# 73/1141/ 001

#### Q31 EXTERNAL PLANTING

To be read with Preliminaries/General conditions.

#### GENERAL INFORMATION/ REQUIREMENTS

#### 112 SITE CLEARANCE

- General: Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil.
- Stones: Remove those with largest dimension exceeding mm
- Contamination: Substances injurious to plant growth including subsoil, rubble, fuel, and lubricants.
- Vegetation:
- Large roots: Grub up and dispose of without undue disturbance of soil and adjacent areas.

#### 118 SOIL CONDITIONS

- Soil for cultivating and planting: Moist, friable and 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. Do not plant during periods of frost or strong winds.

#### 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 aquatic and marginal): September/ October or March/ April.
- Container grown plants: At any time if ground and weather conditions are favourable. Ensure that adequate watering and weed control is provided.
- 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.

#### 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:

#### 165 PREPARATION, PLANTING AND MULCHING MATERIALS

- General: Free from toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
- Certified materials: For each of the following materials submit a certificate giving supply source, content analysis, confirmation of suitability for purpose and confirmation of absence of harmful substances:
  - Give notice before ordering or using.

#### 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: To requirements of and balanced with branch system.
- Species: True to name.
- Origin/ Provenance:

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.

#### 225 BULBS/ CORMS/ TUBERS

- Condition: Firm, entire, not dried out or shrivelled.
- Health: Free from pests, diseases and fungus.

 Handling/ Storage: Remove from packaging immediately. If necessary, store for the minimum period of time in a well ventilated, dark, covered location at 18 -21°C, away from vehicle exhausts and fruit.

#### 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.

#### 246 LABELLING AND INFORMATION

• Standard: To BS 3936.

#### 250 SUPPLY OF PLANTS/ TREES

• Suppliers: Members of the Horticultural Trades Association Nursery Certification Scheme.

#### 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.
- Further alternatives: Proposed substitutions may not be acceptable and submission of further alternatives may be required.
- Approval: Obtain before making any substitution.

# 265 PLANT/ TREE HANDLING, STORAGE AND TRANSPORT

- Standard: To CPSE 'Handling and establishing landscape plants' (obtainable from the Horticultural Trades Association) Part I, Part II and Part III, paragraphs 1.3.3 to 1.3.6, 3.0, and 4.0.
- Frost: Protect plants/ trees from frost.
- Handling: Handle plants/ trees with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
- Plant packaging:
- Packaging of bulk quantities:

#### 270 PLANTING GENERALLY

- Standard: To CPSE 'Handling and establishing landscape plants' (obtainable from the Horticultural Trades Association) Part III, paragraphs 6.2 to 6.6.
- Appearance: Plant upright or well balanced with best side to front.

#### 290 SURPLUS MATERIAL

• General: Remove subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, prunings and other arisings/ rubbish.



#### 341 PEAT

Peat or products containing peat: Do not use.

#### 385 MULCH MATTING/ GEOTEXTILE FABRIC

- Manufacturer:
  - Product reference:
  - Type/ size:
- 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:

#### PLANTING SHRUBS/ HERBACEOUS PLANTS/ BULBS

#### 400 PLANT LAYOUT - RANDOM/ NATURALIZED

- Spacing: Evenly, avoiding straight lines.
- Density:

#### 405 SHRUB PLANTING PITS

- Timing: Excavate days (maximum) before planting.
- Sizes:
- Additional requirements:
- Pit bottom improvement:
- Backfilling material:

# 435 CLIMBING PLANTS USED AS GROUND COVER

• Planting: Remove canes or other supports. Spread stems, pinning to ground where appropriate to ensure good contact for rooting and early establishment.

#### 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.

#### 465 CLIMBING PLANTS

 Planting: 150 mm clear of wall/ fence etc. with roots spread outward. Lightly secure branches to support. Retain canes of plants which are too small to reach supports.



