

PLANTING SPECIFICATION

GENERALLY

- **Plant Stock:** Plant stock must be in strict accordance with the schedule of plants shown on the drawing. All plants are to be supplied by nurseries registered with the HTA Nursery certification scheme in accordance with the National Plant Specification.
- **British Standard:** All tree and shrub planting and turfing shall be carried out in accordance with the relevant British Standards.
- **Planting Conditions:** No planting shall take place when the ground is frozen, wet or waterlogged or in excessively windy conditions, or in any other conditions that could adversely affect the successful establishment of plant material. All plants on site to be protected from adverse weather conditions.
- **Planting Positions:** All plants must be planted in the exact locations shown on the drawings, if this is not possible due to site layout changes or unmarked service runs etc. then changes must be agreed and confirmed in writing by the Contract Administrator.
- **Watering Prior to Planting:** All container grown and root balled planting stock shall be thoroughly watered before planting on the same day as the planting operation.

SITE PREPARATION

- **Topsoil:** Existing topsoil shall be stripped before building works begin. Imported topsoil shall be to BS3882: 2015 Specification for Topsoil. Topsoil shall be multi-purpose grade, of medium texture, with a high Proportion of fertile loamy material. It shall be free from subsoil, rubbish, rubble, contamination, roots of perennial weeds and other materials injurious to plant growth. The maximum stone content of the soil shall be 20%, with the maximum size of stone 25mm in any one dimension. All topsoil shall be stacked in heaps, not exceeding 2m high. During storage, topsoil heaps shall be kept free from compaction, contamination and weeds to BS3882: 2015.
- **Excavation:** Excavation shall NOT be undertaken with machinery within the root protection area of any existing trees or shrubs to be retained. Areas requiring excavation under existing trees are to be hand dug. Unless otherwise indicated areas to be planted shall be cleared of all surface rubbish and excavated to the dimensions below finished level as follows, when the soil is not waterlogged or frozen. Ensure the location of all services is known before any excavation operations.
 - Tree pits: 1000 x 1000 x 900mm deep unless otherwise shown
 - Hedging trenches: 700mm for single row hedges and 1m for double-row hedges x 600mm deep
 - Shrub/planting: 600mm deep
 - Grass areas: 150mm deepThe base of excavated areas shall be forked or otherwise cultivated to a depth of 150mm to facilitate drainage and all bricks, stones and other debris, etc. over 100mm in any one dimension shall be removed. Similarly, areas trafficked by construction vehicles shall be ripped to a depth of 150-300mm to relieve compaction.
- **Backfilling with Subsoil:** Where excavated areas are lower than the required depths, excavations shall be backfilled with selected subsoil and lightly consolidated to make up levels. Selected subsoil shall be friable, second quality topsoil or similar and be free of rubbish, roots, stones over 100mm in any one dimension, perennial weeds or other materials injurious to plant growth to BS8601: 2013.
- **Backfilling with Topsoil:** Tree, shrub and hedge pit/trench excavations shall be backfilled in layers, with clean topsoil (as specified above) thoroughly mixed with peat-free planting compost at a rate of 25 litres/m². Fisons 'Ficote' 140 day 16,10,10 slow-release fertiliser at a rate of 100 grams per m² to be incorporated into backfill in accordance with the manufacturer's instructions. Rake all beds to form an even surface. Remove all surface stones and other debris larger than 50mm. NB ensure that final soil levels within 300mm of edge of all beds are 70mm below adjacent surfaces, to stop mulch moving from bed. Water lightly if the soil is dry prior to planting.
- **Cultivation:** Prior to cultivation if planting/seeding areas are weed infested, weed growth to be strimmed, the arisings removed and re-growth treated with an approved translocated herbicide. Treatment to be undertaken in the growing season preceding planting, at a minimum 4 weeks prior to works to allow for repeat treatment if necessary. Cultivation shall not be undertaken within the root protection area of any trees/shrubs to be retained, without prior agreement from the Local Planning Authority. Topsoil shall be cultivated by hand or machine prior to planting, with minimal compaction by machine. Cultivate to the following depths and tilth,

removing all rubbish, vegetation, perennial weeds, roots, stones over 100mm in any one dimension and rake to even levels.

