



Reading Borough Council

HARD AND SOFT LANDSCAPE SPECIFICATION

Reading Affordable Housing, George Street





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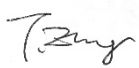
HARD AND SOFT LANDSCAPE SPECIFICATION

Reading Affordable Housing, George Street

WSP

4th Floor
6 Devonshire Square
London
EC2M 4YE
Phone: +44 20 7337 1700
Fax: +44 20 7337 1701
WSP.com

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Q

Paving/Planting/Fencing/Site furniture

Q10

Kerbs/ edgings/ channels/ paving accessories

Q10 Kerbs/ edgings/ channels/ paving accessories

To be read with Preliminaries/General conditions.

TYPES OF KERBS/EDGINGS AND CHANNELS

110A PROPRIETARY PRECAST CONCRETE EDGING TO RESIN BOUND GRAVEL PATH - TO THE SOUTH FLAT TOP EDGING

- Standard: To BS EN 1340.
- Manufacturer: Marshalls.
- Product reference: Flat Top Edging.
- Recycled content: Submit proposals.
- Size (width x height x length): 50mm w x 200mm h x 914mm l.
- Special shapes: As required to suit site geometry.
- Finish: As cast.
- Colour: Standard Grey.
- Bedding: Cement mortar on concrete race.
- Joints generally: Dry, 2-3mm, neatly mitred to suit the site geometry.
- Sealant movement joints: At 15m (maximum) centres.
- Accessories: As required for complete installation.

LAYING

510 LAYING KERBS, EDGINGS AND CHANNELS

- Cutting: Neat, accurate and without spalling. Form neat junctions.
 - Long units (450 mm and over) minimum length after cutting: 300 mm.
 - Short units minimum length after cutting: The lower of one third of their original length or 50 mm.
- Bedding of units: Positioned true to line and levelled along top and front faces, in a mortar bed on accurately cast foundations or on a race of fresh concrete.
- Securing of units: After bedding has set, secured with a continuous haunching of concrete or on a race of fresh concrete with backing concrete cast monolithically.

520 ADVERSE WEATHER

- Conditions: Do not construct if the temperature is below 3°C on a falling thermometer or 1°C on a rising thermometer. Adequately protect foundations, bedding and haunching against frost and rapid drying by sun and wind.

530 CONCRETE FOR FOUNDATIONS, RACES AND HAUNCHING

- Standard: To BS 8500-2.
- Designated mix: Not less than GEN0 or Standard mix ST1.
- Workability: Very low.

540 CEMENT MORTAR BEDDING

- General: To section Z21.
- Mix (Portland cement:sand): 1:3.
 - Portland cement: Class CEM I 42.5 to BS EN 197-1.
 - Sand: to BS EN 12620, grade 0/4 or 0/2 (MP).
- Bed thickness: 12-40 mm.

550 KERB DOWELS

- Dowels: Steel bar to BS 4482.
 - Size: 12 mm diameter, 150 mm long.
- Installation of dowels: Vertically into foundation while concrete is plastic.
 - Centres: To suit holes in kerbs.
 - Projection: 75 mm.
- Grouting of holes in kerbs: Filled with 1:3 cement:sand mortar finished flush.

620 ACCURACY

- Deviations (maximum):
 - Level: ± 6 mm.
 - Horizontal and vertical alignment: 3 mm in 3 m.

625 REGULARITY OF PAVED SURFACES

- Maximum undulation of (non-tactile) paving surface: 3 mm.
 - Method of measurement: Under a 1 m straight edge placed anywhere on the surface (where appropriate in relation to the geometry of the surface).
- Difference in level between adjacent units (maximum):
 - Joints flush with the surface: Twice the joint width (with 5 mm max difference in level).
 - Recessed, filled joints: 2 mm.
 - Recess depth (maximum): 5 mm.
 - Unfilled joints: 2 mm.
- Sudden irregularities: Not permitted.

Q23

*Gravel/ Hoggin/ Woodchip/ Resin bound roads/
paving/ overlays*

Q23 Gravel/ Hoggin/ Woodchip/ Resin bound roads/ paving/ overlays

To be read with Preliminaries/ General conditions.

