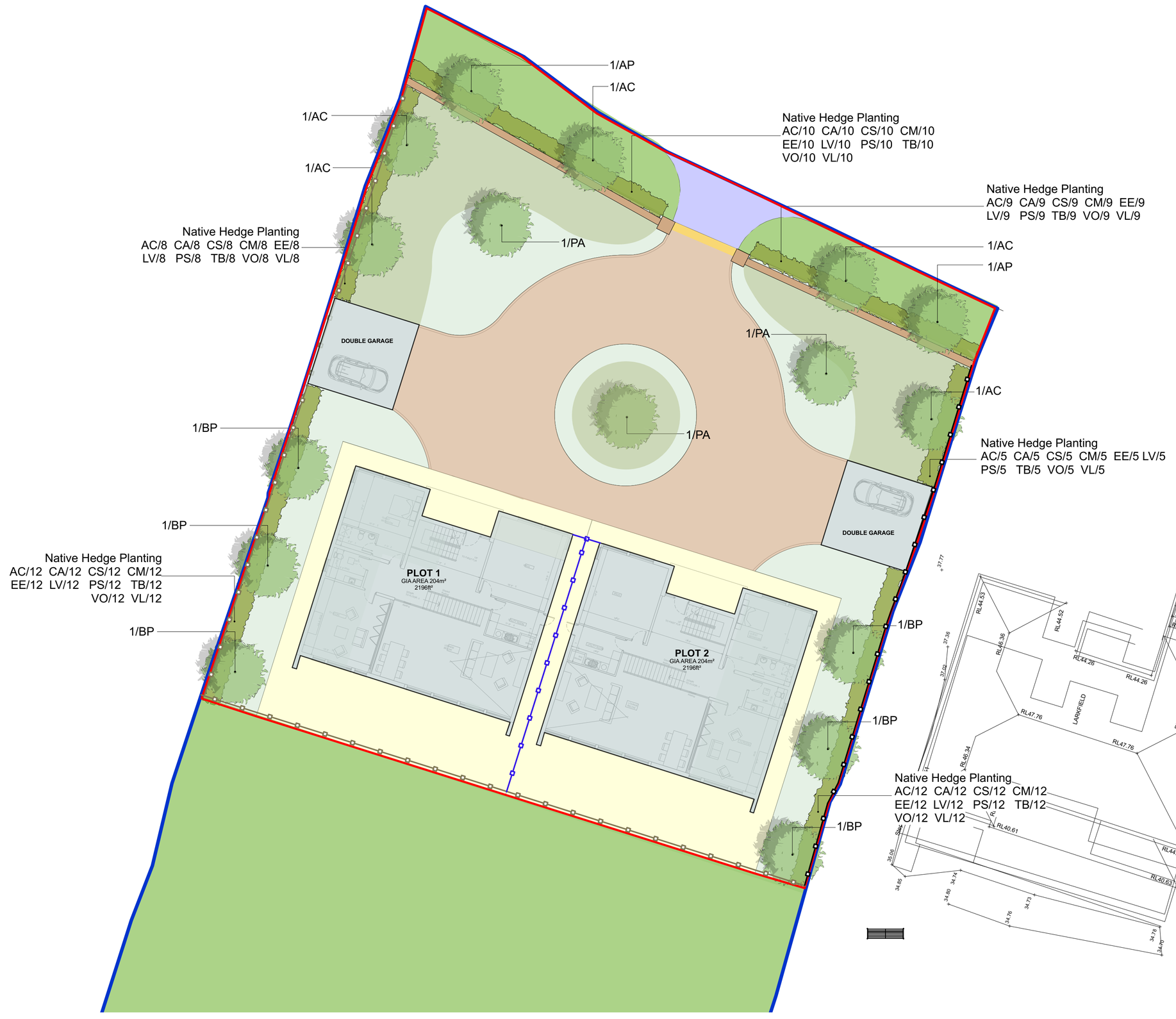

KEY

Soft Landscaping

Proposed Tree Planting

Proposed Mixed Native Hedge Planting

Proposed Grassland/Wildflowers -
EM3 Special General Purpose Meadow Mixture

Proposed Grass -
EL1 Flowering Lawn Mixture

Existing Grass

Hard Landscaping

Existing Tarmac

Proposed Transition Strip -
Tumbled Setts x 3 lines

Proposed Access and Parking -
Limestone Chippings

Proposed Paving -
Limestone Slab Paving

Existing Boundary Retained

Proposed Fencing -
1.2m Timber Cleft Rural Fencing
Image 1

Proposed Fencing -
1.8m Closeboard Fencing

Proposed Stone Wall -
To match neighbouring Wall

Stone Piers Retained

TREE PLANTING

Code	Species	Form	Girth cm	Height cm	Root condition	Quantity
AC	Acer campestre	EHS	14-16	425-600	65/85 L	5
AP	Acer pseudoplatanus	EHS	14-16	425-600	65/85 L	2
BP	Betula pendula	EHS	14-16	425-600	65/85 L	6
PA	Prunus avium	EHS	14-16	425-600	65/85 L	3

