

Advice relating to Development landscaping and planting



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We welcome correspondence
in English and Welsh

Overview

The following information provides details relating to post-development landscaping in relation to a proposed development site.

- Landscaping is a key aspect of most developments and its effectiveness is likely to be a material consideration when the Pembrokeshire Coast National Park Authority (PCNPA) decides whether or not to grant planning permission.
- The purpose of this guidance is to help planning applicants to address this important and often overlooked element when designing their overall development.
- Landscaping schemes can help to integrate new developments into the environment, softening the harsh outlines of new buildings and the monotonous surfaces of driveways and parking areas.
- Well thought out schemes can do much to improve an area, and for the developer can add significant value to the site.
- It is advised that a landscaping scheme is submitted early on in the application process to allow discussions and an understanding of the proposal.

Guidance

- When landscaping schemes are required as conditions of your planning permission it will be necessary for schemes to be submitted and approved prior commencement of the development.
- With large scale proposals a professionally qualified landscape architect can also be employed by the applicant to provide assistance where necessary throughout the development.
- Where a tree report in accordance with **BS5837:2012 Trees in relation to design, demolition and construction: recommendations** is required; it is advised that a project arboriculturalist is employed by the applicant to provide assistance where necessary throughout the development. An advice note is available on request.
- All required tree work should be carried out by a qualified and insured professional in accordance with **BS 3998:2010**. A list of local qualified tree surgeons is available on request.
- In some instances hiring an ecologist may also be required where there are significant wildlife habitats on or near the development site.

Initial Design considerations

Soft Landscaping

- Soft landscaping refers to all vegetation which is to be retained or planted within the site.
- Planting the appropriate species is essential as the alternative is constant and costly replacement; which is a requirement if plants fail during the first five years.
- Points to consider when choosing species include:
 - Final size (height, spread)
 - Colour (flowers, foliage, berries)
 - Physical conditions of the site (aspect, soil, exposure)
 - Native or non native species
 - Evergreen or deciduous species (e.g. for effectiveness of screening)

Plant Selection

Native planting

- In most situations native species are preferred as they have a greater benefit to wildlife.
- When choosing which native species to plant, look to see which species are already doing well locally and ensure that any new planting links in with the existing vegetation to provide continuous cover for wildlife.
- Wherever possible the landscaping scheme must preserve and enhance the biodiversity of the site and surrounding area.

Non-native planting

- New plantings of conifers are usually unacceptable (particularly the species *Cupressus leylandii*) as they can easily outgrow their site, suppressing other plants and sunlight. Their benefit to wildlife is also minimal.
- In some situations, e.g. where good all year round screening is required, non-native evergreens may be considered; however it is prudent to consider that significant ambient light can be lost, whereas an established native hedge will provide a suitable screen whilst also allowing light through.

Invasive species

- If invasive species are present in the development area, treatment will be required to prevent the risk of it spreading both during and after construction.
- To ensure that it is not accidentally transferred during construction any area where it is present is to be fenced off. An invasive species that can occasionally be found on development sites is;
- Japanese Knotweed - The following link to the environmental agency provides information on dealing with Japanese Knotweed on development sites:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/296930/LIT_2695_df1209.pdf
- The following link provides information on other non- native invasive plants:
<https://www.gov.uk/japanese-knotweed-giant-hogweed-and-other-invasive-plants>

Hard landscaping

- Hard Landscaping includes all hard surfaces to be formed within the site, including car park surfaces, steps, walls, roads and paths.
- The following points should be taken into account when designing your scheme:
 - Locally sourced natural materials such as stone and gravel are usually preferable as they are of the local geology which is important for not changing the soil conditions of an area. They are also less likely to lead to a suburban appearance.
 - Loose stone surfaces may be appropriate particularly if better drainage is required. They also tend to blend in more easily as vegetation gets hold at the edges.
 - Decking is usually considered to be a 'structure' and would in most cases require separate planning permission
 - The terracing of gardens usually involves engineering works and may require separate planning permission.
 - Every effort should be made to avoid the creation of large uninterrupted areas of uniform surfacing.

Pembrokeshire Hedgebanks

- In rural areas Pembrokeshire hedgebanks are suitable boundary structures as they provide screening, links to adjacent hedges as well as assisting with the interaction of the development with the immediate landscape.

Fencing and walls

- Fencing and Walls refers to all boundaries to be formed within or along the curtilage of the site.
- It is important to consider the function of the boundary e.g. for screening or security; but also whether the type of boundary is appropriate for the locality and setting of the site.
- Modern 'off the peg' fencing can appear insensitive and unsightly in many situations in the National Park.