TYPES OF SURFACING

225A RESIN BOUNDED SURFACING TO COMMUNAL PATH

- Geomembrane: Geotextile membranes.
Manufacturer: Addagrip. Web: sales@addagrip.co.uk;
Tel: +44(0)1825 761333
Product reference: Addaset - Decorative Resin Bound Porous Surfacing.
- Chippings:
Size 3mm aggregate - flint gravel.
Colour: Dorset Gold.
- Application: Thoroughly mixed and uniformly spread.
 - Resin thickness: minim 16mm thickness.
 - Slip/ skid Resistance: Allow for providing and installing glass grit 0.3mm to 0.6mm or aluminium oxide FEPA 30, 36 or 46, broadcast onto surfaces where additional skid/slip resistance may be required. Manufacture to provide specification.
 - Compaction to all layers: By heavy roller or other appropriate means, adequate to resist subsidence or deformation of the completed roads/ pavings when in use.

LAYING

315 MATERIALS

- Compatibility: Chippings suitable for use with respective binders/ emulsions/ resin/ epoxy.

320 SAMPLES

- Submit: Representative samples of resin bounded surfacing FOR CLIENT/C.A. Approval prior to order.

340 LAYING GENERALLY

- Channels, gullies, etc: Keep clear.
- Finished surfaces:
 - Lines and levels: To prevent ponding.
 - Overall texture: Even.
 - State at completion: Clean.

350 COLD WEATHER WORKING

- Frozen materials: Do not use.
- Freezing conditions: Do not lay pavings.
- Cold bituminous surface dressings: Do not apply when ambient temperature is below 10°C.
- Do not lay resin bound layer in temperatures below 5°C.

- Other dressings or overlays: As manufacturers' recommendations.

360A DRAINAGE FALLS

- Sealed surfaces:
 - Falls and cross falls (minimum): 1:40.

370 LAYING GRANULAR SURFACES IN VEHICULAR AREAS

- Permissible deviation from required levels, falls and cambers (maximum): ± 20 mm.
- General: Spread and level in 150 mm maximum layers. As soon as possible compact each layer.
- Dry weather: Lightly water layers during compaction.

380 LAYING GRANULAR SURFACES IN PEDESTRIAN AREAS

- Permissible deviation from required levels, falls and cambers (maximum): ± 12 mm.
- General: Spread and level in 100 mm maximum layers. As soon as possible, compact each layer.
- Dry weather: Lightly water layers during compaction.

390 PROTECTION FROM TRAFFIC AND PLANT

- Paved areas: Restrict access to prevent damage.

COMPLETION

- No access permitted over resin bound surface unit surface layer is fully cured (minimum 48 hours).

Q24

Interlocking brick/block roads/pavings

Q24 Interlocking brick/block roads/pavings

To be read with Preliminaries/ General conditions

TYPES OF PAVING

110A CONVENTIONAL CONCRETE BLOCK PAVING FOR FRONT PRIVATE ENTRY PATHS FP

- Manufacturer: Tobermore. www.tobermore.co.uk; Tel: sales@tobermore.co.uk
Product reference: Shannon.
- Sizes: 208mm l x 173mm w x 50mm d.
 - Special blocks: As required to complete installation. Blocks neatly cut around all abutments and obstructions to neat finish.
 - Arrises: Chamfered as manufactured.
 - Colour/ Finish: Heather.
 - Recycled content: Submit proposals.
- Jointing:
 - Material: In accordance with BS 7533-3.
 - Joint width: 2-5 mm.
- Sealer/ Stabilizer: Not required.
- Setting out:
 - Bond: Stretcher.
 - Features: Mortar bedded edge restraint.
Bedding layer: 40mm sharp sand.
- Accessories: As required to complete installation, including but not limited to flat top edging, sett edging, step riser paving.

110B CONVENTIONAL CONCRETE BLOCK PAVING FOR FRONT REAR ENTRY PATHS RP

- Manufacturer: Tobermore. www.tobermore.co.uk; Tel: sales@tobermore.co.uk
Product reference: Shannon.
- Sizes: 208mm l x 173mm w x 50mm d.
 - Special blocks: As required to complete installation. Blocks neatly cut around all abutments and obstructions to neat finish.
 - Arrises: Chamfered as manufactured.
 - Colour/ Finish: Natural.
 - Recycled content: Submit proposals.
- Jointing:
 - Material: In accordance with BS 7533-3.
 - Joint width: 2-5 mm.
- Sealer/ Stabilizer: Not required.
- Setting out:
 - Bond: Stretcher.
 - Features: Mortar bedded edge restraint.

