

Deacon Design

Boyle and Summers

Chalcroft Business Park, Horton Heath

DD614S01_Chalcroft Business Park,
Horton Heath - Soft Landscape
Specification

27-02-2023

Soft Landscape Specification

Contents

Q28 Topsoil and soil ameliorants 1

Q30 Seeding/ turfing 6

Q31 External planting..... 9

Q35 Landscape maintenance 17

Q40 Fencing 25

Q28

Topsoil and soil ameliorants

System outline

135 Planting bed topsoil system

1. **Description:** FOR GENERAL PLANTING AREAS FOR ORNAMENTAL PLANTING BEDS
2. **Composition**
 - 2.1. **Topsoil:** Excavated material topped up with Imported topsoil to BS 3882
 - 2.2. **Ameliorants:** Sanitized and stabilized composted materials certified to PAS 100
 - 2.3. **Accessories:** None

145 Planting pit backfilling topsoil system

1. **Description:** FOR SHRUB-PLANTING PITS
2. **Composition**
 - 2.1. **Topsoil:** Excavated material topped up with Imported topsoil to BS 3882
 - 2.2. **Ameliorants:** Sanitized and stabilized composted materials certified to PAS 100
 - 2.3. **Accessories:** None

155 Mulching and top dressing system

1. **Description:** FOR SHRUB BEDS
2. **Composition**
 - 2.1. **Material:** Sanitized and stabilized composted materials certified to PAS 100

Products

300 Preparation materials generally

1. **Purity:** Free of pests and disease.
2. **Foreign matter:** On visual inspection, free of fragments and roots of aggressive weeds, sticks, straw, subsoil, pieces of brick, concrete, glass, wire, large lumps of clay or vegetation, and the like.
3. **Contamination:** Do not use topsoil contaminated with subsoil, rubbish or other materials that are:
 - 3.1. Corrosive, explosive or flammable.
 - 3.2. Hazardous to human or animal life.
 - 3.3. Detrimental to healthy plant growth.
4. **Subsoil:** In areas to receive topsoil or planting media, do not use subsoil contaminated with the above materials.
5. **Objectionable odour:** None.
6. **Give notice:** If any evidence or symptoms of soil contamination are discovered on the site or in topsoil or planting media to be imported.

310 Materials not permitted

1. **Materials:** Peat, Products containing peat, River and canal dredgings

315 Imported topsoil to BS 3882

1. **Description:** FOR PLANTING BEDS
2. **Quantity:** Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.

3. Standard: To BS 3882.
4. Classification: Multipurpose
 - 4.1. Soil textural class to BS 3882, Figure 1: Sandy clay loam
5. Source: Submit proposals
 - 5.1. Product reference: Submit proposals

345 Aggregates

1. Description: FOR TREE PITS
2. Source: Submit proposals
 - 2.1. Product reference: Submit proposals

355 Organic materials

1. Description: FOR TOP DRESSING/ MULCHING
2. Type: Bark
3. Source: Submit proposals
 - 3.1. Product reference: Submit proposals

360 Sanitized and stabilized composted materials certified to PAS 100

1. Description: FOR PLANTING BEDS
2. Standard: In accordance with PAS 100 and Compost Quality Protocol
3. Source: Submit proposals
 - 3.1. Product reference: Submit proposals
4. Texture: Friable.
5. Objectionable odour: Not permitted.
6. Compost Certification Scheme certification: Not required
7. Declaration of analysis: Submit.
8. Additional analyses: Not required
9. Samples: Supply 5 kg sample before ordering

401 Organic fertilizers

1. Description: FOR TREE PITS
2. Manufacturer/ source: Submit proposals
 - 2.1. Product reference: Submit proposals
3. Purpose: Establishment fertilizer
4. Type: Submit proposals
5. Availability to plants: Slow-release

Execution

630 Documentation for imported topsoil

1. Description: FOR PLANTING BEDS FOR TREE PITS
2. Timing: Submit at handover.
3. Contents
 - 3.1. Full description of all soil components.
 - 3.2. Record of source for all soil components.
 - 3.3. Record drawings showing the location and depth of all soils by type and grade.

3.4. Declaration of analysis: in accordance with BS 3882, clause 6 and Table 1.

4. Number of copies: Two One

635 Documentation for compost and composted materials

1. Description: FOR COMPOST
2. Timing: Submit at handover.
3. Contents
 - 3.1. Full description of all compost components.
 - 3.2. Record of source for all compost components.
 - 3.3. Analyst's report for each test carried out.
 - 3.4. Declaration of compliance: in accordance with PAS 100 and BSI PD CR 13456.
 - 3.5. Quality Compost Protocol certification: Not required
4. Number of copies: One

650 Notice

1. Give notice before
 - 1.1. Setting out.
 - 1.2. Spreading topsoil.
 - 1.3. Applying herbicide.
 - 1.4. Applying fertilizer.
 - 1.5. Visiting site during maintenance period.
2. Period of notice: 3 working days

655 Mechanical tools

1. Restrictions: Do not use within 100 mm of tree and plant stems. Do not damage adjacent planting.

665 Subsoil surface preparation for:

1. Description: WILDFLOWER AREAS
2. Standard: In accordance with BS 3882.
3. General: Excavate and/ or place fill to required profiles and levels, as section D20.
4. Loosening
 - 4.1. When ground conditions are sufficiently dry to allow breaking up of soils, loosen thoroughly to specified depth
 - 4.1.1. Light and noncohesive subsoils: Not applicable
 - 4.1.2. Stiff clay and cohesive subsoils: 300 mm
 - 4.1.3. Rock and chalk subgrades: Lightly scarify to promote free drainage.
 - 4.2. Wet conditions: Do not loosen subsoils.
5. Remove from site: Arisings, contaminants and debris

675 Preparation of undisturbed topsoil

1. Standard: In accordance with BS 4428.
 - 1.1. Grading and cultivation: To suit cultivation operations specified in Q30 To suit cultivation operations specified in Q31
2. Hard ground: Break up thoroughly.
3. Clearing: Remove visible roots and large stones with a diameter greater than 50 mm.
4. Areas covered with turf or thick sward: Plough or dig over to full depth of topsoil.