NATIVE HEDGE TRANSPLANTS @ 5 per linear metre in double staggered row

Code	Species	Root Condition	Age + Times Transpl	Height cm	Quantity
AC	Acer campestre (10%)	Bagged	1+1	40-60	56
CA	Corylus avellana (10%)	Bagged	1+1	40-60	56
CM	Crataegus monogyna (10%)	Bagged	1+1	40-60	56
CS	Cornus sanguineum (10%)	Bagged	1+1	40-60	56
EE	Euonymus europaeus (10%)	Bagged	1+1	40-60	56
LV	Ligustrum vulgare (10%)	Bagged	1+1	40-60	56
PS	Prunus spinosa (10%)	Bagged	1+1	40-60	56
TB	Taxus baccata (10%)	Bagged	1+1	40-60	56
VL	Viburnum lantana (10%)	Bagged	1+1	40-60	56
VO	Viburnum opulus (10%)	Bagged	1+1	40-60	56

Emorsgate EM3 Special General-Purpose Meadow Mixture sown at 4gms/m2

Wild Flowers

%	Latin name	Common name
0.5	Achillea millefolium	Yarrow
0.5	Centaurea nigra	Common Knapweed
1.8	Centaurea scabiosa	Greater Knapweed
0.6	Daucus carota	Wild Carrot
0.5	Filipendula ulmaria	Meadowsweet
1	Galium album - (Galium mollugo)	Hedge Bedstraw
1	Galium verum	Lady's Bedstraw
1	Knautia arvensis	Field Scabious
0.2	Leontodon hispidus	Rough Hawkbit
1	Leucanthemum vulgare	Oxeye Daisy
0.2	Plantago media	Hoary Plantain
1.5	Poterium sanguisorba - (Sanguisorba minor)	Salad Burnet
0.6	Primula veris	Cowslip
1	Prunella vulgaris	Selfheal
2.5	Ranunculus acris	Meadow Buttercup
1	Ranunculus bulbosus	Bulbous Buttercup
1	Rhinanthus minor	Yellow Rattle
0.4	Rumex acetosa	Common Sorrel
1	Silene dioica	Red Campion
1.5	Silene vulgaris	Bladder Campion
1	Vicia cracca	Tufted Vetch
20		

Grasses

%	Latin name	Common name
8	Agrostis capillaris	Common Bent
40	Cynosurus cristatus	Crested Dogstail
28	Festuca rubra	Slender-creeping Red-fescue
4	Phleum bertolonii	Smaller Cat's-tail
80		

Emorsgate EL1 Flowering Lawn Mix sown at 4gms/m2

Wild Flowers

%	Latin name	Common name
4	Galium verum	Lady's Bedstraw
0.5	Leontodon hispidus	Rough Hawkbit
1	Leucanthemum vulgare	Oxeye Daisy
3.7	Lotus corniculatus	Birdsfoot Trefoil
3	Primula veris	Cowslip
4	Prunella vulgaris	Selfheal
3.5	Ranunculus acris	Meadow Buttercup
0.3	Trifolium pratense	Wild Red Clover
20		

Grasses

%	Latin name	Common name
8	Agrostis capillaris	Common Bent
40	Cynosurus cristatus	Crested Dogstail
28	Festuca rubra	Slender-creeping Red-fescue
4	Phleum bertolonii	Smaller Cat's-tail
80		

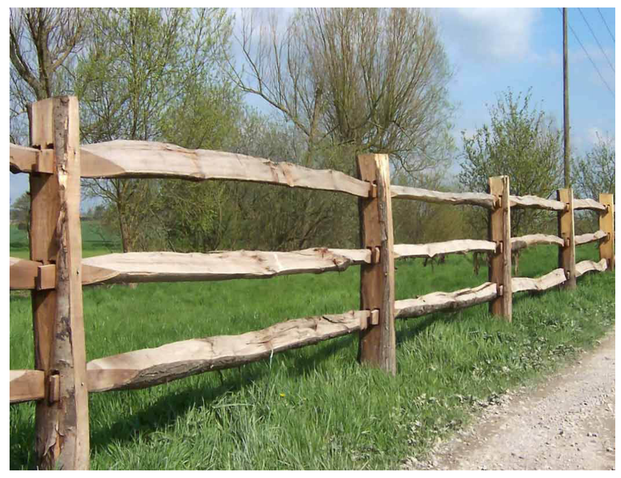

Image 1 - 1.2m Timber Cleft Rural Fencing

Note: The original of this drawing was produced in colour - a monochrome copy should not be relied upon.