- Accessories: As required to complete installation, including but not limited to flat top edging, sett edging.

EXECUTION

200 EXECUTION GENERALLY - CONCRETE BLOCK AND CLAY PAVER PAVING

- Standard: In accordance with BS 7533-3.

211 COLOUR BANDING

- General: Unless premixed by manufacturer, select blocks/ pavers/ setts vertically from at least 5 separate packs in rotation to avoid colour banding.

220 SAMPLES

- General: Before ordering, submit samples of 5 blocks/ pavers/ setts that are representative of colour and appearance.

240 ADVERSE WEATHER

- General: Do not use frozen materials or lay bedding on frozen or frost covered sub-bases.

450 GEOTEXTILE SHEET FOR CONVENTIONAL PAVING

- Location: Immediately below laying course.
- Product: Terram Standard Geotextile T1500 GT.
- Jointing: in accordance with manufacturer's recommendation.
- Laying: Fit neatly at edge restraints and other features that interrupt the sand laying course, e.g. drainage fittings, channels, manholes and kerbs.
 - Edge detail: Turn sheet up to form an upstand against features.
Height (minimum): Thickness of sand laying course.

485 LAYING BLOCKS/ PAVERS/ SETTS

- Setting out: Start from an edge restraint.
- Cutting: Cleanly, accurately and vertically, without spalling. Do not mark or damage visible surfaces.
- Cut edges: Turn inwards where possible; do not position against edge restraints or other features.
- In situ mortar or concrete infill: Do not use.
- Compaction: Vibrate to produce thoroughly interlocked paving of even overall appearance with regular joints and accurate to line, level and profile. Do not mark or damage paving units, kerbs and adjacent work.
 - Concrete blocks and clay pavers: In accordance with BS 7533-3, Annex F, to site category required for laying course material.

500A REGULARITY OF PAVED SURFACES

- Maximum variation in gap under a 3m straight edge placed anywhere on the surface (where appropriate in relation to the geometry of the surface):
 - Precast concrete paving blocks and clay pavers for flexible pavements: 3 mm.

- Difference in level between adjacent paving units (maximum): 2 mm.
- Sudden irregularities: Not permitted.

COMPLETION

615 COMPLETION OF PAVING

- Final compaction of the surface course: In accordance with BS 7533-3.
- Vacuum cleaning machines: Not allowed.

Q25

Slab/brick/sett/cobble pavings

Q25 Slab/brick/sett/cobble pavings

To be read with Preliminaries/ General conditions.

GENERAL

PRODUCTS

315A CONCRETE FLAGS TO PRIVATE EXTERNAL SPACE CF

- Standard: To BS EN 1339.
 - Manufacturer: Tobermore . Web: www.tobermore.co.uk.
Tel: +44 (0)844 800 5736.
Product reference: Riven Flags.
- Colour: Natural.
 - Finish: Riven.
 - Nominal sizes: 400mm l x 400mm w x 32 d mm.
- Arrises: Chamfered.
Slip/ Skid resistance: Extremely low.
Jointing: In accordance with BS EN 1339.
 - Joint widths: 10mm joints;Sealer/ Stabilizer: Not required;
Setting out: Stack Bond;
Features: Mortar bedded edge restraint - 30mm mortar bedding;
Accessories: As required to complete installation, including but not limited to kerbstone edging, at interface of flag paving and gate, and brick wall and accessories to the brick wall.

315B CONCRETE STEP RISERS TO ENTRANCES/ PORCH STEP RISER

- Standard: To BS EN 1339.
 - Manufacturer: Tobermore . Web: www.tobermore.co.uk.
Tel: +44 (0)844 800 5736.
Product reference: Step Riser.
- Colour: Charcoal
 - Finish: As cast.
 - Nominal sizes: 80mm l x 104mm w x 173 h mm.
- Arrises: Chamfered.
Slip/ Skid resistance: Extremely low.
Jointing: In accordance with BS EN 1339.
 - Joint widths: 10mm joints;Sealer/ Stabilizer: Not required;
Setting out: Stack Bond;
Joints - Dry, 2-3mm widths;

Accessories: As required to complete installation, including but not limited to PCC block paving and dwarf freestanding wall.