The Design Process

Site Survey

- In formulating any development proposals it is particularly important that an accurate survey is carried out to define the boundary of the site and to identify any existing features; whether they are to be retained or not.
- This can be carried out in parallel with the initial topographical survey and tree survey.
- The survey should include the following:
 - Position, condition, height, crown spread, species of all existing trees, large shrubs and hedges
 - Any boundary features
 - Topography including existing site levels
 - Drainage: natural and artificial
 - All underground and over ground services noting those that could affect planting
 - Other significant factors

Detailed Landscape Scheme

- The landscaping scheme should be submitted with a scale plan at the earliest opportunity and include the following:
 - Details of new planting
 - Location of retained trees/shrubs/hedges
 - Surface treatments
 - Boundary treatments
 - Finished levels
 - Details of materials to be taken off site or imported (including topsoil)
 - Areas of high biodiversity value
 - Features of archeological interest

Note: a detailed landscape and visual assessment may be needed for particularly prominent developments.

Major developments may also require an Environmental Impact Assessment (EIA) under European regulations.

Tree sizes

Trees are usually described as:

- Heavy standard (350-425cm high – stem girth 12-14cm)
 - Selected standards (300-350cm high – stem girth 10-12cm)
 - Standards (250-300cm high – stem girth 8-10cm)
 - Half standards (200-250cm high – stem girth 6-8cm)
 - Whips (120-200cm high)
 - Transplants (30-90cm high) - bare rooted transplants are usually acceptable for hedging if planted from November to March.
- Correct staking of trees is also important particularly in exposed situations

Final height of trees

- This needs to be considered in order to avoid unnecessary pruning, particularly when planting near buildings and under overhead services.
- It may be useful to consider tree planting within the following final height categories:
 - Large (over 20.0m)
 - Medium (10.0m to 20.0m)
 - Small (5.0m to 10.0m)

Shrub sizes

Shrubs can be described by:

- Container size (litre size pots)
- Density of planting.
- In less formal situations mixed planting in drifts of 5 or 7 of the same plant will give a more natural effect.

Native hedges

- Native hedges are traditionally planted in double staggered rows allowing 6 plants per metre; which is equivalent to about 25cm apart (or 40-60cm apart in each row).
- Do not use plants that are too small as they can become swamped by weeds; 60-90cm tall is normally sufficient
- Smaller specimens can be considered in gardens where maintenance is carried out more often; so as to prevent weeds and grasses competing with the planted specimens.
- In exposed situations staking with canes may be needed. If there is a risk of rabbit predation, use spiral guards.

Grass and Wildflower

- Where circumstances permit and where there are no invasive alien species on site; a preferred and sometimes more cost effective option for establishing grass and wildflowers is to utilise the existing seed bank, such as the use of stripped top soil as the source of seed.
- This is likely to be the best way of ensuring that the vegetation that develops on bare/disturbed ground comprises species that are native and therefore most appropriate for the location.

