

2584 Harefield Hospital Healing & Transplant Garden Soft Landscape Specification

For Planning

06 May 2020

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Q28

Topsoil and soil ameliorants

Q28 Topsoil and soil ameliorants

To be read with Preliminaries/ General conditions.

SYSTEM OUTLINE**135 PLANTING BED SOIL SYSTEM FOR PLANTING BEDS WHERE NECESSARY**

- Composition:
 - Topsoil: British Standard Topsoil e.g. British Sugar Topsoil Hort Loam or similar approved
 - Ameliorants: as per spec.
 - Accessories: as per spec.

PRODUCTS**300 PREPARATION MATERIALS GENERALLY**

- Purity: Free of pests and disease.
- 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.
- Contamination: Do not use topsoil contaminated with subsoil, rubbish or other materials that are:
 - Corrosive, explosive or flammable.
 - Hazardous to human or animal life.
 - Detrimental to healthy plant growth.
- Subsoil: In areas to receive topsoil or planting media, do not use subsoil contaminated with the above materials.
- Objectionable odour: None.
- 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

- Materials: Products containing peat.

330 IMPORTED MANUFACTURED TOPSOIL/ GROWING MEDIUM TO PLANTING BEDS AND LAWN AREAS WHERE LEVELS REQUIRE LIGHT GRADING AND SOIL IMPROVEMENT

- Type: HortLoam is a BS3882:2015 compliant sandy loam, planting topsoil or similar approved performance..
 - Soil textural class: Sandy loam.
- Source: Contractor's choice.
- Manufacturer: British Sugar Topsoil or similar approved.
 - Product reference: HortLoam.

- 360 SANITIZED AND STABILIZED COMPOSTED MATERIALS CERTIFIED TO PAS 100 FOR ALL PLANTING BEDS
- Standard: In accordance with PAS 100.
 - Source: Contractor's choice.
 - Product reference: SINCLAIR TREE START or similar approved.
 - Horticultural parameters:
 - pH (1:5 water extract): 7.0-8.7.
 - Electrical conductivity (maximum, 1:5 water extract): 200 mS/m.
 - Moisture content (m/m of fresh weight): 35-55%.
 - Organic matter content (minimum): 25%.
 - Grading (air dried samples): 99% passing 25 mm screen, and 90% passing: 10 mm screen mesh aperture.
 - Carbon:Nitrogen ratio (maximum): 20:1.
 - Texture: Friable.
 - Objectionable odour: None.
 - Compost Certification Scheme certification: Not required.
 - Declaration of analysis: Submit.
 - Additional analyses: Not required.
 - Samples: Supply 5 kg sample before ordering.
- 380 MYCORRHIZAL INOCULANT TO TREE AND HEDGES
- Manufacturer: Plant Health Care.
 - Product reference: Tree & Shrub Saver.

EXECUTION

- 625 SAMPLE LOADS FOR IMPORTED TOPSOIL
- Deliver to site a sample load: of 5 kg.
 - Give notice: Allow inspection before making further deliveries to site. Retain for comparison with subsequent loads.
 - Notice period: 7 days.
- 630 DOCUMENTATION FOR IMPORTED TOPSOIL TO ALL SOFT LANDSCAPE AREAS
- Timing: Submit at handover.
 - Contents:
 - Full description of all soil components.
 - Record of source for all soil components.
 - Record drawings showing the location and depth of all soils by type and grade.
 - Declaration of analysis: in accordance with BS 3882, clause 6 and Table 1.
 - Number of copies: Three.
- 635 DOCUMENTATION FOR COMPOST AND COMPOSTED MATERIALS FOR COMPOST
- Timing: Submit at handover.
 - Contents:
 - Full description of all compost components.
 - Record of source for all compost components.
 - Analyst's report for each test carried out.
 - Declaration of compliance: in accordance with PAS 100 and BSI PD CR 13456.
 - Quality Compost Protocol certification: Not required.
 - Number of copies: Three.

