P4PBT - SPEC AND DRAWING PACKAGE TO DISCHARGED PLANNING CONDITION 18 -GREEN ROOFS.

STW 04/11/2019

Project 172 UCLH PROTON BEAM THERAPY CENTRE

Soft Landscape Specification

172-DOC-003

22 March 2018



172-UCLH Proton Beam Therapy Centre

FOR PLANNING 22 March 2018

This document includes:

Code	Section	Revision	Dated
Q28	Topsoil and soil ameliorants	-	22 Mar 2018
Q31	External planting	-	22 Mar 2018
Q35	Landscape maintenance	-	22 Mar 2018

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Paving/Planting/Fencing/Site furniture

Section Revision History

No.	Purpose	
-	FOR PLANNING	22nd Mar 2018

Clauses amended in Revision -

This is the first revision stamp for this section. For all future revision stamps, details of all clauses amended at that revision will be included here.

Q28 Topsoil and soil ameliorants

To be read with Preliminaries/ General conditions.

SYSTEM OUTLINE

135 PLANTING BED SOIL SYSTEM TO RAISED PLANTERS

- · Composition:
 - Topsoil: Imported topsoil to BS 3882.
 - Ameliorants: Sanitized and stabilized composted materials.
 - Accessories: None.

155 MULCHING AND TOP DRESSING SYSTEM TO RAISED PLANTERS

- Composition:
 - Material: Composted Ornamental Bark Mulch.

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: Peat and Products containing peat.

315 IMPORTED TOPSOIL TO BS 3882 TO RAISED PLANTING BEDS

- Quantity: Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.
- Standard: To BS 3882.
- · Classification: Multipurpose.
 - Soil textural class to BS 3882, Figure 1: Sandy clay loam or Sandy loam.
- · Source: Contractor's choice.
 - Product reference: Contractor's choice.

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345 AGGREGATES TO BASE OF RAISED PLANTERS FOR DRAINAGE

- · Source: Contractor's choice.
 - Product reference: Contractor's choice.
- · Reference, description and grading:
 - Sand: Not required.
 - Grit: 10 mm single size pea shingle.
 - Crushed materials: Not required.
 - Other aggregates or particles: none.
- · Recycled content: None permitted.

360 SANITIZED AND STABILIZED COMPOSTED MATERIALS CERTIFIED TO PAS 100 TO RAISED PLANTING BEDS

- · Standard: In accordance with PAS 100.
- · Source: Contractor's choice.
 - Product reference: Contractor's choice.
- · 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: 5 mm screen mesh aperture.
 - Carbon: Nitrogen ratio (maximum): 20:1.
- · Texture: Friable.
- · Objectionable odour: None.
- · Compost Certification Scheme certification: Required.
- · Declaration of analysis: Submit.
- Additional analyses: Not required.
- Samples: Not required.

EXECUTION

630 DOCUMENTATION FOR IMPORTED TOPSOIL TO RAISED PLANTING BEDS

- · 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: Two.

635 DOCUMENTATION FOR COMPOST AND COMPOSTED MATERIALS TO RAISED PLANTING BEDS

- 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: Required.
- · Number of copies: Two.

685 SURPLUS MATERIALS TO BE REMOVED

- · Topsoil removal from site: Topsoil remaining after completion of all landscaping work.
- Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings and other arisings: Remove.

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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 ALL PLANTING BEDS

- 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: 75 mm below top of planter wall to allow for application of 50mm mulch.
- Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

805 APPLYING SOIL AMELIORANT TO RAISED PLANTING BEDS

- · Type: Compost to PAS 100.
- · Locations: To all raised planters.
- Fully incorporate into topsoil to a depth of 100mm.
- · Application: Spread evenly.
 - Timing: Apply prior to cultivation.
 - Rate: 50mm layer applied to top of soil.
- Timing: Prior to cultivation.
- · Other requirements: None.

845 APPLYING LOOSE MULCH TO ALL RAISED PLANTERS

- · Timing: Immediately after planting.
- · Preparation: Ensure that soil is thoroughly moistened, applying water where necessary.
- · Coverage of mulch (minimum):
 - Planting beds (depth): 50 mm depth.
 - Trees: 50 mm depth.
 - Container planting: 50 mm depth.
- Finished level of mulch: 30 mm below top of planter wall.

COMPLETION

905 APPLYING MAINTENANCE FERTILIZER TO SOIL TO RAISED PLANTERS

- Duration: Carry out the following operations from completion of seeding/ turfing until the end of the rectification period.
- · Time of year: March or April.
- Application: Evenly spread, carefully incorporating below mulch materials.
- · Rate: To manufacturer's recommendations.

