

Coherent Campus

SOFT LANDSCAPE STANDARDISATION & SPECIFICATIONS



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1.0 Objectives

- To ensure the successful planting operations, establishment and continued healthy growth through to maturity of the Trees, Shrubs and Grass.
- To ensure the continued health and vigour of the existing trees and any retained elements on the site.
- To achieve a clean, tidy condition and appearance of all external areas.

2.0 Conditions

2.1 Failures of Plants (Pre-project Completion):

Any trees, shrubs, other plants, turf and bulbs shall be replaced by the contractor entirely at their own cost.

2.2 Malicious Damage or Theft prior to Project Completion:

All loss or damage arising from theft or malicious damage prior to project completion, shall be made good by the contractor at their own expense.

2.3 Post Project Completion Maintenance:

The maintenance of trees, shrubs, turf, bulbs and other plants after the date of project completion, will be carried out by the contractor for a 12 month period or as specified.

Any plants found to be defective during this period as a result of materials or workmanship shall be replaced by the contractor immediately.

Failure or lack of vigour of any plants within this period will also be entirely at the contractors own cost.

Replacement of plants shall take place as many times as is necessary in order to maintain a complete cover of plants and to maintain the scheme as per design.

2.4 Existing Vegetation:

No existing trees, shrubs or other plants shall be removed or cut without specific instructions from an ESS representative.

Existing trees are to be retained, protected and undisturbed throughout the contract in accordance with BS 5837 section 9.

2.5 Removal of Surplus Excavated Material:

Remove all surplus excavated material from the site. Consult ESS representative to see if any materials are to be kept.

3.0 Topsoil (To Comply with British Standard 3882)

Any source of topsoil will be a well structured, clay loam, "as dug" soil with an independent soil analysis backed up with certification of conformity including all current environmental agency legislation and British Standard 3882 (Appendix A). Topsoil shall be investigated carefully, with respect to its suitability for the intended use by a member of the grounds team. This process should be carried out by sending/delivering a 1 litre soil sample roughly 2 weeks before work is due to commence.

Soil shall not be handled in inappropriate conditions of weather and soil moisture i.e.

- During or shortly after heavy precipitation
- When soil is in a waterlogged condition
- When the ground is frozen or covered by snow
- When there are pools of water on the grounds surface

The rooting depth shall normally be 450mm for grass, 600mm for shrubs and 900mm for trees. This will comprise of both topsoil and subsoil, the depth of topsoil spread shall not normally exceed 300mm. Suitable (loosened) subsoil shall provide the remainder of the minimum rooting depth.

Stockpiling of soil shall be avoided whenever possible to minimise loss of physical quality, diffusion of oxygen and biological activity.

Any stockpiling shall be sited so as to avoid risk of muddy water run-off into a watercourse.

The site of the stockpile will be prepared in advance by grading, removing rubbish and ensuring no fuel or chemicals were previously.

4.0 Subsoil

Before receiving topsoil, subsoil shall be loosened using appropriate equipment; this shall be done when the subsoil is dry so as to encourage soil shattering.

The depth of the cultivation shall be checked by an ESS Grounds representative to ensure the desired result is achieved.

All stones and other objects larger than 50mm shall be removed from the prepared surface.

The loosened subsoil shall be roughly levelled so that an even depth of topsoil can be achieved.

5.0 Turfing

Topsoil, in compliance with BS 3882, should be a minimum of 100mm (4") depth and free of vegetation.

The topsoil should be turned over, levelled, lightly consolidated and free from surface stone, other debris and perennial weeds.

Turf should always be inspected upon receipt.

Sufficient operatives should be available to lay the turf **immediately** when it arrives on site.

Turf will not be laid when soil is frost covered, frozen or when the ground is waterlogged.

If more than one pallet is on site, turf will be drawn equally from each pallet as work progresses so as not to leave one pallet substantially drier than the others.

Planks should be placed on newly-laid turf for walking along and working from.

