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**Softworks Specification
Document No.: P487-S1**



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Q28 TOPSOIL AND GROWING MEDIA

To be read with Preliminaries/General Conditions

- 110 TOPSOIL: At the time of starting the sub-contract work, the areas to be planted will be covered by approved imported topsoil, provided and spread by the Main Contractor.
Small planting beds located in general landscape areas may be excavated separately and at a later date than the general topsoiling operations.
- 120 CLIMATIC CONDITIONS:
• Carry out the work while soil and weather conditions are suitable for the relevant operations. Transplant bare root plants only during the following periods:
- Deciduous trees and shrubs: Late October to late March.
- Conifers and evergreens: March to April.
- Herbaceous/Bulb plants: September to October or March to April.
• Containerised, pot grown and root balled plants may be planted outside the accepted periods if ground and weather conditions are favourable. Plants moved in warm weather conditions must be sprayed and watered regularly.
Do not plant when persistent cold or drying winds are likely to occur or if soil is frost bound, waterlogged or excessively dry. Protect sides of pits from freezing and do not use frozen backfilling material.
- 130 MACHINES AND TOOLS: Use only machinery and tools suitable for the site conditions and the work to be carried out. Use hand tools around trees, plants and in confined spaces where it is impracticable to use machinery.
- 196 IMPORTED TOPSOIL:
To BS 3882.
• Texture:
- Sand (0.05-2.00mm) max 75% min 20%
- Silt (0.002-0.05mm) max 60% min 5%
- Clay (less than 0.002mm) max 30% min 5%
• Soil reaction: pH5.5-7.8
• Stone content: 35% by dry weight of which the fraction 2.5mm must not exceed 20% by dry weight.
• Maximum size of stone in any dimension: 50mm.
• Electrical conductivity : less than 1500 microhoms per cm when expressed on a 1:2.5 soil: water extract.
• Organic matter: not less than 4%
Nitrogen (N): not less than 0.2%
Available phosphorous (P): not less than 45mg/kg
Available potassium (K): not less than 240mg/kg
Available magnesium (Mg): not less than 80mg/kg
• Phytotoxic elements:
- Total Copper (Cu): less than 130mg/kg
- Total Nickel (Ni): less than 70mg/kg
- Total Zinc (Zn): less than 300mg/kg.
- Water-soluble Boron (B): less than 3mg/kg
• Zootoxic elements:
- Total Arsenic (As): less than 40mg/kg
- Total Cadmium (Cd): less than 15mg/kg
- Total Chromium (Cr): less than 1000mg/kg
- Total Lead (Pb): less than 2000mg/kg

- Total Mercury (Hg): less than 20mg/kg
- Free from weeds, roots of perennial weeds, sticks, subsoil, rubble any other foreign matter and chemical contamination. From an approved source.
Obtain approval of a sample load of not less than 5m³. Sample to be retained for comparison with subsequent loads.

197 TOPSOIL ANALYSIS: Submit Certificate of Analysis from an approved independent Testing Laboratory for each new source of imported topsoil (allow two weeks minimum for testing). Analysis to cover:-

- Soil reaction
- Soil texture
- Stone content
- Electrical conductivity
- Nutrient levels
- Organic matter
- Phytotoxic/zootoxic elements
- Recommendations for making good any deficiencies.

200 GRADING SUBSOIL

- General: Grade to smooth flowing contours to achieve specified finished levels of topsoil.
- Areas of thicker topsoil: Excavate locally.

250 SUBSOIL SURFACE PREPARATION

- General: Excavate and/or place fill to required profiles and levels.
- Loosening:
 - Light and non-cohesive subsoils: When ground conditions are reasonably dry, loosen thoroughly to a depth of 300 mm.
 - Stiff clay and cohesive subsoils: When ground conditions are reasonably dry, loosen thoroughly to a depth of 450 mm.
 - Rock and chalk subgrades: Lightly scarify to promote free drainage.
- Stones: Immediately before spreading topsoil, remove stones larger than 75 mm.
- Remove Arisings, contaminants and debris and Builders rubble.

300 TOPSOIL ANALYSIS

- Soil to be analysed: Samples from locations from across the site.
 - Soil analyst: to be agreed.
 - Samples: Collect in accordance with BS 3882.
 - Submit:
 - Declaration of analysis: Chemical analysis and contaminants and Nutrient content, pH value and textural classification.
- Report detailing soil analyst's recommendations.

395 PEAT

- Peat or products containing peat: Do not use.