5. Fallow period (minimum): One month
 - 5.1. Weed control: At appropriate times re-cultivate at fortnightly intervals to suppress weed growth.

680 Surplus topsoil to be retained

1. Generally: Spread and level on site:
 - 1.1. Locations: Any areas where topsoil is required for new planting
 - 1.2. Protected areas: Do not raise soil level within root spread of trees that are to be retained.

690 Topsoil storage heaps

1. Location: Contractor's choice
2. Height (maximum): 1.5 m
3. Width (maximum): 3.0 m
 - 3.1. Formation: Loose tip and shape from the side only, without running machinery on the heap at any time.
4. Protection
 - 4.1. Do not place any other material on top of storage heaps.
 - 4.2. Do not allow construction plant to pass over storage heaps.
 - 4.3. Prevent compaction and contamination, by fencing and covering as appropriate.

700 Grading of topsoil

1. Topsoil condition: Reasonably dry and workable.
2. Contours: Smooth and flowing, with falls for adequate drainage.
 - 2.1. Hollows and ridges: Not permitted.
3. Give notice: If required levels cannot be achieved by movement of existing soil.

705 Handling topsoil

1. Standard: In accordance with BS 3882.
2. Aggressive weeds: Give notice and obtain instructions before moving topsoil.
3. Plant: Select and use plant to minimize disturbance, trafficking and compaction.
4. Contamination: Do not mix topsoil with:
 - 4.1. Subsoil, stone, hardcore, rubbish or material from demolition work.
 - 4.2. Other grades of topsoil.
5. Multiple handling: Keep to a minimum. Use or stockpile topsoil immediately after stripping.
6. Wet conditions: Handle topsoil in the driest condition possible. Do not handle during or after heavy rainfall, or when the moisture content is greater than the plastic limit.

710 Spreading topsoil on: Planting Beds

1. Description: PLANTING AREAS
2. Standard: In accordance with BS 3882.
3. Temporary roads/ surfacing: Remove before spreading topsoil.
4. Layers
 - 4.1. Depth (maximum): 150 mm.
 - 4.2. Gently firm each layer before spreading the next.
5. Depth after firming and settlement: 300 mm

6. **Crumb structure:** Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

715 Loose tipping of topsoil

1. **Standard:** In accordance with BS 3882.
2. **General:** Do not firm, consolidate or compact topsoil when laying. Tip and grade to approximate levels in one operation with minimum of trafficking by plant.

718 Final cultivation

1. **Description:** FOR PLANTING BEDS and WILDFLOWER AREAS
2. **Compacted topsoil:** Break up to full depth.
3. **Tilth:** Loosen, aerate and break up topsoil to a tilth suitable for blade grading.
4. **Depth:** 450 mm (planting beds) 150 (Grassed Areas)
5. **Particle size (maximum):** 5 mm
6. **Timing:** Within a few days before planting
7. **Weather and ground conditions:** Suitably dry.
8. **Surface:** Leave regular and even.
9. **Levels:** 25 mm above adjoining paving or kerbs Minimum 150 mm below dpc of adjoining buildings
10. **Undesirable material brought to the surface**
 - 10.1. Remove visible weeds.
 - 10.2. Remove roots and large stones with any dimension exceeding 50 mm.

845 Applying loose mulch

1. **Description:** FOR PLANTING BEDS; FOR TREE PITS
2. **Timing:** Immediately after planting
3. **Preparation:** Clear all weeds; Water soil thoroughly
4. **Coverage of mulch (minimum)**
 - 4.1. Planting beds (depth): 50 mm depth
 - 4.2. Trees: 50 mm depth
5. **Finished level of mulch:** 30 mm below adjacent grassed or paved areas

Completion

920 Applying mulch

1. **Timing:** At end of the maintenance period; At end of the rectification period
2. **Watering:** Ensure that soil is thoroughly moistened prior to mulching, applying water where necessary.
3. **Planting beds:** Re-mulch.
 - 3.1. Depth (minimum): 75 mm
4. **Trees:** Remulch.
 - 4.1. Depth (minimum): 100 mm

Ω End of Section

Q30

Seeding/ turfing

General information/requirements

115 Seeded and turfed areas

1. **Growth and development:** Healthy, vigorous grass sward, free from the visible effects of pests, weeds and disease.
2. **Appearance:** A closely knit, continuous ground cover of even density, height and colour.

120 Climatic conditions

1. **General:** Carry out the work while soil and weather conditions are suitable.

145 Watering

1. **Quantity:** Wet full depth of topsoil.
2. **Application:** Even and without displacing seed, seedlings or soil.
3. **Frequency:** As necessary to ensure the establishment and continued thriving of all seeding/turfing.

150 Water restrictions

1. **Timing:** If water supply is or is likely to be restricted by emergency legislation do not carry out seeding/turfing until instructed. If seeding/turfing has been carried out, obtain instructions on watering.

160 Notice

1. Give notice before
 - 1.1. Setting out.
 - 1.2. Applying herbicide.
 - 1.3. Applying fertilizer.
 - 1.4. Preparing seed bed.
 - 1.5. Seeding or turfing.
 - 1.6. Visiting site during maintenance period.
2. Period of notice: 3 working days

170 Setting out

1. **Boundaries:** Mark clearly.
2. **Delineation:** In straight lines or smoothly flowing curves as shown on drawings.

Preparation

212 Seed bed cleaning before sowing

1. **Description:** ALL GRASSED AREAS
2. **Operations:** As seed supplier's recommendations.

250 Soil requirements

1. Type
 - 1.1. **Seeded areas:** Existing topsoil topped up with soil for grass swards, as section Q28

Seeding

312 Wildflower seed mixture

1. Description: Wildflower Grassland to SINC Buffer.
2. Supplier: Emorsgate Ltd
 - 2.1. Mixture reference: EH1 Hedgerow Mixture or similar and approved.
3. Origin of each species (as defined in Flora Locale's Code of practice for collectors, growers and suppliers of native flora): British Native
4. Application rate: 15kg/ha - 6kg/acre - 1.5g/m²

322 Quality of wildflower seed

1. Description: FOR ALL SEEDED AREAS
2. Standard: In accordance with Flora Locale's 'Code of practice for collectors, growers and suppliers of native flora'.
3. Germination testing: Not required
4. Freshness of seed: Produced for the current growing season
5. Samples: Submit when requested.

