



# Brighton & Hove

## TREES NEAR TO BUILDINGS

Trees, hedges and shrubs enhance the appearance and quality of almost any type of property. There are, however, possible problems associated with the erection of new buildings and extensions close to existing and newly planted trees and hedges.

### DAMAGE TO BUILDINGS

Damage may be caused to buildings by direct and indirect forms. Direct damage includes physical damage to foundations and services by expansion of the trunk and service roots. It also includes damage to the superstructure by branches striking the building in high winds.

Indirect damage is mainly caused by the removal of moisture from shrinkable clay subsoils by evaporation and transpiration through the tree's leaves. It occurs when the subsoil is at its driest and the roots are continuing to withdraw moisture. This in turn causes the ground to dry out and the ground to crack open. Trees on adjacent properties should also be taken into consideration.

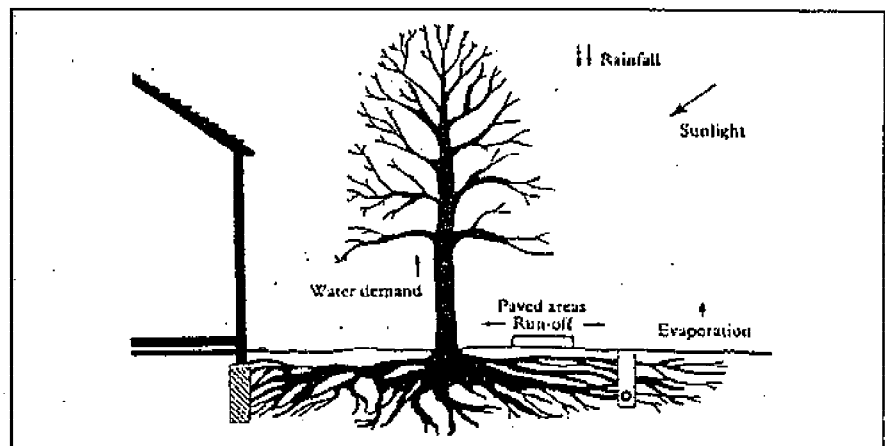
### FOUNDATION DESIGN

The foundations can be taken to a depth which will not be affected by seasonal movement. It is also possible to provide root barriers between the building and trees, in an attempt to divert the roots away from the foundations. This method is not usually used as tree roots can go around them if they are not designed properly.

### Moisture gains and losses likely to affect building structures

Roots cut - ground will swell

Drains and services - roots cut ground will swell until new roots bridge trench



The removal of trees or severe pruning can cause clays to recover their moisture content and the ground can consequently swell and cause uplift. This can be long term and cause serious problems.

SPECIES	VARIETY	SAFE DISTANCE (m)
<b>HIGH WATER DEMAND</b>		
Oak (Quercus)	English (Q.rubra)	28
	Red (Q.rubra)	28
Poplar (Populus)	Hybrid (P.x.euramericana)	38
	Lombardy (P.nigra Italica)	33
Willow (Salix)	Weeping (S.x.chrysocoma)	23
<b>MODERATE WATER DEMAND</b>		
Ash (Fraxinus)	Common (F.excelsior)	18
	Yellow (F.excelsior Jaspidea)	12
Cherry (Prunus)	Wild (P.avium)	12
Hawthorn (Crataegus)	Cherry Leaved (C.prunifolia)	9
	Midland (C.oxyacantha)	9
Hazel (Corylus colurna)	-	12
Horse Chestnut (Aesculus hippocastanum)	Indian (A.indica)	17
	Red (A.X.carnea Briotii)	11
Maple (Acer)	Cappadocicum (A.cappocium)	14
Sycamore (Acerpseudo platanus)	-	18
<b>LOW WATER DEMAND</b>		
Beech (Fagus Sylvatica)	Copper (F.S.Riversii)	17
Birch (Betula)	Common (B.pubescens)	12
Holly (Ilex.aquifolium)	-	11

#### NOTE

If the design of the building is within the recommended distances then a specialist engineer's design may need to be prepared for the foundations.

#### CONSERVATION AREAS AND PRESERVATION ORDERS

Before any work can be carried out on a tree within a conservation area or those under a Tree Preservation Order, you will need to contact Planning, for their approval. There are exceptions but it is safer to check beforehand. You can call in to the Information & Advice Centre, Bartholomew Square, Brighton or telephone Planning on 290000.