Planting areas: 600mm deep cultivation to medium tilth

Turf areas: 150mm deep cultivation to medium tilth raked to a smooth evenly firmed bed

GENERAL RESTRICTIONS WITHIN THE RPA OF TPO BIRCH TREES

Inside the RPA the following shall apply:

- No mechanical excavation whatsoever.
- No excavation by other means without a detailed method statement being agreed by Supervising Arboriculturalist.
- No lowering of the levels for any purposes.
- No storage of plant or materials.
- No storage or handling of any chemicals
- No vehicle access without ground protection and agreement from the supervising Arboriculturalist

PLANTING

- **Plant Stock and Timing:** Plant material and operations shall conform to BS8545 : 2014, BS 3936 Nursery Stock (Parts 1-10), BS 4428 : 1989, BS 4043 : 1989 and BS 5837 2012. The planting season shall be from the 1st October to the 31st March. Container grown stock may be planted outside this season if accompanied by daily watering, or as necessary to ensure healthy establishment. Planting shall not be carried out during periods of frost, drought, cold drying winds or when the soil is waterlogged or frozen.
- **Planting:** All planting that is within the root protection area of existing trees/shrubs to be retained, shall be undertaken by hand and positions altered should tree roots be encountered, in order to avoid damage to the root system. All plants shall be set out evenly over the areas as indicated, to the density and quantities shown. All plants shall be planted upright at the same depth as the nursery soil level and evenly spaced, leaving room for growth. All restrictive containers shall be removed with roots not twisted. Immediately following planting, all plants shall be watered-in to field capacity.
Container grown and root balled plants shall be planted in a planting pit sufficient to accommodate the plant without causing root damage, with a minimum 50mm backfill beyond the root ball extent. Plants to be firmed, watered-in and dead, damaged or lopsided branches shall be removed after planting.
Bare-root plants shall be slit planted, incorporating an approved high phosphate, slow-release fertilizer.
- **Double Staking Large Standard Trees:** Stake trees with a girth size of between 10cm and 16cm with two stakes, 1.8m long x 100mm diameter, driven vertically into base of pit, approximately 600mm apart. Finished height of stakes to be 800mm above finished ground level, cut stakes if necessary to achieve this height. Fix timber cross board 30mm x 200mm x 700mm (approx.) horizontally to stakes. Top edge of board to be flush with tops of stakes, board to be fixed with 2no. 75mm large headed wire nails per post.
Position trees and fix to stakes using biodegradable tree tie with spacing device. Ties to be nailed 25mm from top of stake for single staked trees and 25mm from top edge of cross board for double staked trees. Supply and install 'Metro' irrigation system by Greenleaf Tel 01424 717797 to each tree with a stem girth of 12cm or more, in accordance with manufacturer's instructions. Backfill tree pit with clean topsoil and firm in after planting.
All trees to be firmed in after planting. All trees shall have irrigation/aeration system units fitted to fully surround the root ball.
 - **Root Barrier:** Trees planted on Water Road and Dee Road frontage to be planted with root barrier, as per manufacturer's instructions.
- **Hedge Planting:** Hedges shall be planted in a double staggered row or single row as per details. Dead, damaged or straggly branches shall be removed after planting. All transplants in hedge and native mixes shall be fitted with individual protection i.e. shrub shelters, spiral guards as specified, or alternatively the planting areas shall be protected with rabbit-proof fencing. All shrub shelters/spiral guards shall be black or green, adequately supported and installed to allow for expansion.

MULCHING

Prior to the application of mulch the planting areas shall be completely weed free and watered sufficiently to achieve field capacity. The surface of the planting areas shall be mulched with a minimum 50mm depth layer of coarse woodchip mulch, ensuring that the low branches of trees, shrubs and/or herbaceous plants are NOT smothered.