330 Sowing

1. General: Establish good seed contact with the root zone.
2. Method: To suit soil type, proposed usage, location and weather conditions during and after sowing
 - 2.1. Distribution: To seed suppliers recommendations

336 Wildflower sowing season

1. Wildflower seed generally: March to May or August to October

Turfing - Not Used

Protecting/cutting

510 Protective fencing

1. Fencing type: Chestnut pale fencing to BS 1722-4
 - 1.1. Height: 0.9 m
2. Erection: On completion of seeding/ turfing.
3. Removal: After grass is well established. Fencing will remain the property of the Contractor

530 First cut of grassed areas

1. Timing: When grass is reasonably dry.
 - 1.1. Height of initial growth: 40-75 mm or in accordance with seed supplier specification
2. Preparation
 - 2.1. Debris and litter: Remove.
 - 2.2. Stones and earth clods larger than 25 mm in any dimension: Remove
3. Height of first cut: 50 mm
4. Mower type: Contractor's choice
5. Arisings: Remove from site

590 Cleanliness

1. **Soil and arisings:** Remove from hard surfaces.
2. **General:** Leave the works in a clean, tidy condition at Completion and after any maintenance operations.

Maintenance

610 Failures of seeding/ turfing

1. **Duration:** Carry out the following operations from completion of seeding/ turfing until: the end of the rectification period.
2. **Defective materials or workmanship:** Areas that have failed to thrive.
 - 2.1. **Exclusions:** Theft or malicious damage.
3. **Method of making good:** Recultivation and reseeding/ returfing.
4. **Timing of making good:** The next suitable planting season

620 Maintaining

1. **Description:** GENERAL GRASSED AREAS
2. **Duration:** Carry out the following operations from completion of seeding/ turfing until: the end of the rectification period.
3. **Maximum height of growth at any time:** 125 mm
4. **Preparation:** Before each cut remove all litter and debris.
5. **Cutting:** As and when necessary to a height of 35 mm.
 - 5.1. **Arisings:** Remove
6. **Bulb planting areas:** Do not cut until bulb foliage has died down.
7. **Trimming:** All edges.
 - 7.1. **Arisings:** Remove.
8. **Weed control:** Substantially free of broad leaved weeds.
 - 8.1. **Method:** Application of a suitable selective herbicide.
9. **Stones brought to the surface:** Remove regularly.
 - 9.1. **Size:** Exceeding 25 mm in any dimension.
10. **Areas of settlement:** Make good.
11. **Watering:** When instructed

Ω End of Section

Q31

External planting

General information/ requirements

112 Site clearance generally

1. **General:** Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil.
2. **Stones:** Remove those with any dimension exceeding 50 mm.
3. **Contamination:** Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
4. **Vegetation:** Remove all existing vegetation to planting areas
5. **Large roots:** Grub up and dispose of without undue disturbance of soil and adjacent areas.

118 Soil conditions

1. **Soil for cultivating and planting:** Moist, friable and (except in aquatic/ marginal planting) not waterlogged.
2. **Frozen or snow covered soil:** Give notice before planting. Provide additional root protection. Prevent planting pit sides and bases and backfill materials from freezing.

120 Climatic conditions

1. **General:** Carry out the work while soil and weather conditions are suitable.
 - 1.1. **Strong winds:** Do not plant.

125 Times of year for planting

1. **Deciduous trees and shrubs:** Late October to late March.
2. **Conifers and evergreens:** September/ October or April/ May.
3. **Herbaceous plants (including marginal):** September/ October or March/ April.
4. **Container grown plants:** At any time if ground and weather conditions are favourable.
 - 4.1. **Watering and weed control:** Provide as necessary.
5. **Dried bulbs, corms and tubers:** September/ October.
6. **Colchicum (crocus):** July/ August.
7. **Green bulbs:** After flowering in spring.
8. **Wildflower plugs:** Late August to mid November or March/ April.
9. **Aquatic plants:** May/ June or September/ October.

130 Mechanical tools

1. **Restrictions:** Do not use within 100 mm of tree and plant stems.

145 Watering

1. **Quantity:** Wet full depth of topsoil.
2. **Application:** Even and without damaging or displacing plants or soil.
3. **Frequency:** As necessary to ensure establishment and continued thriving of planting.

150 Water restrictions

1. **General:** If water supply is or is likely to be restricted by emergency legislation, do not carry out planting until instructed. If planting has been carried out, obtain instructions on watering.

160 Notice

1. Give notice before
 - 1.1. Setting out.
 - 1.2. Applying herbicide.
 - 1.3. Applying fertilizer.
 - 1.4. Delivery of plants/ trees.
 - 1.5. Planting shrubs.
 - 1.6. Planting trees into previously dug pits.
 - 1.7. Watering.
 - 1.8. Visiting site during maintenance period.
2. Period of notice: Three working days

170 Soil requirements

1. Type
 - 1.1. Planted beds: Existing topsoil topped up with planting bed soil system, as section Q28
 - 1.2. Tree pits, shrub pits and other backfilling: Existing topsoil and plant pit backfilling soil system, as section Q28
 - 1.3. Mulch applied after planting: Mulching and top dressing system, as section Q28

200 Plants/ Trees – general

1. Condition: Materially undamaged, sturdy, healthy and vigorous.
2. Appearance: Of good shape and without elongated shoots.
3. Hardiness: Grown in a suitable environment and hardened off.
4. Health: Free from pests, diseases, discoloration, weeds and physiological disorders.
5. Budded or grafted plants: Bottom worked.
6. Root system and condition: Balanced with branch system.
 - 6.1. Standard: The National Plant Specification
7. Species: True to name.
8. Origin/ Provenance: Grown in the United Kingdom for at least one growing season, unless otherwise approved
9. Definition: Origin and Provenance have the meaning given in the National Plant Specification.