- 650 NOTICE
- Give notice before:
 - Setting out.
 - Spreading topsoil.
 - Applying herbicide.
 - Applying fertilizer.
 - Visiting site during maintenance period.
 - Period of notice: 1 week.
- 655 MECHANICAL TOOLS
- Restrictions: Do not use within 100 mm of tree and plant stems.
- 660 GRADING SUBSOIL FOR ALL AREAS - ENSURING MINIMAL DISTURBANCE IN TREE RPAs AND IN ACCORDANCE WITH ARBORICULTURAL REPORT
- Standard: In accordance with BS 8601.
 - General: Grade to smooth flowing contours to achieve specified finished levels of topsoil.
 - Areas of thicker topsoil: Excavate locally.
 - Avoid compaction.
 - Excess subsoil: Remove.
- 665 SUBSOIL SURFACE PREPARATION FOR ALL AREAS
- Standard: In accordance with BS 3882.
 - General: Excavate and/ or place fill to required profiles and levels, as section D20.
 - Loosening:
 - When ground conditions are sufficiently dry to allow breaking up of soils, loosen thoroughly to specified depth:
 - Light and noncohesive subsoils: 300 mm.
 - Stiff clay and cohesive subsoils: 450 mm.
 - Rock and chalk subgrades: Lightly scarify to promote free drainage.
 - Wet conditions: Do not loosen subsoils.
 - Stones: Immediately before spreading topsoil, remove stones larger than 30mm.
 - Remove from site: Arisings, contaminants and debris and Builders rubble.
- 670 INSPECTING FORMATIONS
- Give notice: Before spreading topsoil for lawn areas.
 - Notice period: 7 days.
- 675 PREPARATION OF UNDISTURBED TOPSOIL
- Standard: In accordance with BS 4428.
 - Grading and cultivation: Category C.
 - Hard ground: Break up thoroughly.
 - Clearing: Remove visible roots and large stones with a diameter greater than 50 mm.
 - Areas covered with turf or thick sward: Plough or dig over to full depth of topsoil.
 - Fallow period (minimum): One month.
 - Weed control: At appropriate times treat with a suitable translocated nonresidual herbicide.
- 700 GRADING OF TOPSOIL
- Topsoil condition: Reasonably dry and workable.
 - Contours: Smooth and flowing, with falls for adequate drainage.
 - Hollows and ridges: Not permitted.
 - Give notice: If required levels cannot be achieved by movement of existing soil.

705 HANDLING TOPSOIL

- Standard: In accordance with BS 3882.
- Aggressive weeds: Give notice and obtain instructions before moving topsoil.
- Plant: Select and use plant to minimize disturbance, trafficking and compaction.
- Contamination: Do not mix topsoil with:
 - Subsoil, stone, hardcore, rubbish or material from demolition work.
 - Other grades of topsoil.
- Multiple handling: Keep to a minimum. Use or stockpile topsoil immediately after stripping.
- Wet conditions: Handle topsoil in the driest condition possible. Do not handle during or after heavy rainfall or when it is wetter than the plastic limit less 3% to BS 1377-2.

710 SPREADING TOPSOIL ON GENERALLY

- Standard: In accordance with BS 3882.
- Temporary roads/ surfacing: Remove before spreading topsoil.
- Layers:
 - Depth (maximum): 150 mm.
 - Gently firm each layer before spreading the next.
- Depth after firming and settlement: 150 mm.
- Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

715 LOOSE TIPPING OF TOPSOIL

- Standard: In accordance with BS 3882.
- 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.

720 FINISHED LEVELS OF TOPSOIL AFTER SETTLEMENT

- In relation to adjoining paving, kerbs or hard surfaces: 25 mm below for planting beds and flush or just proud for topsoil to lawn areas.
- In relation to dpc of adjoining buildings: Not less than 150 mm below.
- In relation to adjacent grass areas: 25 mm below.
- Seeded areas: Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.
- Sportsfields: To even levels and within the following permitted deviations:
 - From levels or gradients shown on drawings: ± 75 mm.
 - From line between boning rods 30 m apart: ± 25 mm.
- Within root spread of existing trees and shrubs to be retained: Do not dig or cultivate.
- Adjoining soil areas: Marry in.
- Thickness of turf or mulch: Included.

810 APPLYING COMPOST TO AMELIORATE NITROGEN DEFICIENCY

- Application rate for trees and shrubs: $4.9 \text{ m}^3/100 \text{ m}^2$.
 - Timing: Apply prior to cultivation.
- Application rate for grass: $2.5 \text{ m}^3/100 \text{ m}^2$.
 - Timing: Apply prior to cultivation.
- Application rate for planters: 50 mm thick layer.
 - Timing: Apply prior to cultivation.
- Other requirements: None.