Revision	Description	Date
-	First issue	6/12/23

LANDARB SOLUTIONS

Project:
West Winds, Dinas Powys

Description:
Landscape Proposals

Status:
For Planning

Scale:	Drawn I Checked		Date:
1:200 @A1	**DP**	**MP**	**06/12/2023**

Job Number:	Drawing Number:	Revision:
WESTW	**01**	**-**

1. GENERAL

1.1 All excavated areas to be backfilled with imported subsoil to BS 8601:2013 Specification for subsoil and requirements for use (imported subsoil to be laid on site's existing subsoil profiles) and overlaid with topsoil to BS 3882:2015 Specification for topsoil BS 3882 – General purpose grade. All topsoiled areas to be clear of rocks and rubble larger than 50mm diameter and any other debris that may interfere with the establishment of plants. Shrub areas to have a minimum depth of 400 mm topsoil. Grassed area to have a minimum depth of 150mm. Tree pit soil depth/volume in accordance with BS 8545:2014 Trees: from nursery to independence in the landscape. Recommendations.

1.2 All plants are to be supplied in accordance with Horticultural Trade Association's National Plant Specification and from a HTA certified nursery. Delivery and backfilling of all plant material to be in accordance with BS4428/JCLI/CPSE Code of Practice for 'Handling and Establishing Landscape Plants, Parts I, II and III.

1.3 All specimen and ground cover shrubs to be planted in accordance with BS 3936: - Specification for Nursery Stock. Part 1 Trees and shrubs (1992) and Part 10 Ground cover plants (1989)

1.4 All trees shall be planted in accordance with BS: 8545:2014.

1.5 All planting and grass establishment / maintenance operations to be in accordance with BS 4428:1989 Code of practice for general landscape operations (excluding hard surfaces). Trees are to be established / maintained in accordance with BS8545.

1.6 Planting will not be carried out when the ground is waterlogged, frost bound or during periods of cold drying winds.

1.7 All bare-root planting stock will be kept covered until actually planted in order to minimise water-loss and prevent the roots from drying out.

1.8 All bare-root planting stock will be root dipped in an approved water-retaining polymer.

1.9 If the formation level is compacted it should be ripped through before topsoiling. Recommended topsoil depths are 450mm for hedges and 150mm for grass.

2. TREE PLANTING

Ground Preparation and Tree Pit Excavation

2.1 If the formation level is compacted it will be ripped through before topsoiling.

2.2 Where necessary existing weeds will be treated with a suitable glyphosate-based herbicide and a suitable period allowed to elapse, as recommended by the manufacturer, for the herbicide to take effect.

2.3 Tree pits will be excavated to at least twice the diameter of the root spread and to be planted in accordance with BS 4428 (1989). The bottom and sides shall be forked to break up the subsoil. All extraneous matter such as plastic, wood, metal and stones greater than 50mm diameter in any dimension will be removed from site.

Planting

2.4 Trees are to be placed into the pits and backfilled with local topsoil previously stripped from the site. A general-purpose slow-release fertiliser (at the rate of 75gm/m2) and Tree Planting and Mulching Compost (at the rate of 20litres/m^2) are to be incorporated into the top 150mm of topsoil during backfilling. Where tree pits are more than 300mm deep, backfilled material shall be consolidated/firmed in 150mm layers.

2.5 Trees shall be well firmed-in and secured with stakes, proprietary rubber tree ties and spacers as below.

2.6 All newly planted trees over 1.5m high will be held so that movement at the root collar is minimised until new roots have developed to anchor the tree. Therefore low staking (75mm dia x 1.5m length) will be used and attached to the tree at approximately 600mm above ground level. Stakes will be driven 300mm into undisturbed ground before planting the tree, taking care to avoid underground services and cables. The trees will be staked using proprietary rubber ties and must be firmly fixed with a spacing device used to prevent chafing against the tree.

2.7 Trees shall be double staked. Composted bark mulch will be spread to a depth of 75mm across in a 1.0m diameter circle around all individual trees, ensuring that desirable groundcover plants (where present) are not buried.