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920 APPLYING MULCH

- Timing: At end of the rectification period.
- · Watering: Ensure that soil is thoroughly moistened prior to mulching, applying water where
- Planting beds: Re-mulch.Depth (minimum): 50 mm.
- Trees: Remulch.
 - Depth (minimum): 50 mm.
- Container planting: Remulch.
 Depth (minimum): 50 mm.

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Section Revision History

No.	Purpose	
-	FOR PLANNING	22nd Mar 2018

Clauses amended in Revision -

This is the first revision stamp for this section. For all future revision stamps, details of all clauses amended at that revision will be included here.

Q31 External planting

To be read with Preliminaries/General conditions.

GENERAL INFORMATION/ REQUIREMENTS

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.

146 WATERING

- · Quantity: Wet full depth of topsoil.
- Application: Even and without damaging or displacing plants or soil.
- Frequency: assess conditions at each maintenan visit and water if required or adjust irrigation system to suit.

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: Two working days.

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170 SOIL REQUIREMENTS

- Type
 - Planted beds: Planting bed soil system, as section Q28.
 - Tree pits, shrub pits and other backfilling: use displaced topsoil to backfill.
 - External container planting: use displaced topsoil to backfill.
 - Mulch applied after planting: Mulching and top dressing system, as section Q28.

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: Grown in the United Kingdom for at least one growing season, unless otherwise approved (plant passports must be provided for any imported plants).
 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.

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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;
 - Date supplied and consignment details or reference; and
 - Type of container.

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: Coextruded polyethylene bags with black interior and white exterior.
- · Packaging of bulk quantities: Pallets or bins sealed with polyethylene and shrink wrapped.
- · 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

292 PREFABRICATED PLANT CONTAINERS

- · Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- · Material: plastic planter liners.
- Dimensions/ Shape: to fit within the steel planters designed by the Architect.
- · Lining: n/a.
- · Accessories: Automatic irrigation system as section S14.

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PREPARATION OF PLANTING BEDS/ PLANTING MATERIALS

385 MULCH MATTING/ GEOTEXTILE FABRIC TO SEPERATE SOIL/DRAINAGE LAYERS IN RAISED PLANTERS

- · Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Type: porous fleece membrane.
- · Recycled content: Submit proposals.
- · Timing: Lay before planting.
- · Watering: Water soil thoroughly before laying.
- Laying: In close contact with soil surface. Lap or butt joints as recommended by manufacturer, with no gaps.
- · Planting: Cut neat slits or flaps. Refit closely around plant stems.
- · Overlay: Not required.

PLANTING SHRUBS/ HERBACEOUS PLANTS/ BULBS

405 SHRUB PLANTING PITS

- Timing: Excavate 1-2 days (maximum) before planting.
- Sizes: Wide enough to accommodate roots when fully spread and 75 mm deeper than root system.
- · Pit bottom improvement Not required.

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: Ornamental composted bark mulch.
 - Depth: 50 mm.

PLANTING TREES

500 TREE PLANTING

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

502 ANTIDESICCANT FOR CONIFERS/ EVERGREENS

- · Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Application: Dip or thoroughly spray before delivering to site. Spray again soon after planting.
 - Do not apply in wet or frosty weather.
 - Ensure full coverage of underside of foliage.

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505 TREE PITS

- Sizes: 75 mm wider than the root spread, and same depth as the rootball.
- Sloping ground: Maintain horizontal bases and vertical sides with no less than minimum depth throughout.
- · Excavated material: stockpile for backfilling.
- Pit bottoms: Excavate with slightly raised centre: take care not to disturb the drainage board or waterproofing.
 - Treatment: Not required.
- · Pit sides: Scarify.
- · Backfilling material: Excavated material from tree pit.

526 UNDERGROUND GUYING FOR STANDARD TREES.

- · Manufacturer: Platipus.
 - Product reference: Contractor's choice.
- · Anchoring system: 3 no sleeper dead-man anchors.
- Installation: Ensure tree is positioned correctly and vertically prior to tightening guy line tensioners.

PROTECTING/ MAINTAINING/ MAKING GOOD DEFECTS

710 MAINTENANCE

- Duration: Carry out the operations in the following clauses from completion of planting until
 he end of the rectification period.
- Frequency of maintenance visits: In accordance with the agreed maintenance schedule.

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.

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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 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
 - 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 and the functioning of the irrigation system.

760 PLANTING MAINTENANCE - PRUNING

- General: Prune to promote healthy growth and natural shape.
 - Dead, dying, diseased wood and suckers: Remove.
 - Timing: As appropriate to the species.
 - Trees: Favour a single central leading shoot.
- · Arisings: Remove.

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.

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Section Revision History

No.	Purpose	
-	FOR PLANNING	22nd Mar 2018

Clauses amended in Revision -

This is the first revision stamp for this section. For all future revision stamps, details of all clauses amended at that revision will be included here.

Q35 Landscape maintenance

To be read with Preliminaries/ General conditions.