# Climber supports:

#### 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: Coverage:

#### 485 MULCHING PLANTING BEDS

- Material:
  - Purity: Free of pests, disease, fungus and weeds.
- Preparation: Clear all weeds. Water soil thoroughly.
- Coverage:

#### PLANTING TREES

#### 505 TREE PITS

- Sizes:
- Sloping ground: Maintain horizontal bases and vertical sides with no less than minimum depth throughout.
- Pit bottoms: With slightly raised centre. Break up to a depth of
- Pit sides: Scarify.
- Additional requirements:
- Backfilling material:
- Accessories:

#### 535 STAKING GENERALLY

- Stakes: Softwood, peeled chestnut, larch or oak, free from projections and large or edge knots and with pointed lower end.
  - Preservative treatment:
- Nails: To BS 1202-1, galvanized, minimum 25 mm long and with 10 mm diameter heads.
- Minimum stake sizes:

#### 545 LONG SINGLE STAKING FOR

• Staking: Position stake close to tree on windward side and drive vertically at least 300 mm into bottom of pit before planting. Consolidate material around stake during backfilling.



- Height of stakes: Cut off just below lowest branch of tree.
- Ties:
- Tying: Secure tree firmly but not rigidly to stake with at least two ties. Use three ties if necessary to prevent tree touching stake. Position top tie within 25 mm of top of stake and lower tie approximately halfway down.

#### PROTECTING/ MAINTAINING/ MAKING GOOD DEFECTS

#### 710 MAINTENANCE

- Duration: Carry out the operations in the following clauses from completion of planting until .
- Frequency of maintenance visits: Monthly during growing season.

#### 720 FAILURES OF PLANTING

- General: Plants/ trees/ shrubs that have failed to thrive (unless due to theft or malicious damage after completion) during period stated in clause 710, will be regarded as defects due to materials or workmanship not in accordance with the Contract. 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:

#### 740 CLEANLINESS

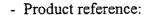
- Soil and arisings: Remove from hard surfaces and grassed areas.
- General: Leave the works in a clean tidy condition at Completion and after any maintenance operations.

#### 750 PLANTING MAINTENANCE GENERALLY

- Weed control: Maintain weed free area around each tree and shrub, minimum diameter the larger of 1 m or the surface of original planting pit.
  - Keep planting beds clear of weeds, by
- 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.
- Staking: Check condition of stakes, ties, guys and guards. Replace broken or missing items. Adjust if necessary to allow for growth and prevent rubbing of bark. Cut back any damaged bark.
  - Frequency of checks:
- Trees: Spray crown when in leaf during warm weather. Carry out in the evening.

# 755 PLANTING MAINTENANCE - FERTILIZER

- Time of year: March or April.
- Fertilizer:
  - Manufacturer:



- Application: Evenly spread, carefully incorporating below mulch materials.
- Coverage:

# 760 PLANTING MAINTENANCE - PRUNING

- General: Prune at appropriate times, to remove dead or dying and diseased wood and suckers, to promote healthy growth and natural shape.
  - Prune trees to favour a single central leading shoot.

# 765 PLANTING MAINTENANCE - WATERING

• General: As clauses

# 780 MAINTENANCE INSTRUCTIONS

• General: Before end of the period stated in clause 710, submit printed instructions recommending procedures to be established by the Employer for maintenance of the planting work for one full year:

# 790 FINAL MULCHING

- Timing: At end of the period stated in clause 710.
- Watering: Ensure that soil is thoroughly moistened prior to remulching, applying water where necessary.
- Planting beds: Remulch as clause 485. Coverage:
- Trees: Remulch as clause 590. Coverage: .

# Q35 LANDSCAPE MAINTENANCE

# To be read with Preliminaries/General conditions.

#### **GENERALLY**

#### 110 NOTICE

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

#### 130 REINSTATEMENT

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

#### 140 CONTROL OF MAMMALIAN PESTS

• Specialist firms/Methods:

#### 155 WATERING

- Supply: Potable mains water.
- Quantity: Wet full depth of topsoil.
- Application: Do not damage or loosen plants.
- Compacted soil: Loosen or scoop out, to direct water to rootzone.
- Frequency: As necessary for the continued thriving of all planting.

# 170 DISPOSAL OF ARISINGS

- General: Unless specified otherwise, dispose of arisings as follows:
- Biodegradable arisings:
- Grass cuttings:
- Tree roots and stumps:
- Shrub and tree prunings:
- Litter and nonbiodegradable arisings:

#### 225 TREE STEMS

Precautions: Do not use mowing machinery closer than 100 mm to tree stems.
 Use nylon filament rotary cutters and other hand held mechanical tools carefully to avoid damage to bark.