215 Plants/ Trees – specification criteria

1. Name, forms, dimensions, provenance and other criteria: As scheduled and defined in the National Plant Specification (available on CS Design Software Limited's website).

235 Container grown plants/ Trees

1. Growing medium: With adequate nutrients for plants to thrive until permanently planted.
2. Plants: Centred in containers, firmed and well watered.
3. Root growth: Substantially filling containers, but not root bound, and in a condition conducive to successful transplanting.
4. Hardiness: Grown in the open for at least two months before being supplied.
5. Containers: With holes adequate for drainage when placed on any substrate commonly used under irrigation systems.

245 Labelling and information

1. **General:** Provide each plant/ tree or group of plants/ trees of a single species or cultivar with supplier's labelling for delivery to site, showing:
 - 1.1. Full botanical name.
 - 1.2. Total number.
 - 1.3. Number of bundles.
 - 1.4. Part bundles.
 - 1.5. Supplier's name.
 - 1.6. Employer's name and project reference.
 - 1.7. Plant specification, in accordance with scheduled National Plant Specification categories.
2. **Additional information:** Submit on request: Country of origin Date supplied and consignment details or reference Potting dates Impact of pest/ disease.

260 Plant/ Tree substitution

1. **Plants/ trees unobtainable or known to be likely to be unobtainable at time of ordering:** Submit alternatives, stating:
 - 1.1. Price.
 - 1.2. Difference from specified plants/ trees.
2. **Approval:** Obtain before making any substitution.

265 Plant handling, storage transport and planting

1. **Standard:** To CPSE 'Handling and establishing landscape plants'.
2. **Frost:** Protect plants from frost.
3. **Handling:** Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
4. **Planting:** Upright or well balanced with best side to front.

280 Treatment of tree wounds

1. **Cutting:** Keep wounds as small as possible.
 - 1.1. Cut cleanly back to sound wood using sharp, clean tools.
 - 1.2. Leave branch collars. Do not cut flush with stem or trunk.
 - 1.3. Set cuts so that water will not collect on cut area.
2. **Fungicide/ Sealant:** Do not apply unless instructed.

290 Surplus material

1. **Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings and other arisings:** Remove.

Plant containers - Not Used

Preparation of planting beds/ planting materials - Not Used

Planting shrubs/ herbaceous plants/ bulbs

400 Random plant layout

1. **Description:** TO ALL BEDS
2. **Spacing:** Evenly, avoiding straight lines; Random groups of 3-7 plants of the same species.
3. **Density:** As plant schedule

405 All Planting Beds

1. **Timing:** Excavate 1-2 days (maximum) before planting.
2. **Sizes:** Wide enough to accommodate roots when fully spread and 75 mm deeper than root system
3. **Pit bottom improvement** Break up to a depth of 150 mm, incorporating 10 kg compost.

420 Climbing plants

1. **Planting:** 150 mm clear of supporting structure (e.g. wall/ fence) with roots spread outward.
 - 1.1. **Branches:** Lightly secured to supports.
2. **Climber supports:**
 - 2.1. **Base height:**
 - 2.2. **Extent:**
 - 2.3. **Centres:**
 - 2.4. **Distance from wall:**
3. **Fixings:**
 - 3.1. **Centres:**

445 Planting bulbs/ Corms/ Tubers

1. **Depth:** Top of bulb/ corm/ tuber at a depth of approximately twice its height, base in contact with bottom of hole.
2. **Backfilling:** Finely broken soil. Lightly firm to existing ground level.
3. **Naturalized planting in existing grassed areas**
 - 3.1. **Scattering:** Random. Plant bulbs/ corms/ tubers where they fall.
 - 3.2. **Planting:** Neatly remove a plug of turf and replace after planting.

455 Planting wildflower plugs

1. **Handling:** Keep plants watered and in shade until planted. Do not allow to dry out.
2. **Preparation:** Remove brambles, coarse and invasive weeds from planting sites.
3. **Planting in grass:** Close mow to approximately 50 mm. Remove arisings.
4. **Planting sites:**
5. **Planting:** Into a hole to suit plug size and shape. Create a cleft at bottom of hole to improve rooting. Gently firm plant into hole.

480 After planting

1. **Watering:** Immediately after planting, thoroughly and without damaging or displacing plants or soil.
2. **Firming:** Lightly firm soil around plants and fork and/ or rake soil, without damaging roots, to a fine tilth with gentle cambers and no hollows.
3. **Top dressing:** Mulching and top dressing system, as section Q28
 - 3.1. **Depth:** 50 mm

Planting trees

500 Tree planting

1. **Standard:** Prepare trees and transplant in accordance with BS 8545

505 Tree pits

1. **Sizes:** As drawing DD614L02

2. **Sloping ground:** Maintain horizontal bases and vertical sides with no less than minimum depth throughout.
3. **Excavated material:** Separate topsoil and subsoil material and stockpile for backfilling
4. **Pit bottoms:** Excavate with slightly raised centre: Break up base to a depth of 150 mm.
 - 4.1. **Treatment:** As drawing DD614L02
5. **Pit sides:** Scarify.
6. **Backfilling material:** As specified on drawing DD614L02

510 Tree pit root barriers

1. **Locations:** To all tree pits adjacent to paved areas; Wherever the installed rootball will be within 2 m of a building foundation Wherever the installed rootball will be within 3 m of an existing underground service route .
2. **Manufacturer:** Submit proposals
 - 2.1. **Product reference:** Submit proposals
3. **Thickness:** Submit proposals
4. **Barrier depth:** Submit proposals
5. **Foil liner:** Submit proposals
6. **Top of root barrier in relation to finished topsoil level:** Flush
7. **Installation:** With sides vertical. Remove all sharp objects adjacent to barrier.

512 Tree pit irrigation and ventilation accessories

1. **Locations:** As drawing DD614L02
2. **Manufacturer:** As drawing DD614L02
 - 2.1. **Product reference:** As drawing DD614L02
3. **Installation**
 - 3.1. **Pipe:** Lay in loop above root ball with slight fall away from inlet pipe. Trim length to ensure a close fit in the tree pit. Connect both ends of pipe securely into plastics tee junction on inlet.
 - 3.2. **Top cap of inlet:** Protruding slightly above finished surround level.
 - 3.3. **Backfill material:** Carefully compact in layers.