2.8 All trees and hedges shall be watered in at the end of each day of planting. Tree moisture levels are to be monitored in accordance with BS8545 11.3 Irrigation.

Maintenance during first growing season

2.9 All dead, dying or diseased trees will be replaced with trees of similar size and species. If the failure of the tree is due to disease and the disease is considered likely to re-occur then an alternative species may be used as replacement if agreed with the LPA.

2.10 The site is to be visited as required throughout the year to undertake the following operations:

2.11 Weed clearance: All planting areas will be kept weed free by hand weeding or herbicide treatment.

2.12 Checking trees: All tree ties and stakes will be checked and adjusted if too loose, too tight or if chafing is occurring. Any broken stakes will be replaced.

2.13 Formative pruning: Any damaged shoots/branches will be pruned back to healthy wood. Plants will be pruned in accordance with good horticultural practice to maintain healthy well-shaped specimens.

3. NATIVE HEDGE TRANSPLANTS

Ground Preparation

3.1 Where necessary existing weeds will be treated with a glyphosate-based herbicide and a suitable period allowed to elapse, as recommended by the manufacturer, for the herbicide to take effect.

3.2 All extraneous matter such as plastic, wood, metal and stones greater than 50mm diameter will be removed from site to a registered waste disposal facility.

Planting

3.3 Bare-root hedge plants shall be notch planted in a double staggered row at the rate of 5 plants per linear metre (using L-, T-, H-shaped or straight notches) using spades of a design suitable for this purpose. The notches must be vertical and deep enough for the roots to hang freely, with the transplant being planted so that the root collar is exactly level with the ground surface. The notch must then be closed and the soil will be well firmed round the roots in line with the guidelines as set out in BS 4428 (1989).

3.4 Container-grown hedge plants will be planted into a pit dug 1.5x the diameter of the root mass, with the bottom and sides of the planting pit broken up to aid root

expansion. The plants will be planted so that the root collar is exactly level with the ground surface.

3.5 All bare-root hedge planting stock will be protected from rabbit damage using approved proprietary 600mm spiral guards, supported with 0.9m 12/14lb canes as advised by the manufacturer.

3.6 All container-grown shrubs will be protected from rabbit damage using approved proprietary 600mm plastic shrub shelters, supported with 0.9m x 32 mm x 32mm softwood stakes as advised by the manufacturer.

Maintenance during first growing season

3.7 All dead, dying or diseased hedge plants will be replaced with plants of similar size and species. If the failure of the plant is due to disease and the disease is considered likely to re-occur then an alternative species may be used as replacement if agreed with the LPA.

3.8 The planting area will be kept weed free throughout the maintenance period using approved herbicides in April, June and August.

4. GRASS

Preparation

4.1 The area to be seeded will be cultivated to a depth of 100mm removing all weeds, debris and stones over 25mm diameter. The surface will be raked to smooth flowing contours with a fine tilth, incorporating pre-seeding fertiliser at 70 g/m2.

Seeding

4.2 Grass seed will be sown in accordance with BS 4428 (1989), and will be sown from April to May or from September to October, during calm weather and not when the ground is frost bound or waterlogged. Seed will be sown in two equal sowings in transverse directions at 4g/m2 for EL1 and EM3 mixes. After sowing the seed will be lightly raked to create intimate contact with the soil.

Grass/Wildflower Mix Cutting

EL1 Mix

First year management

4.3 The wild flower and grass species in this mix are perennial; they will be slow to germinate and grow and will not usually flower in their first growing season. There will often be a flush of annual weeds from the soil in the first growing season. This annual weed growth is easily controlled by repeated mowing.

4.4 Mow newly sown flowering lawns regularly (every 7 -10 days during growing season) throughout the first year of establishment. Cut to a height of 40-60mm, removing cuttings if dense. This will gradually develop a good sward structure, help maintain balance between faster growing grasses and slower developing wild flowers, and control annual weeds.

4.5 Dig out any residual perennial weeds such as docks.

Management once established

4.6 Mow regularly as a lawn but not too short (25-40mm).

4.7 To permit flowering, mowing can be relaxed from late June. Cut again when the sward gets untidy (after 4-8 weeks). Mowing may be suspended earlier in the year to allow cowslips to flower. Heavy quantities of cuttings should be collected and removed from site.