315C CONCRETE STEP UNITS TO GARDEN STEP DETAIL

- Standard: To BS EN 1339.
 - Manufacturer: Hardscapes . Web: enq@hardscape.co.uk
Tel: +44 (0)1204 565 500
Product reference: Kellen Elementale Step Unit 20 Prefab.
- Colour: Standard Light Grey
 - Finish: As cast.
 - Nominal sizes: 2000mm l x 400mm w x 200 mm h.
- Bedding layer: 30mm depth mortar bedding
Accessories: As required to complete installation.

EXECUTION

610 MATERIAL SAMPLES

- Samples representative of colour and appearance of designated materials: Submit before placing orders.
 - Designated materials: Flag Paving.

620 ADVERSE WEATHER

- General:
 - Temperature: Do not lay or joint paving if the temperature is below 3°C on a falling thermometer or below 1°C on a rising thermometer.
 - Frozen materials: Do not use. Do not lay bedding on frozen or frost covered bases.
- Paving with mortar joints and/ or bedding:
 - Protect from frost damage, rapid drying out and saturation until mortar has hardened.
- Paving laid and jointed in sand:
 - Stockpiled bedding sand: Protect from saturation.
 - Exposed areas of sand bedding and uncompacted areas of sand bedded paving: Protect from heavy rainfall.
 - Saturated sand bedding: Remove and replace, or allow to dry before proceeding.
 - Laying dry-sand jointed paving in damp conditions: Brush in as much jointing sand as possible. Minimize site traffic over paving. As soon as paving is dry, top up joints and complete compaction.

625 LAYING PAVINGS - GENERAL

- Appearance: Smooth and even with regular joints and accurate to line, level and profile.
- Falls: To prevent ponding.
- Bedding of paving units: Firm so that rocking or subsidence does not occur or develop.

- Bedding/ Laying course: Consistently and accurately graded, spread and compacted to produce uniform thickness and support for paving units.
- Slopes: Lay paving units upwards from the bottom of slopes.
- Paving units: Free of mortar and sand stains.
- Cutting: Cut units cleanly and accurately, without spalling, to give neat junctions with edgings and adjoining finishes.

630 LEVELS OF PAVING

- Permissible deviation from specified levels:
 - Generally: ± 6 mm.
- Height of finished paving above features:
 - At gullies: +6 to +10 mm.
 - At drainage channels and kerbs: +3 to +6 mm.

637 REGULARITY OF PAVED SURFACES

- Maximum undulations in the surface of pavings (except tactile paving surfaces) under a 1 m straight edge placed anywhere on the surface (where appropriate in relation to the geometry of the surface): 3 mm.
- Joints between paving units or utility access covers:
 - Joints flush with the surface: difference in level between adjacent units to be no more than twice the joint width (with a 5 mm max difference in level).
 - Recessed, filled joints: difference in level between adjacent units to be no greater than 2 mm; the recess to be no deeper than 5 mm.
 - Unfilled joints: difference in level between adjacent units to be no greater than 2 mm.
- Sudden irregularities: Not permitted.

640 COLOUR BANDING

- General: Unless premixed by manufacturer, select from at least 5 separate packs in rotation to avoid colour banding.

645 PROTECTION

- Cleanliness: Keep paving clean and free from mortar droppings, oil and other materials likely to cause staining.
- Materials storage: Do not overload pavings with stacks of materials.
- Handling: Do not damage paving unit corners, arrises, or previously laid paving.
- Mortar bedded pavings: Keep free from traffic after laying:
 - Pedestrian traffic (minimum): 7 days.
 - Vehicular traffic (minimum): 28 days.
- Access: Restrict access to paved areas to prevent damage from site traffic and plant.

650 CEMENTITIOUS BASES AND SUB-BASES

- General: Protect from moisture loss, if not covered by another pavement course within 2 hours of completion.

