

LANDSCAPE SPECIFICATION
IMPLEMENTATION GUIDELINES

General

All soft landscape proposals will be fully implemented in the first planting season following reasonable completion of the development.

Existing levels to be preserved around retained existing trees and vegetation. Existing trees and vegetation to be retained are to be protected in accordance with BS5837 during construction. All landscape works to be undertaken by competent persons, with appropriate training and equipment.

Services
The contractor must ascertain for themselves the exact location of underground services before commencing work.

Topsoil
Topsoil to be handled (i.e. excavated and/or imported, stored, spread, cultivated) in accordance with BS3882. Amelioration to be as determined by analysis. If poor drainage is suspected in existing soil surfaces, these should be broken up prior to planting, turfing and seeding to a depth of 300mm to remove likelihood of compaction and damage to new planting and turf.

Where at all possible clean site won topsoil should be used. Where Imported topsoil required, such soils to be a good quality loam to BS 3882: multipurpose grade or manufactured topsoil. All topsoil areas shall be thoroughly cultivated by hand or suitable machinery to the full depth of the topsoil layer, incorporating ameliorants as specified and/or as indicated by analysis and in accordance with BS 3882. Hand cultivations shall be carried out to achieve the required finish on areas where machine cultivation is impossible ie adjacent to kerbs, manholes and footpath junctions etc. Surplus plant matter, rubbish and surface stones having any dimension greater than 25mm shall be collected and removed from the site. Existing topsoil to be stripped and re-used if suitable as per specification.

Topsoil is to be stored in heaps, maximum of 3m in height, providing soil is reasonably dry and friable during stripping and handling - using a tracked excavator. To protect from wet weather once final height is achieved, an excavator should regrade the sides and top of stockpile to firm surface by tracking across it to form a smooth gradient.

Topsoiling depth as follows:

- Shrub areas min 350mm depth
- Tree Planting min 600mm depth

in addition to the above suitable loosened multi purpose subsoil to BS8601:2013 should provide the remainder of the minimum rooting depth:

- Shrub areas min 600mm depth
- Tree Planting min 400mm depth

Soiling for all meadow grass areas spread 75mm of topsoil and cultivate to depth of 200mm to allow for a nutrient low soil suitable for species.

Before applying topsoil, remove all debris and contaminants, cultivate the surface depth of approx 300mm to loosen subsoil soil and create a 'key' for the new topsoil, or to break up compacted topsoil.

Fertilizer/Compost
Approved (peat free) composts to PAS100 and fertilizers to be added during cultivation as required to full depth of growing medium.

Ensure that plant beds are neatly defined, and rise from adjacent paved areas. All ornamental planting areas to be mulched with 75mm (settled depth) bark mulch. Sample of mulch to be approved by Landscape Architect.

Plant Handling
Plant handling at the nursery, and during transit up to delivery, shall be in accordance with 'Plant Handling', the booklet published by the Committee for Plant Supply and Establishment (CPSE). The contractor shall comply with clauses 3 & 4 of the above booklet (obtained from the Horticulture Trades Association) which refers to the receipt, unloading and temporary storage of plants. General plant stock to conform to BS 3936, advanced nursery stock to BS 5236, and planting to BS 4428. Plants shall be first class examples of their species or variety, free from all pests and diseases, with good fibrous root systems and materially undamaged (refer to relevant sections of BS3936 Parts 1-4 'Specification of Nursery Stock'). All planting operations to be in general compliance with BS4428: 1989 'Code of Practice for general landscape operations (excluding hard surfaces)'. Carry out all planting while soil and weather conditions are suitable:

- Do not plant during periods of frost or strong winds. Plant only during the following periods
- Deciduous and conifer trees: Late October to late March
- Container grown plants: At any time if ground and weather conditions are favourable. Ensure that adequate watering and weed control is provided
- Bulbs : September/October

Trees
All tree planting works & tree husbandry should be carried out in accordance with BS8545 2014: *Trees from nursery to independence in the landscape*.

The species of tree, stock size and stock type shall be as labelled on the planting drawing and as identified on the schedule opposite. Any deviation on species, stock type or stock size shall be agreed with the Local planning authority prior to planting.

All trees to be planted in pits 1m x 1m with depth dependant on planting stock root ball depth. The root stock/ball to rest directly on underlying soil. Backfill pit with 500mm depth 80% clean topsoil and 20% approved green compost to PAS100 and 100 gms granular fertilizer.Water-in heavily after planting.

