3.18.1 Landscaping is a key factor in the success of an attractive housing environment. Too often it is an element left out of the design process until other constraints make implementation of a worthwhile scheme impossible. The use of plants is only one element - albeit a vital one - of landscape design and should never be considered in isolation. A good quality landscape scheme can 'lift' designs by creating a varied, stimulating and satisfying living environment.

3.18.2 It is one of the aims of the Suffolk Design Guide to ensure that landscape considerations are discussed and agreed at the earliest possible moment in the development process. The guiding principles may then be established at the outset; adequate provision for its implementation and maintenance can be allocated; and constraints such as service routes organised to allow the landscape scheme the fullest possible scope.

3.18.3 Developers are reminded that the responsibility for creating an acceptable scheme lies with them and not the local authority. An attitude of 'you tell us what to do and we will do it' is unacceptable, as time and resources cannot be made available. The employment of professional expertise is likely to pay for itself not least in the saving of much valuable time. Where a professional landscape designer is not used attention is drawn to Appendix C.

**The Design Stage**

3.19.1 Mistakes made at the design stage frequently create long-term problems and have both environmental and financial implications. The effects are likely to increase as time passes, becoming more costly and difficult to rectify.
3.19.2 Landscape schemes must include details of, or changes to, site topography, existing features with details of how these are to be used or reasons for removal, and a comprehensive soil survey. These details are essential to any landscape scheme, dictating both the form of the design and the choice of plants.

3.19.3 The landscape design should include a brief, setting down the principles and aims of the scheme. This should encompass the entire site rather than attempt a piecemeal approach and will involve an assessment of adjacent development and landform. Where the estate boundary adjoins older development or open countryside, landscaping should seek to integrate the new works within the locale by the choice of appropriate plant material and by the creation of new landscape features, taking advantage of existing contours or features.

3.19.4 Where proposed development will dominate a landscape by virtue of its visual prominence, provision for minimising any negative effects will be required. This may involve:

- Pre-development planting. The species chosen must reflect the vegetation of the surrounding environment and the aim should be to help link the new development with its surroundings rather than to create a screen or barrier between them.

- Alterations in topography. This may be a useful means of increasing the effectiveness of planting or in producing variety of landform.

The initial survey will detail all the existing features on site.
3.19.5 Within the estate adequate space for planting must be allocated at the earliest stages in the design process. All plants require room to develop and sufficient soil to thrive, but it is clear that the importance of this has not been fully appreciated in the past. A shrub with a mature spread of 2 metres must have that space allocated at the design stage even though when planted it is only 50cms in spread and will not physically occupy the room for a number of years. Similarly, hedges need space on both sides of the main stem to develop and a forest tree will require 75 square metres or more at the time of planting, even if the new plant is scarcely larger than a pencil.

3.19.6 The result of failing to achieve this includes:

- Increased maintenance costs as inappropriate plants in restrictive sites require constant pruning.

- Damage to dwellings, services and other structures.

- Premature removal of landscape features, particularly trees before they reach maturity.

3.19.7 Soil type, aspect, prevailing wind and available space all play their parts in determining the choice of species. Planting schemes submitted without reference to this additional information will not be acceptable.

3.19.8 Angles formed by walls and hard surfacing, extended sections of fencing or wall, and areas of grass surrounded by hard surfacing can look unappealing and can create maintenance problems. However where planting is used effectively these ‘dead’ areas can be transformed into positive assets.

3.19.9 Formal landscape features, such as arches, seats, fences, fountains and ornamental structures can improve the appearance of an estate by creating contrasts of form and colour.
3.19.10 Block plantings containing single species tend to be more visually effective than a haphazard mixture, however planting need not always be confined to strictly defined ‘beds’. Single plants or small groups may be used to clothe or soften the appearance of walls, road and path edges and street furniture, particularly where space for more extensive planting is limited. Generally, however small shrub beds tend to be visually ineffective and difficult to establish and maintain. It is preferable that such areas should contain at least 10 plants. See Appendix C for plant spacing details.

3.19.11 Ornamental planting containers, if used, must be of a substantial size to allow adequate stocking and maintenance. Containers themselves form ornamental feature and should therefore be well designed. Small tubs or boxes are often found in a deplorable state and their use will be discouraged.

3.19.12 Breaking the tyranny of grass within the urban environment is a vital factor in its improvement. Its substitution with ground cover shrubs, trees, woods, or ‘hard’ landscape features will be encouraged.

3.19.13 Service routes must pay respect to the landscape scheme and the presence of existing features, otherwise the landscaping of the new estate will be compromised.

3.19.14 Security is of great concern to residents and local authorities alike. Landscape schemes should avoid creating high-risk areas of shade or screening. A sense of security may be achieved by appropriate co-ordination between the landscape design and street lighting layout, car parking zones and footpath/cycleway alignment.
Existing Features

3.20.1 Important existing features on a new development site should be retained, to give a site maturity and help link it with the past. Such features may either be organic such as trees, hedges, ponds and meadows; or they may be inorganic such as walls and buildings. In either case their effect or existence can be lost through neglect or improper management. Attention is drawn to B.S. 5837:1991 ‘Trees in relation to construction’, which will form the basis for discussions regarding tree retention and protection on site.