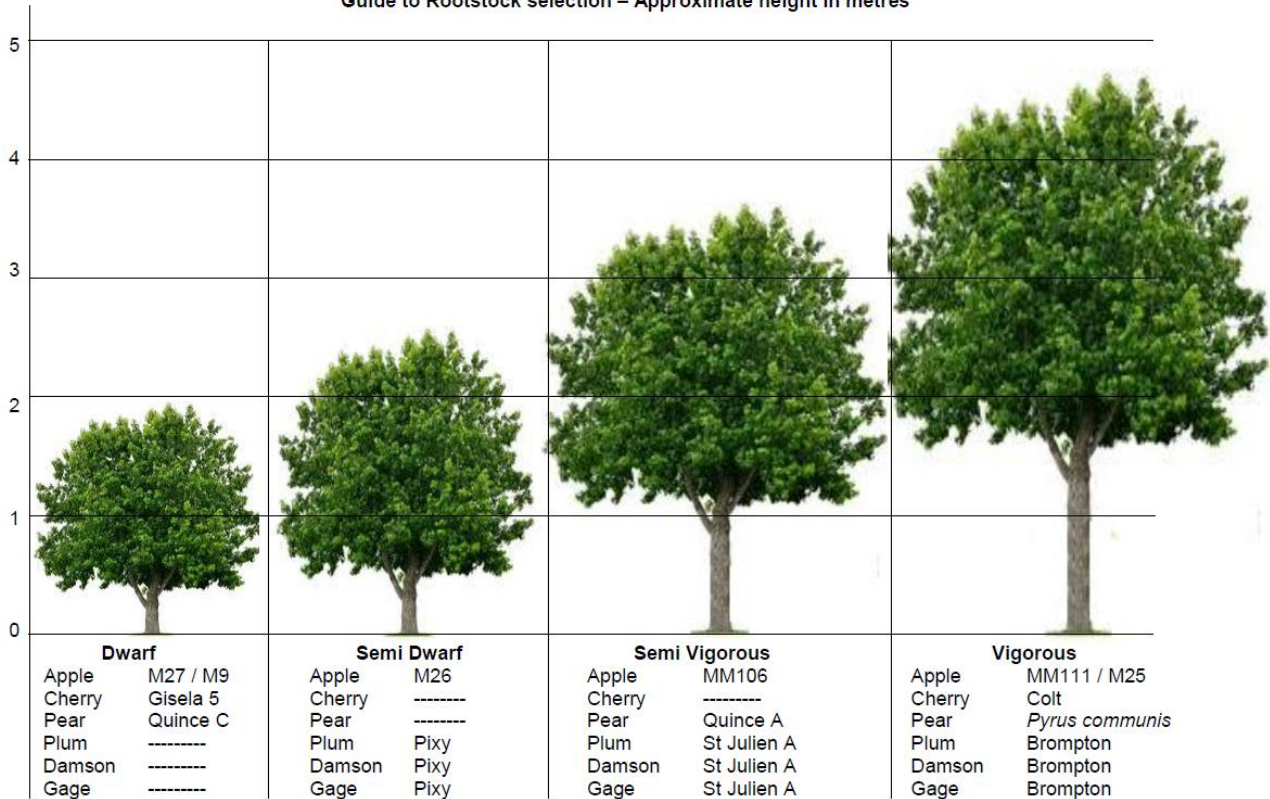
Planting timescale

- Planting should ideally be carried out between November and March.
- If planting outside this season all plants must be containerized.
- If planting during dry periods additional watering may be required to ensure survival.

Fruit tree rootstock selection

- Fruit trees can generally be bought on a specific rootstock which will govern the established height of the tree
- This can make it easier to select the right sized fruit tree for a particular space or purpose.
- An example of rootstock selection is shown overleaf.

Guide to Rootstock selection – Approximate height in metres



Tree and hedge retention

- This is preferable as it allows the development to interact with the surrounding landscape as well as giving the site a feeling of instant maturity.
- A tree report in accordance with **BS5837:2012 Trees in relation to design, demolition and construction: recommendations** is generally required if there are any trees on or immediately adjacent to the site that meet the following criteria including:
 - Any tree with a stem diameter of 75mm or greater, measured at 1.5m above highest adjacent ground level.
 - Any tree with more than one stem at 1.5m above ground level that has combined stem diameters equaling 75mm or greater.

PLEASE NOTE:

Annex C of BS5837:2012 should be referred to on how to carry out measurements on other tree forms.

- A project arboriculturalist can be employed by the applicant to provide assistance where necessary throughout the development.
- The report can be included with a Planning application so that the Pembrokeshire Coast National Park Authority can make an informed decision on the impact of the development on the surrounding Trees as well as the hard and soft Landscape.
- Where possible the Tree report will include the landscaping proposals as well as the following:
 - Arboricultural Implication Assessment
 - Scale Tree Protection Plan of the site
 - Any necessary Arboricultural Method statements
 - Details of any pre-development tree work
 - Any other information deemed relevant to the application

Soil

- Trees and shrubs should be planted into topsoil to ensure long term survival. Different types of planting require varying depths of topsoil:
 - Grass areas – 150mm deep (wild flower grass swards grow better without topsoil).
 - Ornamental shrub beds – 450mm deep
 - Newly planted trees – tree pits to be backfilled with topsoil to the following dimensions:
 - Transplants and whips – 500mm x 500mm x 450mm deep
 - Standard trees – 750mm x 750mm x 450mm deep
- Prior to spreading any topsoil, all subsoil should be ripped to alleviate compaction.
- A Soil assessment should be considered if there are concerns regarding:
 - Root Protection Area of retained trees
 - Tree protection
 - New planting designs (suitable post development planting)
 - Foundation designs in relation to retained, removed and new trees.
- Topsoil can be reused but should be stored in mounds no higher than 2 metres and used within 12 months.
- Soil should never be piled up around trees.
- Imported topsoil should preferably be sourced locally and must be good quality fibrous loam, free from perennial weeds (such as Japanese knotweed), debris or stones in excess of 25mm.
- Topsoil must be given time to settle before planting particularly when planting on new banks; 3-6 months is usually sufficient assuming the work is not completed in late winter in which case you may need to wait longer.

Maintenance

- The effectiveness of the soft landscaping element of larger schemes depends on appropriate programmed maintenance. A maintenance schedule should be submitted to the NPA with the landscaping scheme for approval.
- The maintenance schedule should specify that:
 - Arisings are removed following any maintenance work.
 - Plants (including trees) are kept in a healthy condition and that establishment is encouraged (ensuring that a suitable management regime is implemented including:
 - watering
 - weeding
 - pruning
 - Tree stakes and ties remain secure and in good condition at all times and that they will be removed eventually to avoid inhibiting their growth.
 - Trees that fail within the first five years be replaced.

Security planting

- ‘*Designing out crime*’ can be an important consideration for many developments.
- Secured by Design (www.securedbydesign.com) is the nationwide flagship Police initiative supported and endorsed by the Association of Chief Police Officers. They provide useful information and advice about effective crime prevention and security standards.