Unless noted above as requiring underground guying, all trees to be short double staked and tied and multi stems diagonal single stake - Refer to detail opposite. Any necessary tree works are to be carried out by an approved tree surgeon to BS 3998. Trees planted in grass areas to be set in bare earth circles, 1m diameter around tree trunk, with turf trimmed neatly to form circle, and earth mulched with approved bark mulch to 75mm depth after planting.

Thicket Planting
Generally clear any surface vegetation in proposed woodland and thicket areas, utilising proprietary herbicide where appropriate and install plants into isolated pre-prepared planting pits, generally 300 x 300 x 450mm deep or 200mm greater than the rootstock, whichever is greater, backfilling with either existing retained site sourced topsoil (free from weeds) or imported topsoil (General Purpose grade to BS3882:2007) or a combination of the two as necessary. Incorporate a soil conditioner/ameliorant in the form of peat free tree and shrub compost or well rotted spent mushroom compost into backfill material at the rate of 5L per pit. Ensure planting conforms to planting matrix where appropriate and in all other areas appears random / natural and not formal in accordance with the planting proposal layouts.

Species Groups :
Native shrub mix and Woodland mix planting is to be planted in species groups of 3-5.

Plant Protection
All small / feathered trees to be protected by min. 1200mm high x 80-110mm dia. proprietary plastic mesh tree guard/shelter and secured in place with min. 25mm square treated softwood timber stake and fixed with plastic cable ties. NB:- Should red or fallow deer reside in the locality the tree guards/shelters should be increased in height to 1.8m.

All bushy thicket shrubs to be protected by min. 600mm high x 170-200mm diameter, proprietary plastic mesh shrub shelters / guards and secured in place with treated softwood timber stake and plastic cable ties. All single stem thicket transplants to be protected by min. 450mm high x 50mm proprietary plastic spiral guards secured with min. 12-14lb x 900mm long bamboo cane.

All trees and thicket plants to be installed with a min. 500mm square, woven polypropylene mulch mat securely pegged in place.

Tree Pit Root Barriers
Install ReRoot 2000 (1.0m depth) root barrier in locations as indicated on the plan as per manufacturers recommendations. ReRoot 2000 is available from greenblueurban (www.greenblue.com), or equivalent approved. The top edge of the root barrier should finish 10mm above growing media, tree side or encapsulated into the concrete haunching of edgings.

Shrub Herbaceous & Ground Cover Planting
All plants to be planted in cultivated planting beds at densities shown in plant schedule, in pits of min. size 0.3m x 0.3m x 0.3m deep so as to accommodate full root spread, backfilled with 80% clean topsoil and 20% approved green compost to PAS100 and 20 gms granular fertilizer. All shrub beds to be in min. 300mm good quality, well prepared topsoil and to be mulched with 75mm depth approved bark mulch after planting.

Wildflower Meadow Seeding
Kill off any existing vegetation by spraying off with proprietary herbicide and allow time to elapse as recommended by the manufacturer before commencing any cultivation works. If time permits, a 'stale seed bed' is to be established, by allowing the graded meadow area to colonise with weeds from the existing soil seed bank following initial cultivation / rotovation and an additional application of proprietary herbicide applied to remove any weed growth. Areas to be seeded are to be finely graded to bring to a uniform and even grade at the correct finished level and to remove all minor hollows and ridges. All stones and debris greater than 50mm in size to be removed and disposed of off-site. Wildflower seeded areas are to consist of min. 300mm deep existing retained topsoil (free from weeds):subsoil mix (50:50) over existing site subsoil layer. No imported topsoil should be used in the formation of wildflower meadows. Final preparation of the seeded areas shall be carried out so as to create a fine tilth surface suitable for seeding. No pre-seeding fertiliser shall be applied. Wildflower seeding is to be undertaken preferably in Spring (Early March to late June) or if not feasible in Autumn (Mid August to October). Where sowing rates are low and sowing is to be undertaken by hand broad-casting, the contractor should mix the seed evenly with a fine, dry sand to bulk up the sowing mixture. Seeding by this method should only be undertaken on calm days with no wind. Ater seeding, areas are to be hand raked and lightly rolled. The contractor shall take the necessary precautions to ensure all grass areas are protected throughout the establishment period, with the use of chestnut pale fencing where appropriate. The contractor shall ensure that all seeded areas are watered fully at the time of installation to the full cultivated depth, and that sufficient subsequent watering is carried out to ensure healthy establishment of the grass sward.