515 Tree pit drainage

1. **Locations:** As drawing DD614L02
2. **Depth of excavation:** Increase from specified size to allow for aggregate layer, with base slightly falling to outlet.
3. **Aggregate layer:** Clean gravel or broken stone, with no fines, graded 40 to 20 mm.
 - 3.1. **Depth:** 200 mm
4. **Drainage pipes**
5. **Completed pits:** Test for free drainage before planting. Where necessary add positive drainage in accordance with drainage engineer's recommendations.

535 Tree stakes

1. **Stakes:** Softwood, peeled chestnut, larch or oak, straight, free from projections and large or edge knots and with pointed lower end.
 - 1.1. **Preservative treatment:** To provide a 20 year service life
2. **Stake size (minimum):** 75 mm diameter
3. **Stake length (minimum):** 2100 mm

540 Single angled staking for Standard Trees

1. **Description:** STANDARD TREES
2. **Staking**
 - 2.1. **Position:** Close to tree position on windward or upslope side.
 - 2.2. **Tying position:** Approximately one third of the height of the clear stem of the tree to be planted.
 - 2.3. **Driving:** At an angle of 45° away from the tree position and at least 300 mm into bottom of pit before planting.
 - 2.4. **Backfilling:** Consolidate material around stake.
 - 2.5. **Firming:** Sufficiently firm to prevent movement of the rootball/ rootstock.
 - 2.6. **Excess length:** Cut off 200 mm above tree support position.
3. **Ties:** Submit proposals
 - 3.1. **Number of ties:** Two
4. **Tying:** Secure tree firmly but not rigidly to stake. Prevent tree from touching stake using spacer blocks or cushions if required.
5. **Nails:** To BS 1202-1, galvanized, minimum 25 mm long and with 10 mm diameter heads.

550 Double staking for Heavy to Extra Heavy Standard

1. **Description:** HEAVY STANDARD TREES
2. **Staking**
 - 2.1. **Position:** Either side of tree position and perpendicular to wind direction.
 - 2.2. **Driving:** Vertically at least 300 mm into bottom of pit before planting.
 - 2.3. **Backfilling:** Consolidate material around stake.
 - 2.4. **Firming:** Sufficiently firm to prevent movement of the rootball/ rootstock.
3. **Height of stakes:** Cut off to approximately 700 mm above ground level
4. **Horizontal bracing:** Flexible webbing; Rubber belting with spacers; Contractor's choice
 - 4.1. **Fixing:** Firmly fix using nails on windward side of tree and as close as possible to the stem without making contact with the bark. Position cross bar horizontally and 25 mm from top of stakes
5. **Ties:** Adjustable Expanding
6. **Tying:** Secure flexible webbing around tree stem firmly without causing constriction or chafing
7. **Nails for fixing ties, belts and webbing:** To BS 1202-1, galvanized, minimum 25 mm long and with 10 mm diameter heads.
8. **Nails for fixing cross bars:** To BS 1202-1, galvanized round wire, minimum 75 mm long and 3.75 mm gauge

576 Tree pit surfacing – loose fill

1. **Surfacing material:** Mulch, as section Q28
2. **Area:** 300 mm radius circle
3. **Depth:** 100 mm
4. **Watering:** Water soil thoroughly before laying.
5. **Installation:** Ensure the base of the tree stem is kept free from loose filled material.

Woodland/ matrix/ buffer zone planting - Not Used

Protecting/ maintaining/ making good defects

710 Maintenance

1. Duration: Carry out the operations in the following clauses from completion of planting until the end of the rectification period.
2. Frequency of maintenance visits: Fortnightly during growing season or as agreed

720 Failures of planting

1. Defects due to materials or workmanship not in accordance with the Contract: Plants/ trees/ shrubs that have failed to thrive.
 - 1.1. Exclusions: Theft or malicious damage after completion.
 - 1.2. Rectification: Replace with equivalent plants/ trees/ shrubs.
2. Replacements: To match size of adjacent or nearby plants of same species or match original specification, whichever is the greater.
3. Timing of making good: During the next suitable planting season

730 Protective fencing To SINC Buffer

1. Fencing type: General pattern wire mesh fencing, as section Q40
2. Erection: On completion of planting.
3. Removal: After planting is well established

740 Cleanliness

1. Soil and arisings: Remove from hard surfaces and grassed areas.
2. General: Leave the works in a clean tidy condition at completion and after any maintenance operations.

750 Planting maintenance generally

1. Weed control: Maintain weed free area around each tree and shrub.
 - 1.1. Diameter (minimum): The larger of 1 m or the surface of original planting pit.
 - 1.2. Keep planting beds clear of weeds: By maintaining full thickness of mulch
2. Planted areas: Fork over beds as necessary to keep soil loose, with gentle cambers and no hollows. Take care not to reduce depth or effect of mulch.
3. Precautions: Ensure that trees and shrubs are not damaged by use of mowers, nylon filament rotary cutters and similar powered tools.
4. Firming up: Gently firm loosened soil around trees/ shrubs. Straighten leaning trees/ shrubs.
5. Trees: Spray crown when in leaf during warm weather.
 - 5.1. Timing: After dusk.
6. Tree accessories: Check condition of stakes, ties, guys, guards and irrigation and ventilation systems.
 - 6.1. Broken or missing items: Replace.
 - 6.2. Loose stakes: Re-firm in the ground or replace as necessary to provide support to the tree.
 - 6.3. Loose guys: Re-firm anchor points and adjust as necessary to provide support to the tree.
 - 6.4. Ties: Adjust to accommodate growth and prevent constriction or abrasion.
 - 6.5. Damage to bark: Cut back neatly with sharp knife. Prevent further damage.
 - 6.6. Frequency of checks: At each scheduled maintenance visit

7. **Watering:** As required for healthy establishment, depending on weather conditions

760 Planting maintenance – pruning

1. **General:** Prune to promote healthy growth and natural shape.
 - 1.1. **Dead, dying, diseased wood and suckers:** Remove.
 - 1.2. **Timing:** As appropriate to the species & in accordance with the agreed maintenance schedule
 - 1.3. **Trees:** Favour a single central leading shoot.
2. **Arisings:** Remove.