820 APPLYING GENERAL FERTILIZER TO PLANTING BEDS

- Application: Spread evenly, carefully incorporating below mulch materials.
 - Timing: Immediately before cultivation.
 - Application rate: as per manufacturer guidance.
 - Other requirements: none.

840 APPLYING MYCORRHIZAL INOCULANT TO TREE & HEDGE PLANTING.

- Depth: To manufacturer's/ supplier's recommendations.

845 APPLYING LOOSE MULCH FOR PLANTING BEDS

- Timing: following planting and irrigation installation and final grading of beds.
- Preparation: Clear all weeds.
- Coverage of mulch (minimum):
 - Planting beds (depth): 50-60 mm depth.
 - Trees: In a circular area of 500 mm radius minimum measured from the tree stem or as per B&W drawings.
 - Container planting: 50 mm depth.
- Finished level of mulch: 30 mm below adjacent grassed or paved areas.

Q30

Seeding/turfing

Q30 Seeding/turfing

To be read with Preliminaries/General conditions.

GENERAL INFORMATION/REQUIREMENTS**115 SEEDED AND TURFED AREAS**

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

117 IMPORTANT NOTE

- Read in conjunction with Bowles & Wyer Landscape Maintenance Spe Q35

120 CLIMATIC CONDITIONS

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

145 WATERING

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

150 WATER RESTRICTIONS

- 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

- Give notice before:
 - Setting out.
 - Applying herbicide.
 - Applying fertilizer.
 - Preparing seed bed.
 - Seeding or turfing.
 - Visiting site during maintenance period.
- Period of notice: 1 week.

170 SETTING OUT

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

PREPARATION**210 HERBICIDE FOR ALL GRASSED AREAS**

- Type: Suitable for suppressing perennial weeds.
- Timing: Allow fallow period before cultivation.
 - Duration: 1 week.

295 FINAL CULTIVATION

Timing: After grading and fertilizing

Seed bed: reduce to fine, firm tilth with good crumb structure

- Depth: 25mm
- Surface prep: rake to a true, even surface, friable and lightly firmed but not over compacted
- Remove surface stones/earth clods exceeding 30mm for general lawn areas and 10mm for fine lawn areas.
- Adjacent levels extend and cultivate into existing adjacent grassed areas sufficient to ensure full marrying in of levels

SEEDING**310 GRASS SEED FOR ALL GRASSED AREAS**

- Mixture: 35% Chewings fescue, 35% Slender red fescue, 20% Smooth stalked meadow grass, 10% Brown top bent or similar approved.
- Application rate: To manufactures guidelines.

319 QUALITY OF SEED FOR ALL GRASSED AREAS

- Freshness: Produced for the current growing season.
- Certification: Blue label certified varieties.
 - Standard: EC purity and germination regulations.
 - Official Seed Testing Station certificate of germination, purity and composition: Submit when requested.
- Samples of mixtures: Submit when requested.

330 SOWING

- General: Establish good seed contact with the root zone.
- Method: To suit soil type, proposed usage, location and weather conditions during and after sowing.
 - Distribution: 2 equal sowings at right angles to each other.

335 GRASS SOWING SEASON

- Grass seed generally: April to October weather conditions allowing.

TURFING**400 CULTIVATED TURF TO EDGE PATHS & KEY AREAS**

- Supplier: Lindum Turf.
 - Product reference: LT7 Festival.
- Properties of soil used for turf production: Well drained sandy loam.

402 CULTIVATED TURF FOR GENERAL LAWN AREAS

- Supplier: Lindum Turf.
 - Product reference: LT7 Festival turf.
- Properties of soil used for turf production: Well drained sandy loam.

420 DELIVERY AND STORAGE

- Timing: Lay turf with minimum possible delay after lifting. If delay occurs, lay turf out on topsoil and keep moist.
- Frosty weather or waterlogged ground: Do not lift turf.
- Delivery: Arrange to avoid need for excessive stacking.
- Stacking height (maximum): 1 m.
- Dried out or deteriorated turf: Do not use.
- Certification:
 - Standard: To BS 3969.
 - Declaration: Species mix, including percentage of specified species.

423 INSPECTION OF TURF FOR ALL GRASSED AREAS

- Sampling method: To BS 3969.
- Give notice: Before lifting turf.
 - Period of notice: 1 week.