ESTABLISHMENT MAINTENANCE GUIDELINES

General
Establishment maintenance for all planting for 5 years from Practical Completion (first year to be carried out by installing contractor) to include weed control, watering and replacement of failures to original specification in the planting season following failure. All plant material to receive annual pruning and groundcover to be trained and edged with minimum 2 trims per year.

During the 5 yr establishment period visit at eight weekly intervals from April - December to carry out the following to planting areas:

- Control weed growth. Maintaining a weed free area around each plant during the first few years will allow quick establishment of the plants and reduce the likelihood of dieback.
- Prune dead and broken branches/shoots
- Check stakes and ties. Adjust or replace as necessary
- Litter picking of beds

Irrigation
Shrubs and Herbaceous Plants: During the first full growing season after planting it may be necessary to water all plants in prolonged periods of dry weather. This usually occurs during May - September. All planting areas should be watered to field saturation using clean fresh water on a weekly basis.

Trees: During the initial three full growing seasons year after planting it may be necessary to water all specimen trees. Watering will need to be accessed on the prevailing soil and weather conditions. The following is a guide only and should be taken as a minimum standard. During the months of May to September watering will be required twice weekly when there has not be significant rainfall within 15 consecutive days. As a guide for Light Standards to Heavy Standards, including Multi-Stem stock up to 1.8m height, water volumes shall be 20L per m². For planting stock of Extra Heavy Standards and above the volumes shall be 40L per m². During the first year after planting an area of 500mm dia from the tree stem shall be covered with water. i.e 1m². This should be increased to 1m dia. (2m² around the tree stem) for year 2, to ensure the rooting zone is covered.

Removal of Stakes and Ties
All spiral guards, canes and tree stakes should be removed at the end of years 3-5 following planting, once planting has established.

Formative Pruning of Trees
Trees should require very little pruning and should be allowed to grow to their naturally occurring shape. some occasional intervention may be necessary in relation to removing the following growth: crossing branches and branches that grow back towards the centre of the tree. Remove tightly included branching or one half codominant stems.Remove multiple leaders on evergreens and other trees where a single leader is desirable. As young trees grow, remove lower branches gradually to raise the crown, and remove branches that are too closely spaced on the trunk.

Wildflower and Meadow Areas
- First year management:
Most of the sown meadow species are perennial and will be slow to germinate and grow and will not usually flower in the first growing season. There will often be a flush of annual weeds from the soil in the first growing season. This weed growth should be controlled by topping or mowing. This should be done up to four times in the first year (if sown in the previous autumn) or three times if sown in the spring.
- Management once established:
In the second and subsequent years meadow areas are to be managed by topping in the spring followed by a main cut in late July August once seed has set. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site. Mow or graze the re-growth through to late autumn/winter to c 50mm and again in early April.

EG9 – GRASS MIXTURE FOR HEDGEROWS AND WOODLAND

EG9 contains a selection of grasses that are tolerant of a degree of shade.

%	Latin name	Common name
12.5	Agrostis capillaris	Common Bent
2.5	Anthoxanthum odoratum	Sweet Vernal-grass (w)
8.75	Brachypodium sylvaticum	False Brome (w)
25	Cynosurus cristatus	Crested Dogstail
1.25	Deschampsia cespitosa	Tufted Hair-grass (w)
35	Festuca rubra	Red Fescue
15	Poa nemoralis	Wood Meadow-grass
100		

Meadow seed to be sown onto prepared seed bed at a rate of 5g/m²

Planting Schedule					
Trees Number	Species	Specification	Height	Girth	Pot Size
2 -	Acer campestre	C	250-300cm	8-10cm	25L
10 -	Pinus nigra	C	175-200cm		25L
6 -	Pinus sylvestris	C	250-300cm	8-10cm	25L
13 -	Quercus robur	C	250-300cm	8-10cm	25L
Total :30 -					

Low Trailing Plants						
Number	Species	Specification	Diameter	Height	Pot Size	Density
6 -	Pieris 'Forest Flame'	C		40-60cm	3L	Counted