780 Maintenance instructions

1. **General:** Before end of the maintenance period, submit printed instructions recommending procedures to be established by the Employer for maintenance of the planting work for one full year: Provide a schedule of any ongoing maintenance problems experienced during the rectification period Provide details of any special procedures to be carried out.

790 Final mulching

1. **Timing:** At end of the maintenance period.
2. **Watering:** Ensure that soil is thoroughly moistened prior to remulching, applying water where necessary.
3. **Planting beds:** Remulch.
4. **Depth (minimum):** 75 mm
5. **Trees:** Remulch.
6. **Depth (minimum):** 100 mm

Ω End of Section

Q35

Landscape maintenance

Generally

105 Maintenance objectives

1. Location: All Planting Beds, hedges and tree planting
 - 1.1. Duration: Five years
2. Aims: Improved landscape visual amenity and ensure scheme establishes and matures
3. Results: Established and thriving landscape scheme

110 Notice

1. Give notice before
 - 1.1. Application of herbicide.
 - 1.2. Application of fertilizer.
 - 1.3. Watering.
 - 1.4. Each site maintenance visit.
2. Period of notice: Seven days

130 Reinstatement

1. Damage or disturbance to soil structure, planting, grass, fencing, hard landscaping, structures or buildings: Reinstatement to original condition.

155 Watering

1. Supply: No site supply available; submit proposals
2. Quantity: Wet full depth of topsoil
3. Application: Do not damage or loosen plants.
4. Compacted soil: Loosen or scoop out, to direct water to rootzone.
5. Frequency: As necessary for the continued thriving of all planting

160 Water restrictions

1. General: If water supply is, or is likely to be, restricted by emergency legislation, submit proposals for an alternative suitable source of water. Obtain instructions before proceeding.

170 Disposal of arisings

1. General: Unless specified otherwise, dispose of arisings as follows:
 - 1.1. Biodegradable arisings: Remove to recycling facility
 - 1.2. Grass cuttings: Remove to recycling facility
 - 1.3. Tree roots and stumps: Remove from site
 - 1.4. Shrub and tree prunings: Remove to recycling facility
 - 1.5. Litter and nonbiodegradable arisings: Remove from site

181 Mechanical equipment

1. General: Minimize.
2. Timing: Use of mechanical equipment allowed between the hours of 10:00 am and 4:00 pm only

190 Litter

1. **Extraneous rubbish not arising from the contract work:** Collect and remove from site.

195 Protection of existing grass

1. **General:** Protect areas affected by maintenance operations using boards/tarpaulins. Do not place excavated or imported materials directly on grass.

197 Cleanliness

1. **Soil and arisings:** Remove from hard surfaces.
2. **General:** Leave the works in a clean, tidy condition at completion and after any maintenance operations.

Grassed areas

210 Performance-based maintenance of grassed areas

1. **General:** Maintain turf in a manner appropriate to the intended use.
2. **Soil and grass**
 - 2.1. **Condition:** Maintain a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt.
 - 2.2. **Waterlogging and compaction:** Prevent.
 - 2.3. **Damage:** Repair trampling, abrasion or scalping.
3. **Ornamental lawns:** Maintain reasonably free from moss, excessive thatch, weeds, frost heave, worm casts and mole hills.
 - 3.1. **Edges:** Neat and well defined, in clean, straight lines or smooth-flowing curves.
4. **Litter and fallen leaves:** Remove regularly to maintain a neat appearance.

220 Grass cutting generally

1. **Before mowing:** Remove litter, rubbish and debris.
2. **Finish:** Neat and even, without surface rutting, compaction or damage to grass.
3. **Edges:** Leave neat and well defined. Neatly trim around obstructions.
4. **Adjoining hard areas:** Sweep clear and remove arisings.
5. **Drought or wet conditions:** Obtain instructions.

225 Tree stems

1. **Precautions:** Do not use mowing machinery closer than 100 mm to tree stems. Use nylon filament rotary cutters and other handheld mechanical tools carefully to avoid damage to bark. Do not allow nylon filament rotary cutters and other mechanical tools closer than 100 mm to the stem of any tree. Complete operations close to stems using hand tools.

240 Mowing strips

1. **Location:** To edge of wildflower grassland against hard landscape areas.
2. **Width (approximate):** 1000mm.
3. **Operations:** Maintain by mechanical mowing.

250 Leaf removal

1. **Operations:** Collect fallen leaves.
2. **Special requirements:** None
3. **Disposal:** Remove from site for recycling.

265 Mowing general areas

1. Grass height: 75 mm maximum
2. Arisings: Remove

272 Maintaining grassed areas with perennial wildflowers (Emorsgate EH1 Hedgerow Mixture or similar and approved).

1. Preparation: Before each cut remove litter and debris.
2. Height and frequency of cut in first growing season
 - 2.1. Time of first cut: Late summer once all species have set seed.
 - 2.2. Height of first cut: 40-60mm
 - 2.3. Frequency of subsequent cutting (minimum): Every six to eight weeks until autumn
 - 2.4. Height of growth permitted (maximum): 100 mm
3. Height and frequency of cut in second growing season
 - 3.1. Time of cut: Single cut in October
 - 3.2. Height of cut: 100 mm
4. Trimming: All edges.
 - 4.1. Arisings: Remove.
5. Watering: When instructed

Flower beds/ seasonal beddings

460 Beds of perennials or perennials and annuals

1. Gaps in planting: Refill by replanting.
2. Watering
 - 2.1. New plants: Before and after planting out.
 - 2.2. Ongoing: As necessary for the continued thriving of all planting.
3. Operations at end of growing season
 - 3.1. Trim: Older flowering stems of herbaceous perennials.
 - 3.2. Remove: Redundant plant supports, litter, debris and arisings.
 - 3.3. Cultivate: Fork over the soil, taking care not to cause undue disturbance to plants.
 - 3.4. Top dress: Apply Sanitized and stabilized compost top dressing.