670 CONTAMINATION

- General: 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, do not use subsoil contaminated with the above materials.
- Give notice: If any evidence or symptoms of soil contamination are discovered on the

- site, or in topsoil to be imported.
- Protection:
 - Do not place any other material on top of storage heaps.
 - Do not allow construction plant to pass over storage heaps.
 - Prevent compaction and contamination, by fencing and covering as appropriate.

685 TEMPORARY CROP ON TOPSOIL STORAGE HEAPS

- Seed mix supplier: Contractor's choice.
- Product reference: as clause D20 421.
- Sowing rate: 20 g/m².
- Maintenance: Cut to a height of 50 mm when growth reaches 150 mm, re-cultivate sward one month prior to final planting.

690 HANDLING TOPSOIL

- 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.

700A SPREADING TOPSOIL

- Temporary roads/surfacing: Remove before spreading topsoil.
- Layers:
 - Depth (maximum): 150 mm.
 - Gently firm (avoid compaction) each layer before spreading the next.
- Depths after firming and settlement (minimum):
 - Grass seeded areas - 150mm
 - Planted areas - 300mm.
 - Tree pits: Drawing Number 107
- Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

910A FINISHED LEVELS OF TOPSOIL AFTER SETTLEMENT

- Above adjoining paving or kerbs: 25 mm.
- Shrub areas: Higher than adjoining grass areas by 25 mm.
- Within root spread of existing trees: Unchanged.
- Adjoining soil areas: Marry in.
- Thickness of turf or mulch: Included.

920 DOCUMENTATION

- Timing: Submit at handover.
- Contents:
 - Full description of all soil components.
 - Record of source for all soil components.
 - Analyst's report for each test carried out.
 - Record drawings showing the location and depth of all soils by type and grade.
 - Supplier's declaration of compliance with BS 3882.
- Number of copies: 2.

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.
- 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: 2 working days.
- 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: As manufacturer's recommendation.
- 280 FINAL CULTIVATION
- Timing: After grading and fertilizing.
 - Seed bed: Reduce to fine, firm tilth with good crumb structure.
 - Depth: 25 mm.
 - Surface preparation: Rake to a true, even surface, friable and lightly firmed but not over compacted.
 - Remove surface stones/earth clods exceeding:
 - General areas: 40 mm.
 - Fine lawn areas: 10 mm.

- Adjacent levels: Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.

SEEDING

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 and diagonally to main axis.
 - Spread density 8gm/m²

335 GRASS SOWING SEASON

- Grass seed generally: April to June or August to October.

340 PRE-EMERGENT HERBICIDE FOR ALL GRASSED AREAS

- Standard: Pesticide Safety Directorate approved.
- Application rate: In accordance with manufacturer's written recommendation.
 - Timing: Immediately after sowing.

352 EDGES TO SEEDED AREAS ADJACENT TO PLANTING BEDS AND TREE PITS

- Timing: After seeded areas are well established.
- Edges: Clean straight lines or smooth curves.
 - Mulch and soil: Draw back to permit edging.
- Arisings: Remove.
- Completion: Respread soil and mulch.

PROTECTING/CUTTING

530 FIRST CUT OF GRASSED AREAS

- Timing: When grass is reasonably dry.
 - Height of initial growth: 40-75 mm.
- 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: Contractor's choice.
- Arisings: Spread evenly over cut areas.

- 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: Re-cultivation and reseeding/ re-turfing.
 - Timing of making good: The next suitable planting season.
- 620 MAINTAINING GENERAL GRASSED AREAS
- 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: 50 mm.
 - Preparation: Before each cut remove all litter and debris.
 - Cutting: As and when necessary to a height of 35 mm.
 - Arisings: Spread evenly over cut areas.
 - 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: Contractor's choice.
- 680 MAINTENANCE FERTILIZER FOR ALL GRASSED AREAS
- Duration: Carry out the following operations from completion of seeding/ turfing until: the end of the rectification period.
 - March application: 15:10:10 Spring turf fertilizer at 35 g/m².
 - September application: 5:10:10 Autumn turf fertilizer at 50 g/m².

Q31 EXTERNAL PLANTING

To be read with Preliminaries/General conditions and in conjunction with Project Architects and Engineers Specifications.