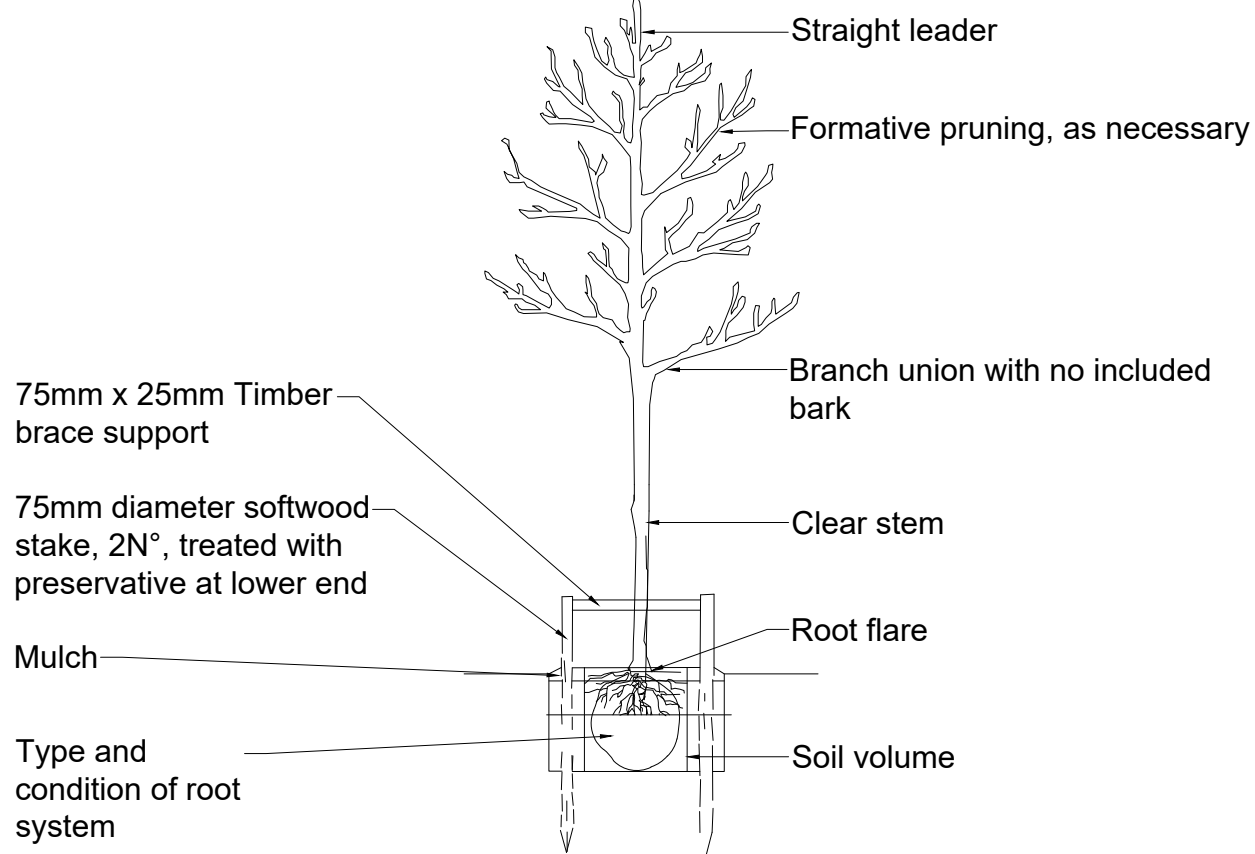
Herbaceous				
Number	Species	Specification	Pot Size	Density
743 -	Vinca major 'Variegata'	C	3L	4/m²

Native Shrub Mix					
Number	Species	Specification	Height	Density	%
13 -	Cornus sanguinea	C	40-60cm	1Ctr	20%
16 -	Corylus avellana	RB: Transplant	60-80cm	1Ctr	25%
16 -	Crataegus monogyna	RB: Transplant	60-80cm	1Ctr	25%
11 -	Prunus spinosa	C	40-60cm	1Ctr	15%
11 -	Sambucus nigra	C	40-60cm	1Ctr	15%
Total :67 -					

Woodland Mix					
Number	Species	Specification	Height	Density	%
74 -	Cornus sanguinea	C	40-60cm	1.5Ctr	15%
98 -	Corylus avellana	C	40-60cm	1.5Ctr	20%
74 -	Crataegus monogyna	C	40-60cm	1.5Ctr	15%
25 -	Pinus nigra	C	80-100cm	1.5Ctr	5%
25 -	Quercus robur	BR	125-150cm	1.5Ctr	5%
49 -	Salix caprea	C	40-60cm	1.5Ctr	10%
49 -	Salix elaeagnos	C	40-60cm	1.5Ctr	10%
49 -	Sambucus nigra 'Black Lace'	C	40-60cm	1.5Ctr	10%
49 -	Viburnum opulus	C	40-60cm	1.5Ctr	10%
Total :492 -					