Shrubs/ trees/ hedges

500 Establishment of new planting

1. Duration: Five full growing seasons from the date of planting
2. Weed control
 - 2.1. Method: Keep planting beds clear of weeds by Maintaining full thickness of mulch.
 - 2.2. Area: Maintain a weed-free area around each tree and shrub, minimum diameter the larger of 1 m or the surface of the original planting pit.
3. Soil condition: Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch.
4. Watering: As required for plants to thrive & When instructed

510 Tree stakes and ties

1. Inspection/ maintenance times: As scheduled and immediately after strong winds

2. Stakes

- 2.1. Replace loose, broken or decayed stakes to original specification.
- 2.2. If longer than half of clear tree stem height, cut to this height in spring. Retie to tree firmly but not tightly with a single tie.
3. **Ties:** Adjust, refix or replace loose or defective ties, allowing for growth and to prevent chafing.
 - 3.1. Where chafing has occurred, reposition or replace ties to prevent further chafing.
4. **Removal of stakes and ties:** Two years after planting
 - 4.1. Fill stake holes with lightly compacted soil.

520 Refirming of trees and shrubs

1. **Timing:** After strong winds, frost heave and other disturbances.
2. **Refirming:** Tread around the base until firmly bedded.
3. **Collars in soil at base of tree stems, created by tree movement:** Break up by fork, avoiding damage to roots. Backfill with topsoil and refirm.

537 Nesting wild birds

1. **Survey:** Before starting hedge or tree work during the period of February to August (inclusive), carry out a survey by a qualified ecologist and submit report
2. **Accidental disturbance:** Report immediately.

540 Pruning generally

1. **Pruning:** In accordance with good horticultural and arboricultural practice.
 - 1.1. **Removing branches:** Do not damage or tear the stem or bark.
 - 1.2. **Wounds:** Keep as small as possible and cut cleanly back to sound wood.
 - 1.3. **Cutting:** Make cuts above and sloping away from an outward-facing healthy bud, angled so that water will not collect on cut area.
 - 1.4. **Larger branches:** Prune neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.
2. **Appearance:** Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well-balanced natural appearance.
3. **Tools:** Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.
4. **Disease or infection:** Give notice if detected.
5. **Growth retardants, fungicide or pruning sealant:** Do not use unless instructed.

545 Pruning of excessive overhang

1. **Timing:** As instructed
2. **Operations:** Remove growth encroaching onto grassed areas, paths, roads, signs, sightlines and road lighting luminaires.

555 Pruning trees and shrubs

1. **Standard:** To BS 7370-4.
2. **Special requirements:** None

570 Formative pruning of young trees

1. **Standard:** Type and timing of pruning operations to suit the plant species.
2. **Time of year:** Do not prune during the late winter/ early spring sap flow period.
3. **Young trees up to 4 m high**

- 3.1. Crown prune by removing dead branches and reducing selected side branches by one third to preserve a well-balanced head and ensure the development of a single strong leader.
- 3.2. Remove duplicated branches and potentially weak or tight forks. In each case, cut back to live wood.
4. Whips or feathered trees: Do not prune.
5. Operatives: Approved specialist contractor

575 Pruning ornamental shrubs

1. General: Prune to encourage healthy and bushy growth and desirable ornamental features, e.g. flowers, fruit, autumn colour, stem colour.
2. Suckers: Remove by cutting back level with the source stem or root.

580 Pruning flowering species of shrubs and roses

1. Time of year
 - 1.1. Winter flowering shrubs: Spring.
 - 1.2. Shrubs flowering between March and July: Immediately after the flowering period.
 - 1.3. Shrubs flowering between July and October: Back to old wood in winter.
 - 1.4. Rose bushes: Early spring to encourage basal growths and a balanced, compact habit.

620 Removal of dead plant material

1. Operations: At the end of the growing season, check all shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems.

625 Climbing plants

1. Pruning: Remove excess growth, to ensure that signs, light fittings, doors and windows are kept clear at all times.
2. Insecure growth: Attach to supporting wires or structures using Stainless steel wire.
3. Supporting structures: Check and repair as necessary.

630 Dead and diseased plants

1. Removal: As soon as possible
2. Replacement: In the next suitable planting season

635 Reinstatement of shrub/ herbaceous areas

1. Dead and damaged plants: Remove.
2. Mulch/ matting materials
 - 2.1. Carefully move to one side and dig over the soil, leaving it fit for replanting.
3. Do not disturb roots of adjacent plants.
4. Replacement plants
 - 4.1. Use pits and plants: To original specification or to match the size of adjacent or nearby plants of the same species, whichever is the greater.
 - 4.2. Additional requirements: Submit details and cost of plants before ordering
5. Dressing: Slow-release fertilizer:
 - 5.1. Type: Contractor's choice
 - 5.2. Application rate: As manufacturer's recommendations

645 Weed control generally

1. **Weed tolerance:** At all times, weed cover less than 5% and no weed to exceed 100 mm high
2. **Adjacent plants, trees and grass:** Do not damage.

650 Hand-weeding

1. **General:** Remove weeds entirely, including roots.
2. **Disturbance:** Remove the minimum quantity of soil, and disturb plants, bulbs and mulched surfaces as little as possible.
3. **Completion:** Rake area to a neat, clean condition.
4. **Mulch:** Reinstate to original depth.

675 Digging over

1. **General:** Dig over beds. Do not damage existing plants, bulbs and roots.
 - 1.1. **Depth of dig (minimum):** 75 mm

680 Soil aeration

1. **Compacted soil surfaces**
 - 1.1. **Prick up:** To aerate the soil of root areas and break surface crust.
 - 1.2. **Size of lumps:** Reduce to crumb and level off.
 - 1.3. **Damage:** Do not damage plants and their roots.