Ensure complete contact between soil and the underside of each turf, if necessary; use the head of a rake held vertically and press ("tamp") this against the turf.

Use a whole turf at any edges.

Trim turf with edging shears or a half moon.

Finished grass levels are to be 40mm above surrounding kerbs, paving and plant bed edges.

Start watering on the day turf is laid. On hot days, watering may need to commence prior to laying all of the turf.

6.0 Tree planting

Planting locations are to be agreed and inspected with an ESS representative.

A site assessment will be made with consideration given to tree species, access, overhead and underground services plus general safety.

The planting site shall be naturally or physically drained to prevent the trees from being waterlogged at any time.

Excavations for tree pits should be at least twice the diameter of the root spread, and 1.5 times the depth of the roots of the stock to be planted.

Before planting, the sides of the pit shall be broken up and the base dug over to a depth of 150mm to improve drainage.

The tree will be planted to the same depth as it was in the nursery.

Backfill will be firmed in around the rootball to prevent any air pockets.

An irrigation/aeration system will be installed comprising of perforated pipe around the rootball.

Installation of a supporting system for the tree will be necessary and will be in the form of an appropriately sized tree stake and accompanying tree ties. For most trees and locations a single stake and one tie should provide adequate anchorage. "Tall Standard" trees and root-balled trees may need two stakes and a tie from each stake to the tree; or two stakes, a crossbar and a tie; in order to hold the root collar steady. Single stakes, which should generally be on the windward side of a tree, should be driven into the ground vertically, although on hillsides/slopes a slanting stake may need to be installed on the higher side.

All tree stakes on the same site should be of a uniform height.

Any necessary formative pruning will be carried out and where appropriate, woodchip/bark mulch applied to a depth of 50mm, and to at least the edge of the planting pit.

Where suitable tree species should be native to the UK, represent the character of the local landscape and where possible link with existing vegetation

The trees used should be wildlife friendly *for example* berry, fruit bearing or scented species

Where possible trees and seeds should be locally sourced

7.0 Shrub Planting

When inspected visually, plants shall be free from pests and diseases, damage and signs of nutrient deficiency and toxicity.

Plants will have adequate root systems and flowering plants shall have a reasonable expectation that they will give a good flower display the season following their planting out into open ground.

All shrubs, hedging plants, climbers, herbaceous plants and bulbs should comply with BS 3936 (Appendix B).

Planting will be avoided in frozen ground conditions and waterlogged soil.

Temporary wind barrier protection should be provided if planting in periods of persistent wind.

All plants will be firmed and watered if they are planted in dry weather.

Planting holes should be about 150mm wider than the root spread.

The shrubs should be set in the holes so that the soil level, after settlement, will be at the original root collar level on the stem of the shrub.

The holes should be backfilled to half their depth then firmed by treading before the remainder of the topsoil is returned and firmed again.

All shrub species should represent the character of the local landscape and where possible link with existing vegetation

The shrubs used should be wildlife friendly such as scented species with a succession of flowering times and diverse range of petal shapes

Where possible shrubs and seeds should be locally sourced

8.0 Work near a Tree

Refer to BS 5837 Trees in relation to construction – Section 9 (Appendix C).

9.0 Damage to Plants to be Retained

If a plant to be retained is damaged, the plant is to be repaired or replaced by the contractor at their own expense.

“Damaged” means:

- The destruction of a plant
- The breaking of branches or roots
- The debarking of trunks or limbs
- The contamination of root zone soil or plants from drift sprays, dust or contaminated storm water
- The damage by the placement of fill or building materials within the canopy perimeter or otherwise.

10.0 Weeding

A plant that roots directly from its base and has shallow roots is to be removed by hand, by removing the main root system.

A weed that grows from a clumped, fibrous root system is to be removed using the crowning method, by cutting the roots from the crown of the weed.

A large weed infestation is to be removed by spraying an approved chemical directly onto the target infestation.

A plant being a tree or a vine is to be removed using the cut and paint method, by cutting the base of the stem close to the ground and immediately applying herbicide to the cut.