430 TURFING GENERALLY

- Time of year: Autumn or early winter.
- Timing of laying:
 - Spring and summer: Within 18 hours of delivery.
 - Autumn and winter: Within 24 hours of delivery.
- Weather conditions: Do not lay turf when persistent cold or drying winds are likely to occur or soil is frost bound, waterlogged or excessively dry.
- Working access: Planks laid on previously laid turf. Do not walk on prepared bed or newly laid turf.
- Jointing: Laid with broken joints, well butted up. Do not stretch turf.
- Edges: Whole turfs, trimmed to a true line.
- Adjusting levels: Remove high spots and fill hollows with fine soil.
- Consolidating: Lightly and evenly firm as laying proceeds to ensure full contact with substrate. Do not use rollers.
- Dressing, brushed well in to completely fill all joints: sandy loam.
- Watering: Thoroughly water completed turf immediately after laying. Check that water has penetrated into the soil below.

450 TRIMMING TURF

- Newly planted tree pits: Neatly cut away around individual trees.
 - Diameter: 500-800 mm.
 - Tree pit surface: Leave exposed.

PROTECTING/CUTTING**510 PROTECTIVE FENCING**

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

530 FIRST CUT OF GRASSED AREAS

- Timing: When grass is reasonably dry.
 - Height of initial growth: 65mm.
- Preparation:
 - Debris and litter: Remove.
 - Stones and earth clods larger than 25 mm in any dimension: Remove
- Height of first cut: 40 mm.
- Mower type: Rotary.
- Arisings: Remove from site.

550 AREAS NOT TO BE CUT

- Do not cut:
any areas where bulbs have been planted - refer to planting plans for details, only cut after suitable period following the end of flowering and when they have died back.

590 CLEANLINESS

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

MAINTENANCE**610 FAILURES OF SEEDING/TURFING**

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

620 MAINTAINING LAWNS

- Duration: Carry out the following operations from completion of seeding/ turfing until: the end of the rectification period.
- Maximum height of growth at any time: 35 mm.
- Preparation: Before each cut remove all litter and debris.
- Cutting: As and when necessary to a height of 25 mm.
 - Arisings: Remove.
- Bulb planting areas: Do not cut until bulb foliage has died down.
- Trimming: All edges.
 - Arisings: Remove.
- Weed control: Substantially free of broad leaved weeds.
 - Method: Application of a suitable selective herbicide.
- Stones brought to the surface: Remove regularly.
 - Size: Exceeding 25 mm in any dimension.
- Areas of settlement: Make good.
- Watering: by automatic irrigation system.

655 MAINTENANCE FERTILIZER FOR LAWNS

Duration: carry out following operations from completion of turfing until the end of the rectification period

March application:

-Manufacturer: Scots

-Product ref: Greenmaster spring and summer 14:5:10

Sept application

- manufacturer: Scots

- product ref: greenmaster autumn 6:5:10

- Application rate: 35g/m2

Q31

External planting

Q31 External planting

To be read with Preliminaries/General conditions.

GENERAL INFORMATION/ REQUIREMENTS**109 IMPORTANT NOTE**

- Read in conjunction with Bowles & Wyer Q35 Landscape Maintenance spec

112 SITE CLEARANCE GENERALLY

- General: Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil.
- Stones: Remove those with any dimension exceeding 50 mm.
- Contamination: Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
- Vegetation: Clear scrub to ground level by flail mowing and remove arisings; retain and protect trees indicated on drawings.
- Large roots: Grub up and dispose of without undue disturbance of soil and adjacent areas.
- Additional requirements: refer to PDP information.

118 SOIL CONDITIONS

- Soil for cultivating and planting: Moist, friable and (except in aquatic/ marginal planting) not waterlogged.
- 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

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

125 TIMES OF YEAR FOR PLANTING

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

130 MECHANICAL TOOLS

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

145 WATERING

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

150 WATER RESTRICTIONS

- 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

- Give notice before:
 - Setting out.
 - Applying herbicide.
 - Applying fertilizer.
 - Delivery of plants/ trees.
 - Planting shrubs.
 - Planting trees into previously dug pits.
 - Watering.
 - Visiting site during maintenance period.
- Period of notice: One week.

200 PLANTS/ TREES - GENERAL

- Condition: Materially undamaged, sturdy, healthy and vigorous.
- Appearance: Of good shape and without elongated shoots.
- Hardiness: Grown in a suitable environment and hardened off.
- Health: Free from pests, diseases, discoloration, weeds and physiological disorders.
- Budded or grafted plants: Bottom worked.
- Root system and condition: Balanced with branch system.
 - Standard: The National Plant Specification.
- Species: True to name.
- Origin/ Provenance: As plant schedule.
Definition: Origin and Provenance have the meaning given in the National Plant Specification.