690 Maintenance of loose mulch

1. **Thickness (minimum):** 50 mm
 - 1.1. **Top up:** Twice per year
2. **Mulch spill on adjacent areas:** Remove weeds and rubbish and return to planted area.
3. **Weeding:** Remove weeds growing on or in mulch by Hand-weeding.

705 Winter leaf removal

1. **Operations:** Take down temporary leaf fences. Collect accumulations of drifted leaves from the vicinity and from planting beds.
2. **Arisings:** Remove

Green walls - Not Used

Tree work

810 Tree work generally

1. **Identification:** Before starting work agree which trees, shrubs and hedges are to be removed or pruned.
2. **Protection:** Avoid damage to neighbouring trees, plants and property
3. **Standard:** To BS 3998.
4. **Removing branches:** Cut vertical branches similarly, with no more slope on the cut surface than is necessary to shed rainwater.
5. **Appearance:** Leave trees with a well-balanced natural appearance.
6. **Chain saw work:** Operatives must hold a certificate of competence.
7. **Tree work:** To be carried out by an approved member of the Arboricultural Association.

815 Additional work

1. Defective, diseased, unsafe or weak parts of trees additional to those scheduled for attention: Give notice if detected.

820 Prevention of wound bleeding

1. Standard: To BS 3998.

825 Prevention of disease transmission

1. Standard: To BS 3998.

835 Cutting and pruning generally

1. Tools: Appropriate, well maintained and sharp.
2. Final pruning cuts
 - 2.1. Chainsaws: Do not use on branches of less than 50 mm diameter.
 - 2.2. Hand saws: Form a smooth cut surface.
 - 2.3. Anvil type secateurs: Do not use.
3. Removing branches: Do not damage or tear the stem.
4. Wounds: Keep as small as possible, cut cleanly back to sound wood leaving a smooth surface, and angled so that water will not collect on the cut area.
5. Cutting: Cut at a fork or at the main stem to avoid stumps wherever possible.
6. Large branches: Remove only if unavoidable
 - 6.1. Remove in small sections and lower to ground with ropes and slings.
7. Dead branches and stubs: When removing, do not cut into live wood.
8. Unsafe branches: Remove epicormic shoots and potentially weak forks that could fail in adverse weather conditions.
9. Disease or fungus: Give notice if detected. Do not apply fungicide or sealant unless instructed.

860 Removing trees, shrubs and hedges

1. Standard: To BS 3998.
2. Existing services: Check for below and above ground services. Give notice if they may be affected.
3. Shrubs and smaller trees: Cut down and grub up roots.
4. Tree stumps
 - 4.1. Treatment: Remove mechanically to a minimum depth of 300 mm below ground level
 - 4.2. Removal by winching: Give notice. Do not use other trees as supports or anchors.
5. Protection: Avoid damage to neighbouring trees, plants and property
6. Work near retained trees: Where tree canopies overlap and in confined spaces generally, take down trees carefully in small sections to avoid damage to adjacent trees that are to be retained.
7. Filling holes
 - 7.1. Material: Use as-dug material and/ or imported soil as required.
 - 7.2. Finishing: Consolidate and grade to marry in with surrounding ground level.

865 Bark damage

1. Wounds
 - 1.1. Do not attempt to stop sap bleeding.
 - 1.2. Bark: Remove ragged edges using a sharp knife.
 - 1.3. Wood: Remove splintered wood from deep wounds.

- 1.4. **Size:** Keep wounds as small as possible.
2. **Liquid or flux oozing from apparently healthy bark:** Give notice.

870 Cavities in trees

1. **Investigation:** Remove rubbish and rotten wood. Probe the cavity to find the extent of any decay, and give notice.
2. **Water-filled cavities:** Do not drain.
3. **Sound wood inside cavities:** Do not remove.
4. **Cavity openings:** Do not cover

Water areas - Not Used

Hard landscape areas/ fencing

920 Fencing

1. **Fences:** Inspect and repair to maintain protection against Rabbit / Deer.

Ω End of Section

Q40 Fencing

Fencing systems

140 General pattern wire mesh fencing to provide rabbit proof fencing to SINC Buffer Planting

1. Manufacturer: Submit proposals
 - 1.1. Product reference: Submit proposals
2. Standard: To BS 1722-2.
3. Maximum centres of posts
 - 3.1. Straining posts: 150 m in straight runs and at all ends, corners, changes of direction and acute variations in level.

320 Cleft chestnut pale fencing to Provide temporary protection to seeded areas

1. Manufacturer: Contractor's choice
 - 1.1. Product reference: Submit proposals
2. Height: 900 mm
3. Posts and struts:
 - 3.1. Treatment:
4. Centres of posts (maximum)

Gates, posts and stiles - Not Used

Accessories

625 Additional mesh/ fabric

1. Description: RABBIT NETTING

Execution

710 Installation generally

1. Set out and erect
 - 1.1. Alignment: Straight lines or smoothly flowing curves.
 - 1.2. Tops of posts: Following profile of the ground.
 - 1.3. Setting posts: Rigid, plumb and to specified depth, or greater where necessary to ensure adequate support.
 - 1.4. Fixings: All components securely fixed.

740 Setting posts in earth

1. Holes: Excavated neatly, with vertical sides and as small as practicable to allow refilling.
2. Filling: Position posts/ struts and replace excavated material, well rammed as filling proceeds.

750 Driven posts

1. Damage to heads: Minimize.
 - 1.1. Repair: Neatly finish post tops after installation.

760 Nailed wood rails

1. Length (minimum): Two bays, with joints in adjacent rails staggered.
2. Fixing: Nail each length of rail to each post with two 100 mm galvanized nails.
3. Rails with split ends: Replace.

770 Site cutting of wood

1. General: Kept to a minimum.
2. Below or near ground level: Cutting prohibited.
3. Treatment of surfaces exposed by minor cutting and drilling: Two flood coats of solution recommended for the purpose by main treatment solution manufacturer.

Completion

910 Cleaning

1. General: Leave the works in a clean, tidy condition.
2. Surfaces: Clean immediately before handover.

920 Fixings

1. All components: Tighten.
 - 1.1. Timing: Before handover.

Ω End of Section



Specification created using NBS Chorus