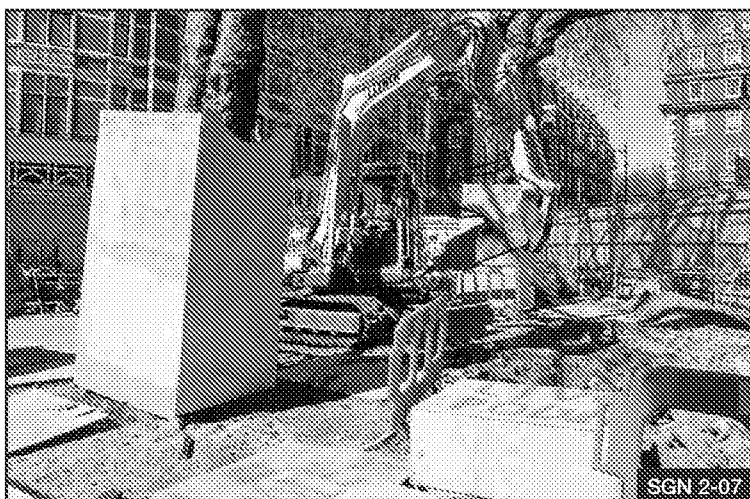
An alternative to dug supports is concrete blocks set outside the RPA.



SGN 2: Explanatory notes and examples



Improvised use of drainage pipe wrapped around the trunk can provide an added layer of protection beneath a layer of plywood.



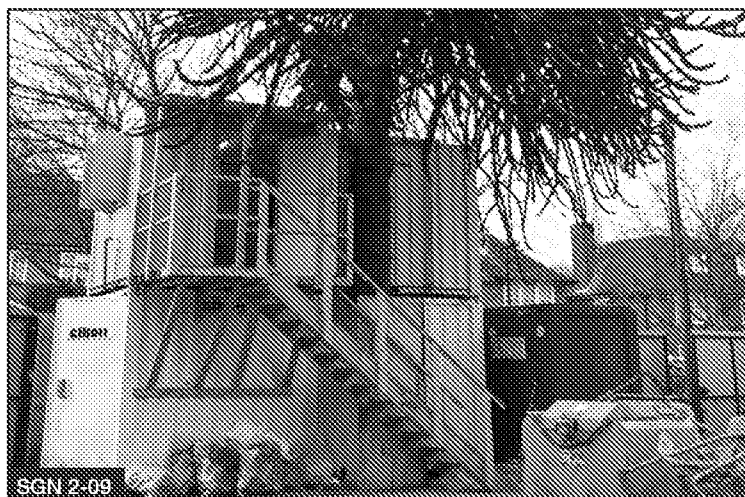
Boards attached to a supporting framework surrounding the trunk reduces the risk of accidental impact.



A wood frame around the trunk can be used to support a plywood surround.

SGN 2: Explanatory notes and examples

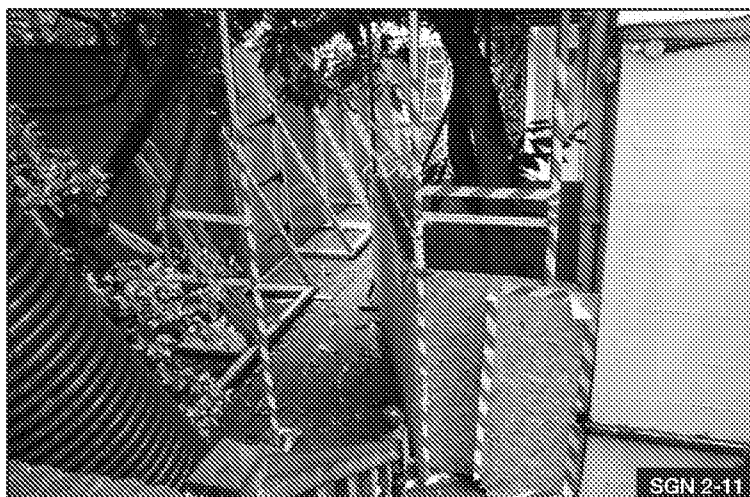
An innovative use of plywood and accommodation cabins to protect the trunk and roots of this retained tree.



Scaffold and boards can be installed around trees that have to be retained within working areas.



SGN 2: Explanatory notes and examples



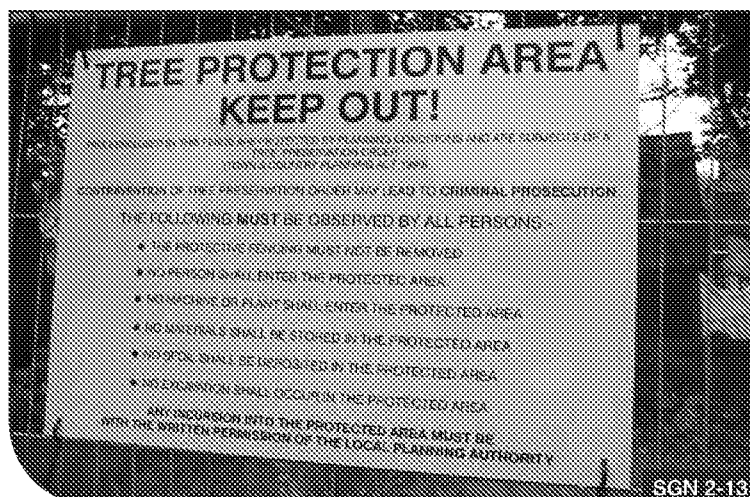
SGN 2-11

Boxing in trunks provides effective protection, even in the tightest of situations, along with the retention of existing hard surfacing to protect the RPA.



SGN 2-12

If street trees could be harmed during development, they should also be protected even though they may be off site.



SGN 2-13

BS 5837 recommends warning signs are attached to fencing as a reminder of the restrictions within the RPA.

SGN 2: Explanatory notes and examples

Technical reference

Due to copyright restrictions, the relevant British Standard clauses are summarised, not quoted, as follows:

1. **BS 5837 (2012) Trees in relation to design, demolition and construction – Recommendations:**
Clauses 6.2 (Barriers and ground protection) and 7.3 (Tree protection during development) recommend:
 - 6.2.1.1 *All retained trees should be protected by fencing and ground protection before any demolition, development or soil stripping starts.*
 - 6.2.1.3 *The protected area is sacrosanct. Fencing and ground protection should not be removed or altered unless agreed by the supervising arboriculturist.*
 - 6.2.1.5 *The supervising arboriculturist should confirm that the tree protection has been installed as agreed before any significant site work starts.*
 - 6.2.2.1 *The tree protection should be fit for purpose, i.e. preventing inappropriate work in the RPAs of retained trees, and be maintained to remain rigid and complete.*
 - 7.3.2 *Where structures are to be removed from RPAs, fencing and ground protection should be installed up to the edge of the structure to protect the underlying soil.*