GENERALLY

105 MAINTENANCE OBJECTIVES

- · Location: Raised planters.
 - Duration: to the end of the rectification period.
- · Aims: Enhanced landscape quality.
- · Restrictions: Access times and other restrictions to be agreed with the client.
- Results: Adequate establishment in accordance with the grant scheme contract to produce a high quality garden landscape.

110 NOTICE

- · Give notice before:
 - Application of herbicide.
 - Application of fertilizer.
 - Watering.
 - Each site maintenance visit.
- · Period of notice: 2 days.

130 REINSTATEMENT

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

157 WATERING

· Supply: Irrigation system from potable mains water

Check irrigation system on each maintenance visit and adjust to ensure suitable functioning

Apply additional hand watering to resolve short-term problems if required

Compacted soil: Loosen or scoop out, to direct water to rootzone.

Frequency: As necessary for the continued thriving of all planting.

160 WATER RESTRICTIONS

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

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

180 CHIPPING OR SHREDDING

· General: Not permitted on site.

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181 MECHANICAL EQUIPMENT

- · General: Minimize.
- · Prohibited equipment: Chippers.
- Timing: Use of mechanical equipment allowed between the hours of 10:00 am and 4:00 pm only.

190 LITTER

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

197 CLEANLINESS

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

FLOWER BEDS/ SEASONAL BEDDINGS

460 BEDS OF PERENNIALS OR PERENNIALS AND ANNUALS

- Plant supports: Stake and tie plants using peony rings.
 - Length: To suit plant height.
 - Maintain throughout the growing season.
- · Gaps in planting: Refill by replanting.
- · Watering:
 - New plants: Before and after planting out.
 - Ongoing: As necessary for the continued thriving of all planting.
- · Operations at end of growing season:
 - Trim: Older flowering stems of herbaceous perennials.
 - Remove: Redundant plant supports, litter, debris and arisings.
 - Cultivate: Fork over the soil, taking care not to cause undue disturbance to plants.
 - Top dress: Apply fertiliser and 50mm mulch each season.

470 FLOWER BEDS GENERALLY

- Operations:
 - Remove: Dead flower heads, fallen leaves, litter and debris.
 - Weeds: Thoroughly hand weed.
 - Cultivate: Lightly hoe.
 - Trim: Clip grass edges.
- · Fungicide: Not required.
- Insecticide: Not required.

SHRUBS/TREES/HEDGES

500 ESTABLISHMENT OF NEW PLANTING

- · Duration: to end of the rectification period.
- · Weed control:
 - Method: Keep planting beds clear of weeds by hand weeding and maintaining the full thickness of mulch.
 - 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.
- Soil condition: Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch.
- · Watering: irrigation system.

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502 ESTABLISHMENT OF NEW PLANTING - FERTILIZER

- · Time of year: March or April.
- · Type: Slow release.
- · Spreading: Spread evenly. Carefully lift and replace any mulch materials.
 - Application rate: As manufacturer's recommendations.

520 REFIRMING OF TREES AND SHRUBS

- · Timing: After strong winds, frost heave and other disturbances.
- · Refirming: Tread around the base until firmly bedded.
- 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.

540 PRUNING GENERALLY

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

605 TRIMMING SLOWLY ESTABLISHING HEDGES

- · Operations:
 - Timing: Cut back hard in June and September to encourage bushy growth down to ground level.
 - Form: Allow to reach planned dimensions only by gradual degrees, depending on growth rate and habit.

620 REMOVAL OF DEAD PLANT MATERIAL

• 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.

635 REINSTATEMENT OF SHRUB/ HERBACEOUS AREAS

- Dead and damaged plants: Remove.
- · Mulch/ matting materials:
 - Carefully move to one side and dig over the soil, leaving it fit for replanting.
- · Do not disturb roots of adjacent plants.
- · Replacement plants:
 - 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.
 - Additional requirements: None.
- · Dressing: Slow release fertilizer:
 - Type: Organic.
 - Application rate: As manufacturer's recommendations.

645 WEED CONTROL GENERALLY

- · Weed tolerance: Weed to clear ground at each maintenance visit.
- · Adjacent plants, trees and grass: Do not damage.

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650 HAND WEEDING

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

658 HERBICIDE

· DO NOT USE.

680 SOIL AERATION

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

685 SOIL LEVEL ADJUSTMENT

- Level of soil/mulch at edges of beds: Reduce to 50 mm below adjacent grass or hard surface.
 - Arisings (if any): Spread evenly over the bed.

690 MAINTENANCE OF LOOSE MULCH

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

695 FERTILIZING ESTABLISHED TREES AND SHRUBS

- · Time of year: During April or May.
- · Type of fertilizer: Slow release.
- · Application: Spread evenly.
 - Rate: As manufacturer's recommendations.

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