- *Tree pits in grass areas-* Ensure finished soil level is 100mm below adjacent grass surface to a radius of 500mm from the base of the tree, thus forming a neat circle. Spread 80mm depth of coarse wood chip mulch over surface of pit leaving a small gap so is not in contact with the trunk of the tree.

- *Under existing Betula* - Ensure finished soil level is 100mm below adjacent surfaces and spread 80mm depth of coarse wood chip mulch over surface.

TURF

- **Herbicide Application:** Spray areas with translocated herbicide if there is any pernicious perennial weed growth. Allow weed growth to die off and repeat treatments if necessary to ensure that areas are free from perennial weed growth prior to further cultivation. Spraying to be carried out in accordance with COSHH regulations 1994. NB herbicide application should be carried out approximately six weeks after soil rotovation i.e. once dormant weed seed and existing vegetation has begun to generate new growth.
- **Cultivation - Areas that have been recently topsoiled:** Rotovate all areas to 150mm depth. Rake to create a fine tilth and even surface. Remove all stones and organic debris greater than 20mm diameter and all vegetative material. If ground conditions are dry and soil is loose, then lightly consolidate area with garden roller or similar to eliminate soft spots, then lightly re-rake surface. If ground conditions are wet, then either allow area to dry prior to cultivating, or spread 5-10 mm of sharp sand over area prior to laying turf and ensure that area is not walked on for 3-4 weeks after turf has been laid, in order to allow ground to settle evenly - scaffold boards can be placed over the lawn to allow access during this period. NB ensure that final level of grass areas within 500mm of edge are 10mm below adjacent paved surfaces, to allow mowing and surface water runoff.
- **Turf within RPAs of TPO Birch Trees:** No general ground cultivation should occur, i.e. rotovating, raking etc as that could damage roots.
- **Turf:** Supply turf and ensure that any stored rolls are kept moist at all times. If ground is dry then water lightly prior to laying turf. Lay turf and firm in with a light roller if ground conditions are not wet. Water finished area to field capacity. Turf to be Rolawn 'Medalion' or similar and approved.

MAINTENANCE PERIOD

- **Maintenance period:** Carry out the following maintenance operations until planting is established. Ensure that maintenance operations are carried out as necessary to keep the works in a tidy condition throughout the maintenance period.
- **Weed control:** Remove all weed growth by hand or treat with spot herbicide applications, taking care to avoid spray drift. Spraying to be carried out in accordance with COSHH regulations 1994. All arisings to be removed from site.
- **Litter removal:** Remove from site all litter and other debris during each maintenance visit.
- **General pruning:** Prune off dead, damaged, diseased or misshapen growth from shrubs and trees to promote good habit and shape.
- **Native hedging pruning:** Water Road hedging under existing Silver Birch maintained at 0.6m high. Rest of Water Road/Dee Road boundary hedging maintained at 0.9m high. All other hedging maintained at 1.8m high.
 - First spring after planting cut down to 45–60cm above ground to encourage plants to bush out. Then during the first summer, weed around the base of the shrubs to prevent competition, while watering regularly. Replace any dead, damaged or diseased plants in autumn/winter to prevent gaps forming.
 - No pruning to take place from March to September, peak bird nesting season. Prune hedges in winter, ideally early February so as to provide autumn/winter food source for birds.
 - Hedges to be cut every two or three years to allow flower buds to form on second-year growth.
- **Replacement:** Replace or make good immediately, any soft landscape item that fails, or does not develop full foliage during the maintenance period.
- **Watering:** Water soft landscape items as necessary throughout the maintenance period, to ensure establishment. Replace or make good immediately, any soft landscape item that fails due to lack of water. Weekly watering of trees and hedges particularly in the first two growing seasons. (A guide to the amount of water required: 12-14cmg trees 25ltrs per week - half into the pipe and half directly onto the ground).