GENERAL INFORMATION/ REQUIREMENTS

- 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: None.
 - Large roots: Grub up and dispose of without undue disturbance of soil and adjacent areas.
 - Additional requirements: None.
- 118 **SOIL CONDITIONS**
- Soil for cultivating and planting: Moist, friable and (excepting 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.
- 127 **TIMES OF YEAR FOR PLANTING**
- All plants to be planted May-September
 - Container grown plants: At any time if ground and weather conditions are favourable.
 - Watering and weed control: Provide as necessary.
- 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: Two working days.

- 165 PREPARATION, PLANTING AND MULCHING MATERIALS
- General: Free from toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
 - Certification of source, analysis, suitability for purpose and absence of harmful substances:
Submit.
 - Certified materials: Pass 100 Green Compost.
 - 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: Balanced with branch system.
 - Standard: The National Plant Specification.
 - Species: True to name.
 - Origin/ Provenance: Contractor's choice.
- 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.
- 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.

- 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 HTA '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: Approved recognised method.
 - 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.
- 285 PROTECTION OF EXISTING GRASS
- General: Protect areas affected by planting operations using boards/ tarpaulins.
 - Excavated or imported material: Do not place directly on grass.
 - Duration: Minimum period.
- 290 SURPLUS MATERIAL
- Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings and other arisings: Remove.

PREPARATION OF PLANTING BEDS/ PLANTING MATERIALS

- 305 WEED CONTROL FOR INVASIVE NON-NATIVE WEEDS
- Locations: All planting areas.
 - General: Prevent weeds from seeding and perennial weeds from becoming established, by cultivating.
- 375 CULTIVATION
- Compacted topsoil: Break up to full depth.
 - Cultivation: Loosen, aerate and break up soil into particles of 2-8 mm.
 - Depth: 250 mm.
 - Timing: Within a few days before planting.
 - Weather and ground conditions: Suitably dry.
 - Surface: Leave regular and even.
 - Levels: 25 mm above adjoining paving or kerbs and Minimum 150 mm below dpc of adjoining buildings.
 - Undesirable material brought to the surface: Remove visible weeds, roots and large stones with any dimension exceeding 50 mm.
 - Soil within root spread of trees and shrubs to be retained: Do not dig or cultivate.

PLANTING SHRUBS/ HERBACEOUS PLANTS/ BULBS

- 400A RANDOM PLANT LAYOUT TO ALL BEDS
- Spacing: Evenly, avoiding straight lines.
 - Density: Average 3/m² 2L containers.
- 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.
 - Backfilling material: As clause 476.
- 405A HEDGE PLANTING PITS/TROUGH
- Timing: Excavate 1-2 days (*maximum*) before planting.
 - Sizes: Minimum trough width 1m and 75 mm deeper than root system.
 - Pit bottom improvement Not required.
 - Backfilling material: As clause 476.
- 415 ANTIDESICCANT FOR CONIFERS/ EVERGREENS
- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
 - Application: Dip before delivering to site. Spray soon after planting.
 - Do not apply in wet or frosty weather.
 - Ensure full coverage of underside of foliage.
- 435 CLIMBING PLANTS USED AS GROUND COVER
- Planting:
 - Canes or other supports: Remove.
 - Arrangement: Spread stems.
 - Fixing: Pinned to ground to ensure good contact.
- 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.
- 476 SHRUB, HERBACEOUS AND BULB BACKFILLING MATERIAL For all planting
- Composition: Previously prepared mixture of topsoil excavated from pit and additional topsoil as required:
 - Ameliorant/ Conditioner: Compost to Pass 100.
 - Application rate: 0.75m³/10m².
 - Fertilizer: Slow release Enmag or similar.
 - Application rate: 50gm/m².
- 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: Not required.

- 485 MULCHING PLANTING BEDS
- Material: Medium grade bark mulch
 - Purity: Free of pests, disease, fungus and weeds.
 - Recycled content: Contractor's choice.
 - Preparation: Clear all weeds. Water soil thoroughly.
 - Coverage: Localised coverage around shrubs and trees only of 50 mm depth as directed.
 - Finished level of mulch: 30 mm below adjacent grassed or paved areas

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: Weekly during growing season.
- 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 handweeding and use if approved herbicides.
 - 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.
 - Broken or missing items: Replace.
 - Rubbing: Prevent.
 - Ties: Adjust to accommodate growth.
 - Damage to bark: Cut back neatly with sharp knife. Prevent further damage.
 - Frequency of checks: At each scheduled maintenance visit.
 - 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.
 - Watering: Contractor's choice.
- 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.

Q35 LANDSCAPE MAINTENANCE

To be read with Preliminaries/ General conditions.