EM3 Mix

First year management

4.8 Most of the sown meadow species are perennial and are slow to establish. Soon after sowing there will be a flush of annual weeds, arising from the soil seed bank. These weeds can look unsightly, but they will offer shelter to the sown seedlings, are great for bugs, and they will die before the year is out. So resist cutting the annual weeds until mid to late summer, especially if the mixture contains Yellow Rattle, or has been sown with a nurse of cornfield annuals. Then cut, remove and compost. Early August is a good time. This will reveal the young meadow, which can then be kept short by grazing or mowing through to the end of March of the following year.

4.9 Dig out any residual perennial weeds such as docks.

Management once established

4.10 In the second and subsequent years EM3 sowings can be managed in a number of ways which, in association with soil fertility, will determine the character of the grassland. The best results are usually obtained by traditional meadow management based around a main summer hay cut in combination with autumn and possibly spring mowing.

4.11 Meadow grassland is not cut from spring through to late July/August to give the sown species an opportunity to flower. After flowering in July or August take a 'hay cut': cut back with a scythe, petrol strimmer or tractor mower to c 50mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site.

4.12 Mow the re-growth through to late autumn/winter to c 50mm and again in spring if needed.

5. WATERING

Trees

5.1 Watering is one of the prime keys to successful establishment after planting a tree.

5.2 Use a watering can with a rose attachment on the end to water, a hose pipe or other such method that will administer water slowly and at a low pressure, mimicking rainfall.

5.3 Water should be applied to the base of the trees, evenly distributed over the entirety of the root-ball to encourage even root development.

Immediately after planting

5.4 In spring and summer, water newly planted trees immediately (known as 'watering in').

5.5 In autumn and winter, it depends how wet the ground is, or if rain is due. At this time of year, it's only really necessary to water in if we are experiencing a dry spell, to make sure the roots don't dry out.

5.6 A newly planted tree should be watered in when planted, and at the point of bud burst in the spring and should be continued throughout the spring and summer until the leaves have fallen in autumn (for deciduous trees).

In the first year after planting

5.7 From mid-March until the end of September, water trees two to three times a week. Increase this regime if we have a particularly hot and dry spell, and vice versa, reduce if the weather is very wet. Bear in mind that rain doesn't necessarily get to where it's needed, if the leaf canopy creates a 'rain shadow'. Dig down a little into the soil if you want to check how moist it is under the surface. During the height of summer, water should be applied at a rate of 2 domestic buckets full (or 20 litres of water) every other day. This figure is the aim to reach during the height of summer and can be gradually increased to this in the spring and decreased before ceasing watering in the autumn.

5.8 It's best not to water every day, but to let the ground dry out a little bit, encouraging roots to spread out in search of water. If a drought is on the horizon, however, consider beginning to water before things get dry.

5.9 In autumn and winter, watering isn't generally necessary, unless we have an un-seasonally warm and dry period.

5.10 Watering is advised for the first 2 summers after planting, further to this the tree should be able to access water from the surrounding soil.

5.11 Use bark mulch at the base of the tree to help retain water, prevent weed growth and also give you an indication of where you need to water.

5.12 Be mindful that newly planted trees do need watering, even if it has been raining! Rain is useful in slowing up the volume of water needed by a newly planted tree, as it is often cooler during such periods, however it is the root-ball of the tree that needs watering and often rainfall will not fall this close to the base of the tree, due to the width of the canopy

5.13 Ensure that water is draining well away after 10 minutes of application of water.

2-3 years after planting

5.14 After the first year, enough roots may have grown into the soil to allow the plant to drink up enough to support itself, but as a precautionary measure carry on watering during dry spells. Monitor the plants to help you decide whether to water. If they begin to look at all floppy, drench them. Yellowing, dropping leaves, on the other hand, can indicate over watering (but not always).

5.15 You can water further away from the stem during this time, as the root zone will have widened out. Watering further away will also encourage roots to spread out.

Native Hedge Planting

5.16 Do not let the soil dry out at all in the first 12 months. Even if the plants appear dormant, the roots will be starting to grow under the ground. It is better to soak the soil twice a week than it is to sprinkle it with water every day. The water needs to sink as far as possible into the ground to encourage deep rooting. To make life easier, consider an automated irrigation system.

5.17 New planting areas need to be kept well-watered if the weather is dry. As a guide, new hedge planting areas will need at least 5-10 litres per metre, twice a week but larger rootball plants will need substantially more.

Peak watering times

5.18 Plants need most water when they are in active growth. Deciduous trees which lose their leaves in autumn, are in this state in spring and summer.

5.19 It's important that trees don’t dry out completely, at any time of year.

5.20 Watering in the early morning or in the evening is most efficient.