215 PLANTS/ TREES - SPECIFICATION CRITERIA

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

225 BULBS/ CORMS/ TUBERS

- Condition: Firm, entire, not dried out or shrivelled.
- Health: Free from pests, diseases and fungus.
- Handling: Remove from packaging immediately.
- Storage: Permitted only when necessary.
 - Location: Well ventilated, dark, covered, rodent proof container, away from exhausts and fruit.
 - Duration: Minimum period.
 - Temperature: 18-21°C.

235 CONTAINER GROWN PLANTS/ TREES

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

245 LABELLING AND INFORMATION

- 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:
 - Full botanical name.
 - Total number.
 - Number of bundles.
 - Part bundles.
 - Supplier's name.
 - Employer's name and project reference.
 - Plant specification, in accordance with scheduled National Plant Specification categories.
- Additional information: Submit on request: Country of origin and Impact of pest/ disease.

255 PLANTS/ TREES RESERVED AT SUPPLIER'S PREMISES

- Types/ Species: as per plant schedule.
- Predelivery inspection: Give notice.
- Labelling: Identify inspected plants/ trees as reserved for use on this project.

260 PLANT/ TREE SUBSTITUTION

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

265 PLANT HANDLING, STORAGE TRANSPORT AND PLANTING

- Standard: To CPSE 'Handling and establishing landscape plants'.
- Frost: Protect plants from frost.
- Handling: Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
- Plant packaging: fit for purpose.
- Packaging of bulk quantities: fit for purpose.
- Planting: Upright or well balanced with best side to front.

280 TREATMENT OF TREE WOUNDS

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

290 SURPLUS MATERIAL

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

PLANT CONTAINERS**292A RAISED PLANTING BED - HEALING GARDEN**

- Manufacturer: Streetlife Furniture NL.
 - Product reference: Corten Steel Tree Island with integrated timber bench - organic shaped planter.
- Material: Corten Steel and timber.
- Dimensions/ Shape: 18.5m circumference and 12.5m L.
- Lining: Not required.
- Accessories: Base fixings and bench supports.

PREPARATION OF PLANTING BEDS/ PLANTING MATERIALS

- 305 WEED CONTROL for invasive and non invasive weeds
- Locations: site wide.
 - General: Prevent weeds from seeding and perennial weeds from becoming established, by hand weeding.

PLANTING SHRUBS/ HERBACEOUS PLANTS/ BULBS

- 400A PLANTING LAYOUTS
- Refer to Bowles & Wyer planting plan 16 series 01A & 02A drawings for full layout information and to Bowles & Wyer plant schedule for full quantities, sizes and information on plants.
- 405 SHRUB PLANTING PITS
- Timing: Excavate 1-2 days (maximum) before planting.
 - Sizes: 150 mm wider than roots when fully spread and 200 mm deep.
 - Pit bottom improvement shrub and planting backfilling material.
- 445 PLANTING BULBS/ CORMS/ TUBERS
- Depth: Top of bulb/ corm/ tuber at a depth of approximately twice its height, base in contact with bottom of hole.
 - Backfilling: Finely broken soil. Lightly firm to existing ground level.
 - Naturalized planting in existing grassed areas:
 - Scattering: Random. Plant bulbs/ corms/ tubers where they fall.
 - Planting: Neatly remove a plug of turf and replace after planting.
- 470 FORMAL HEDGES
- Shrubs for hedges: Consistent in species, cultivar and clone to ensure a uniform hedge.
 - Planting: In trenches large enough to take full spread of roots. Set out plants evenly.
- 480 AFTER PLANTING
- Watering: Immediately after planting, thoroughly and without damaging or displacing plants or soil.
 - 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.
 - Top dressing: Not required.
 - Depth: n/a.
- 482 SHRUB, HERBACEOUS AND BULB BACKFILLING MATERIAL FOR FLOWERING SHRUB PITS
- Composition: previously prepared mixture of topsoil excavated from pit and additional topsoil as required
 - Ameliorant/Conditioner: sanitized and stabilized compost applied to manufacturer guidelines
 - Fertilizer: slow release applied to manufacturer guidelines
- 485 BARK MULCH TO PLANTING BEDS
- Material: Melcourt fine ornamental bark mulch or similar approved
 - Purity: free from pests and diseases, fungus and weeds
 - Recycled content: as per product listing
 - Preparation: clear all weeds, ensure ground is even and irrigation pipework is laid flat and pinned down as required.
 - Coverage: 50-60mm deep
 - Finished level of mulch: 25-30mm below adjacent lawn, paving or wall coping levels