Native Hedge Mix						
Number	Species	Specification	Height	Pot Size	Density	%
17 -	Acer campestre	BR	60-80cm		1/m	10%
51 -	Corylus avellana	BR	60-80cm		1/m	30%
42 -	Crataegus monogyna	BR	60-80cm		1/m	25%
9 -	Ilex aquifolium	C	60-80cm	5L	1/m	5%
17 -	Prunus spinosa	BR	60-80cm		1/m	10%
17 -	Rosa arvensis	BR	60-80cm		1/m	10%
17 -	Sambucus nigra	BR	60-80cm		1/m	10%
Total :170 -						Total :100%

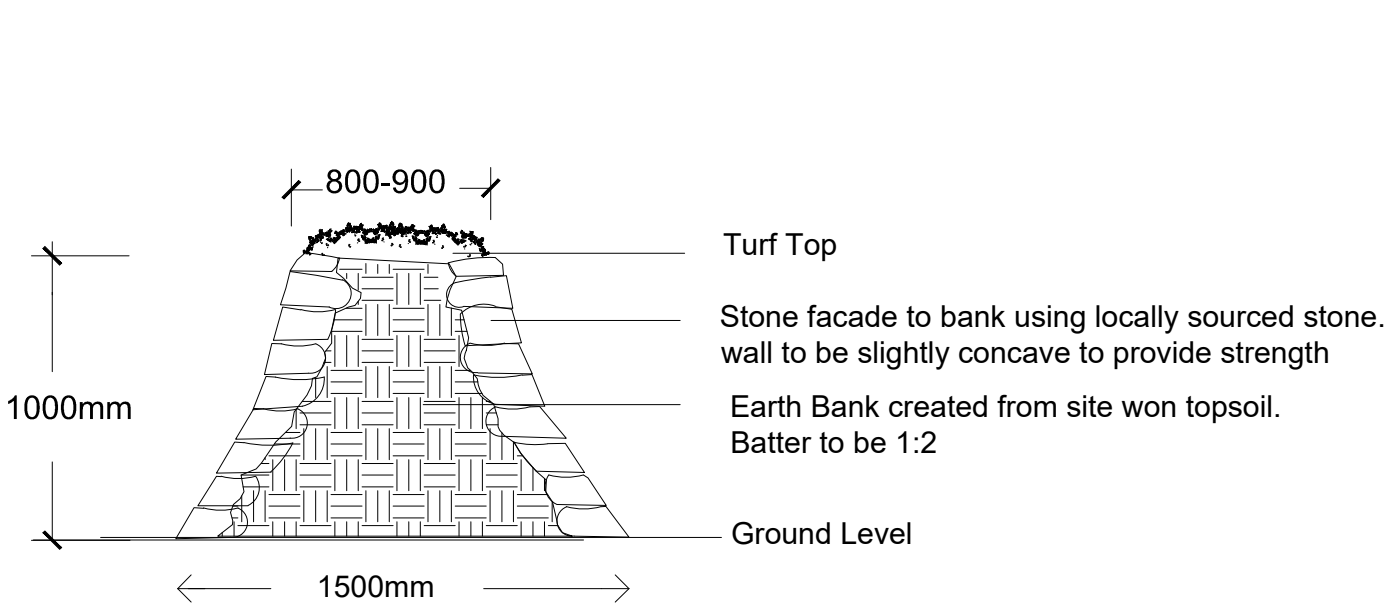
TREE STAKING DETAIL Not to scale



FRONT ELEVATION

SIDE ELEVATION

Hedge Bank - Stone Faced Not to Scale
Plant material to be as per drawing.



DRAFT

REFER TO
736_01 Planting Plan
736_02 Details and Notes

Do not scale off this drawing for construction purposes. Discrepancies to be reported to RBD before proceeding for construction purposes. Use only figured dimensions.

REVISIONS:

SCALE	DRAWING NO.	Rev.
VARIOUS@A1	736/02	-

PROJECT
Proposed Retail Unit
Edginswell Business Park, Torquay
CLIENT
TDA

DRAWING TITLE	DATE
Details and Notes	19/03/2021
	DRAWN BY JD
	CHECKED BY NP