3.20.2 A number of points should be borne in mind in relation to the retention of mature trees.

- Tree roots should be permitted to remain intact across service trenches. This may involve an element of more costly hand digging. Provision must be made for this at an early stage. Thrust boring may be a more satisfactory alternative.

- No activity should be permitted beneath the crown of any mature tree. This includes storage of materials, site-huts and vehicle parking as well as soil disturbance or alterations in level. The advice of the local authority Arboricultural Officer should be sought.

- Any existing feature will either become the property of one party or, where this is impractical, the planning authority may seek to retain it as adoptable open space.

3.20.3 Retained features will require attention if they are to survive development, continue to thrive and satisfy the reasons for their retention. The following information must form part of any design seeking to retain existing site features:
- **ACCURATE DIMENSIONAL IDENTIFICATION ON PLAN.** All features must be accurately identified on the site plan and those to be removed must be clearly indicated. The proposed development, including dwellings, services and highways, should be shown in relation to them.

- **SURVEY OF GENERAL CONDITION.** As with all old and neglected structures, repair and maintenance may be necessary and provision in the form of a commuted sum may be required. The need for this should be highlighted in a comprehensive survey prepared by the developer. Where the feature is retained in public ownership (often desirable where trees and woodlands are concerned) this sum will also cater for their future maintenance. The survey should indicate age, health (if a tree), life expectancy and any necessary repair or remedial work. It should also include a full appraisal of the importance of the feature and the part it will play in the future development.

- **PROVISION FOR PROTECTION DURING DEVELOPMENT.** Most mature trees which fail to survive development do so because inadequate protective measures were taken during the course of building works. Fencing, at least out to the crown-edge, will be required prior to the commencement of works. Where buildings and structural items are retained, a full structural survey should be obtained with recommendations for protection. Ref BS5837:1991.

- **SUFFICIENT SPACE FOR DEVELOPMENT, SAFETY AND MAINTENANCE.** The layout must show that sufficient space has been provided for the growth and safety of the retained feature. In the case of a mature tree, this may involve keeping new structures outside the falling distance and orientating buildings and gardens to avoid excessive shading.
3.20.4 Existing features may also be subject to statutory protection. Developers must obtain any necessary consent before work is begun. Statutory protection may involve:

- Tree Preservation Orders: Local Authority
- Felling Licences: Forestry Commission
- Conservation Area Protection: Local Authority
- Listed Buildings: Local Authority
- Sites of Special Scientific Interest: English Nature.

3.20.5 In any event, professional assistance should be sought in retaining or removing existing features. Even where a consent has been obtained, prosecution could result or irreversible damage be caused from working without the necessary understanding and experience.

**Use of planting**

3.21.1 Form, colour, rate of growth, autumn and winter colouring, may all play a part in the overall design and will be assessed in considering any proposed scheme. A random selection of plant species is unlikely to produce an effective scheme.

3.21.2 Good quality plant material is vital to the establishment of any landscape scheme. Plants should be vigorous, healthy, free from defects and of good form. Ornamental shrubs should be container grown.

3.21.3 The density of planting (distance from plant to plant) will dictate the speed at which the design begins to have an impact. A well-stocked area can tolerate the loss of an occasional individual without loss of effect or possibly the need to replace. Plants spaced too far apart take considerable time to develop into a pleasing state and will require higher maintenance for a longer period than those beds which are well stocked.
3.21.4 Plants may be used to perform a number of ‘tasks’ in design, besides creating an harmonious and pleasing environment. These include:

- providing privacy;
- shielding the unsightly;
- softening the visual harshness of new development;
- guiding pedestrians in desirable directions;
- preventing access;
- improving the visual appearance of car parking areas;
- keeping pedestrians away from moving vehicles.

3.21.5 A wide range of plant families within the whole scheme should be used to create a varied environment, thus minimising the risks associated with monoculture. However, plants known to cause structural damage, or which have health implications, should be avoided.

3.21.6 A variety of plant forms and species may also satisfy a number of aims. These may include:

- shade for parking;
- colour, particularly in autumn and spring;
- height;
- wildlife encouragement;
- creating vistas;
- providing focal points.

3.21.7 Large trees give a sense of height and grandeur to a development as they mature and sufficient space must be provided for them to develop and thrive. It is not acceptable to populate new estates exclusively with small ornamental trees.
3.21.8 Trees planted within hard paved or impervious surfaces must be allowed adequate access to water. Herbaceous weed and grass competition for water and nutrients makes the establishment of all new planting difficult. Close mown grassland is particularly damaging where it encroaches up to the stems of trees; this combination of factors should be avoided. See Appendix C.

3.21.9 The use of bare-rooted, heavy standard trees is to be avoided unless there is a substantial maintenance commitment.

**Maintenance**

3.22.1 Securing and maintaining adequate management of planting is often disregarded during the planning process. This leads to confusion over responsibility, scope of work, timing and access. It is probably the single most common cause of the failure of otherwise admirable designs. The maintenance of retained features and landscaping should be itemised and its responsibility clearly identified and agreed prior to implementation. An agreed commuted sum for maintenance will be required on all adopted open space. Attention is drawn to the items listed in the Appendix C.