PLANTING TREES**505 TREE PITS**

- Sizes: 75 mm deeper than root system and wide enough to accommodate roots when fully spread. Pits within tree RPAs to be carefully hand dug avoiding tree roots in accordance with Arboricultural consultant advice.
- Sloping ground: Maintain horizontal bases and vertical sides with no less than minimum depth throughout.
- Excavated material: Separate topsoil and subsoil material and stockpile for backfilling.
- Pit bottoms: Excavate with slightly raised centre: Break up base to a depth of 200 mm and install underground deadman anchors to support tree rootballs.
 - Treatment: Soil ameliorant worked into pit bottoms.
- Pit sides: Scarify.
- Backfilling material: Topsoil, as section Q28.

507 TREE PIT ACCESSORIES

- All large trees generally to be supported by underground anchor rootball guying system
- Supplier:

Platapus
Kingsfield Business Centre
Philanthropic Road
Redhill
Surrey
RH1 4DP
England

T: +44 (0) 1737 762300

F: +44 (0) 1737 773395

E: info@platapus-anchors.com

568 TREE PROTECTION TO EXISTING TREES

- Refer to tree protection plans and measures by arboricultural consultant.

PROTECTING/ MAINTAINING/ MAKING GOOD DEFECTS**710 MAINTENANCE**

- Duration: Carry out the operations in the following clauses from completion of planting until the end of the rectification period.
- Frequency of maintenance visits: In accordance with the agreed maintenance schedule - see B&W Maintenance Spec Q35.

720 FAILURES OF PLANTING

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

740 CLEANLINESS

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

750 PLANTING MAINTENANCE GENERALLY

- Weed control: Maintain weed free area around each tree and shrub.
 - Diameter (minimum): The larger of 1 m or the surface of original planting pit.
 - Keep planting beds clear of weeds: By maintaining full thickness of mulch and hand weeding.
- 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.
- Precautions: Ensure that trees and shrubs are not damaged by use of mowers, nylon filament rotary cutters and similar powered tools.
- Firming up: Gently firm loosened soil around trees/ shrubs. Straighten leaning trees/ shrubs.
- Trees: Spray crown when in leaf during warm weather.
 - Timing: After dusk.
- Tree accessories: Check condition of stakes, ties, guys, guards and irrigation and ventilation systems.
 - Broken or missing items: Replace.
 - Loose stakes: Re-firm in the ground or replace as necessary to provide support to the tree.
 - Loose guys: Re-firm anchor points and adjust as necessary to provide support to the tree.
 - Ties: Adjust to accommodate growth and prevent constriction or abrasion.
 - Damage to bark: Cut back neatly with sharp knife. Prevent further damage.
 - Frequency of checks: At each scheduled maintenance visit.
- Watering: As required for healthy establishment, depending on weather conditions where required in addition to automated irrigation system specified by Waterwise.

760 PLANTING MAINTENANCE - PRUNING

- General: Prune to promote healthy growth and natural shape.
 - Dead, dying, diseased wood and suckers: Remove.
 - Timing: In accordance with the agreed maintenance schedule.
 - Trees: Favour a single central leading shoot.
- Arisings: Remove.

785 MAINTENANCE INSTRUCTIONS

- Bowles & Wyer maintenance specification Q35 is to be followed and it is recommended the same company plants and maintains the plants to create a clear liability envelope for replacements.
- Suggested maintenance period following practical completion: 2 years by the soft landscape contractor to allow for proper establishment. 5 Years maintenance overall regardless of contractor.
- Before end of the agreed maintenance period, submit printed instructions recommending procedures to be established by the employer for maintenance of the planting. Provide a schedule of any ongoing problems experienced during the rectification period and recommended alterations.

790 FINAL MULCHING

- Timing: At end of the maintenance period.
- Watering: Ensure that soil is thoroughly moistened prior to remulching, applying water where necessary.
- Planting beds: Remulch.
Depth (minimum): 50 mm.
- Trees: Remulch.
Depth (minimum): 50 mm.