#### 235 BULBS AND CORMS IN GRASSED AREAS

• Interval between end of flowering and start of grass cutting (minimum):

# 250 LEAF REMOVAL

• Operations: Remove fallen leaves.



# • Special requirements:

#### 470 FLOWER BEDS GENERALLY

- Operations:
  - Remove dead flower heads.
  - Remove litter and debris.
  - Remove fallen leaves.
  - Thoroughly hand weed.
  - Lightly hoe.
  - Clip grass edges.
- Fungicide:
- Insecticide:

#### SHRUBS/TREES/HEDGES

#### 500 ESTABLISHMENT OF NEW PLANTING

- Duration:
- Weed control:
  - Keep planting beds clear of weeds by
  - 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.
- Trees: When in leaf, spray crowns in the evening during warm weather.

#### 510 TREE STAKES AND TIES

- Inspection/maintenance times:
- Stakes:
  - Replace loose, broken or decayed stakes to original specification.
  - 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.
- Ties: Adjust, refix or replace loose or defective ties, allowing for growth and to prevent chafing.
  - Where chafing has occurred, reposition or replace ties to prevent further chafing.
- Removal of stakes and ties:
  - Fill stake holes with lightly compacted soil.

# 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.

# 570 FORMATIVE PRUNING OF YOUNG TREES



- Time of year: Do not prune during the late winter/early spring sap flow period.
- Young trees up to 4 m high:
  - 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.
  - Remove duplicated branches and potentially weak or tight forks. In each case cut back to live wood.
- Whips or feathered trees: Do not prune.
- Operatives: Extensive pruning of young trees and any surgery to larger trees
  must be carried out by an approved member of the Arboricultural Association or
  other approved specialist.

# 580 PRUNING FLOWERING SPECIES OF SHRUBS AND ROSES

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

# 600 TRIMMING RAPIDLY ESTABLISHING HEDGES

• General: Allow to reach planned height as rapidly as possible. Trim back lateral branches moderately to establish required shape.

#### 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.

# 625 CLIMBING PLANTS

- Pruning: Remove excess growth to ensure that (in addition to the requirements of clause 545 where relevant) signs, light fittings, doors and windows are kept clear at all times.
- Insecure growth: Attach to supporting wires or structures using
- Supporting structures: Check and repair as necessary.

#### 630 DEAD PLANTS

- Removal:
- Replacement:

#### 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:
- Dressing: Slow release fertilizer:
  - Type:
  - Coverage: g/m<sup>2</sup>.

# 645 WEED CONTROL GENERALLY

- Weed tolerance:
- Adjacent plants, trees and grass: Do not damage.

#### 650 HAND WEEDING

- General: Remove weeds entire, 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.

#### 655 WEED CUTTING BY HAND OR MACHINE

- Undesirable grass, brambles and herbaceous growth: Cut down cleanly to a maximum height of mm.
- Herbicides:

#### 657 HERBICIDE TO KILL REGROWTH

- Type: Suitable foliar acting herbicide to kill regrowth.
- Timing: Allow recommended period for herbicide to take effect before clearing arisings.

#### 665 WEED CONTROL WITH WINTER HERBICIDE

- Type: Suitable residual soil acting herbicide.
- Time of year: Unless otherwise agreed, complete before end of March.
- Timing: Allow recommended period for herbicide to take effect before clearing arisings.

# 670 WEED CONTROL WITH SUMMER HERBICIDE

- Type: Suitable foliar acting herbicide.
- Timing: Allow recommended period for herbicide to take effect before clearing arisings.

#### 675 DIGGING OVER

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

# 680 SOIL AERATION

 Compacted soil surfaces: Prick up to aerate the soil of root areas. Break surface crust, reduce size of lumps to crumb and level off. 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):
  - Top up:
- Mulch spill on adjacent areas: Remove weeds and rubbish and return to planted area.
- Weeding: Remove weeds growing on or in mulch by

# 700 SNOW REMOVAL FROM SHRUBS/TREES

• General: Remove snow as recommended by BS 7370-4, clause 3.5.15