GENERALLY

105A MAINTENANCE OBJECTIVES

- Location: External envelope within site boundary.
 - Duration: 18 Months
- Aims: High quality landscape .
- Results: Weedfree, established planting and turfing with clean hard pavings and surfaces.

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.

140 CONTROL OF MAMMALIAN PESTS

- Specialist firms: Submit proposals.
 - Method: Submit proposals.

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.

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 ARISING

- General: Unless specified otherwise, dispose of arisings as follows:
 - Biodegradable arisings: Remove to recycling facility.
 - Grass cuttings: Spread evenly.
 - Tree roots and stumps: Remove from site.
 - Shrub and tree prunings: Chip on site and spread in areas as instructed.
 - Litter and nonbiodegradable arisings: Remove from site.

195 PROTECTION OF EXISTING GRASS

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

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.

GRASSED AREAS

210 MAINTENANCE OF GRASSED AREAS

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

220 GRASS CUTTING GENERALLY

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

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

- Before flowering: Do not cut.
- Interval between end of flowering and start of grass cutting (minimum): Six weeks.

260 MOWING LAWNS

- Grass height: Maintain between 25 and 50 mm.
- Arisings: Spread evenly over cut areas.

285 TOP DRESSING

- Location: All lawns.
- Timing: 1 month before handover.
- Material: Sandy loam.
- Supplier: Contractor's choice.
 - Product reference: Contractor's choice.
- Declaration of analysis: Submit.
- Additional analyses: Not required.
- Samples: Supply 5 kg sample before ordering.
- Application rate: 2 kg/m².

295 SPIKING

- Location: All lawns.

- Timing: February or March, after first mowing.
- Operations: Aerate the soil and improve surface water penetration.
- Depth (minimum): 100 mm into soil.

309 EDGES TO SEEDED AREAS

- Location: Planting beds and around newly planted trees.
- Timing: After seeded areas are well established.
- Edges: Cut to clean straight lines or smooth curves. Draw back soil to permit edging.
- Arisings: Remove.

320 LEVELLING HOLLOWES AND BUMPS IN TURF

- Standard: To BS 7370-3, clauses 12.4 and 12.5.

330 SELECTIVE HERBICIDE

- Location: All lawns.
- Herbicide: Contractor's choice.
- Areas not to be sprayed: Bulb and corm planted areas when in leaf.

350 FERTILIZER - SPRING APPLICATION

- Type: Slow release.
- Application rate: 60 g/m².

360 FERTILIZER - AUTUMN APPLICATION

- Type: Slow release.
- Application rate: 60 g/m².

380 REINSTATEMENT OF DAMAGED LAWNS

- Damaged turf: Remove to a depth of 30 mm.
- Preparation: Cultivate substrate to a fine tilth.
- Reinstatement: Contractor's choice of returfing or topsoiling and reseeding:
 - Returfing: Quality and appearance to match existing.
 - Reseeding: Fill with fine topsoil to BS 3882 multi purpose class, free from stones, debris and weeds. Reseed with a seed mix to match existing grass in quality and appearance.
- Protection and watering: Provide as necessary to promote successful germination and/ or establishment.

SHRUBS/TREES/HEDGES

500 ESTABLISHMENT OF NEW PLANTING

- Duration: 5 Years
- Weed control:
 - Method: Keep planting beds clear of weeds by handweeding and approved herbicides.
 - 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: Contractor's choice.

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.
- 600 TRIMMING RAPIDLY ESTABLISHING HEDGES
- General: Allow to reach planned height as rapidly as possible.
 - Form: Trim back lateral branches moderately.
- 620A REMOVAL OF DEAD PLANT MATERIAL
- Operations: At the end of the growing season, check all shrubs and perennials and remove all dead foliage, dead wood, and broken or damaged branches and stems.
- 630 DEAD AND DISEASED PLANTS
- Removal: As soon as possible.
 - Replacement: In the next scheduled round of replacement planting.
- 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: Reinststate to original depth.
- 657 HERBICIDE TO KILL REGROWTH
- Type: Suitable foliar acting herbicide to kill regrowth.
 - Timing: Allow recommended period for herbicide to take effect before clearing dead weeds.
- 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: Annually.
 - 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.
- 700 SNOW REMOVAL FROM SHRUBS/ TREES
- Standard: To BS 7370-4.
 - Plants subject to snow removal: All evergreens.
 - Timing: Within 24 hours of snowfall.