655 CONDITION OF SUB-BASES/ BASES BEFORE SPREADING LAYING COURSE

- Trenches and excavation of soft or loose spots in subgrade: Fill and thoroughly compact.
- Granular surfaces: Lay and compact so as to be sound, clean, smooth and close-textured enough to prevent migration of bedding/ laying course materials into the sub-base during compaction and use, free from movement under compaction plant and free from compaction ridges, cracks and loose material.
- Prepared existing and new bound bases (roadbases): Sound, clean, free from rutting or major cracking. Remove sharp stones, projections and debris.
- Sub-base/ Roadbase level tolerances: To BS 7533-7, Annex A.
- Levels and falls: Accurate and within the specified tolerances.
- Drainage outlets: Within 0-10 mm of the required finished level.
- Features in sand bedded paving (including mortar bedded restraints and drainage ironwork): Complete to required levels; adequately bed and haunch in mortar.
- Sub-bases containing cement/ hydraulic binder: Cure for minimum times specified in BS 7533-4.

COMPLETION

915 COMPLETION OF PAVING WITH DRY SAND OR FINE AGGREGATE FILLED JOINTS

- Sand dressing: Leave a thin layer of dry jointing sand over the paving, sweep clean before practical completion.
- Final compaction of the surface course: In accordance with BS 7533-3.
- Vacuum cleaning machines: Not allowed.

Q28

Topsoil and soil ameliorants

Q28 Topsoil and soil ameliorants

To be read with Preliminaries/ General conditions.

SYSTEM OUTLINE

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.

315A IMPORTED TOPSOIL TO BS 3882 FOR TREE PITS

2015

- Quantity: Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.
 - Standard: To BS 3882:2015.
 - Classification: Multipurpose.
 - Soil textural class to BS 3882, Figure 1: Sandy loam.
 - Source: Contractor's choice.
 - Product reference: Topsoil to BS3882:2015.
- Requirements for all tree pit areas: Topsoil/ compost mix to be imported topsoil mixed with 20%planting compost, 600g/m³ bonemeal and fertiliser spread and firmed down in layers not exceeding 150mm to depths shown.
- All tree pits area to have a 300mm depth topsoil.
- Contractor to test topsoil batch and send a current certificate for client approval, before delivery on site.

315B IMPORTED TOPSOIL TO BS 3882 FOR 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 loam.
- Source: Contractor's choice.
 - Product reference: Topsoil to BS3882: 2015.
Requirements for all planting beds: 250mm depth topsoil
Contractor to test topsoil batch and provide a current certificate for client approval, before delivery on site.

315C IMPORTED TOPSOIL TO BS 3882 FOR TURFING

- 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 loam.
- Source: Contractor's choice.
 - Product reference: Topsoil to BS3882: 2015.
Requirements for all turf areas: 150mm depth topsoil, to sit under the turf layer.
Contractor to test topsoil batch and provide a current certificate for client approval, before delivery on site.

335A IMPORTED MANUFACTURED TOPSOIL, CUSTOM MIX FOR TREE PITS

- Quantity: Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.
- Source: Contractor's choice.
 - Product reference: Topsoil to BS: 3882:2015 to Contractor's choice.
- Soil textural class: Sandy loam.
- Reaction, to BS 1377-3: pH 5.0-6.4.
- Organic matter to PD CR 13456: Minimum 20%.
- Nutrient content: Minimum index values for nitrogen, phosphorus, potassium and magnesium to be as for BS 3882 multipurpose topsoil.
- Crumb structure: Made up of discernible crumbs.
- Stone size in any dimension (maximum): 20 mm.

EXECUTION

610 TOPSOIL ANALYSIS

- Soil to be analysed: Imported topsoil.
- Soil analyst: to be checked with groundwork risk and remediation team for approval.
- Samples: Collect in accordance with BS 3882.
- Submit:
 - Declaration of analysis: In accordance with BS 3882, clause 6 and Table 1.

- Additional analysis: as required, following groundcover report recommendations.
- Report detailing soil analyst's recommendations.

615 TESTING OF MATERIALS

- Material to be analysed: Imported soils.
- Laboratory: Contractor's choice.
- Samples: Collect in accordance with BS 3882:2015.
- Submit:
 - Declaration of analysis: pH value, chemical value, nutrient content.
 - Report detailing analyst's recommendations.

620 IMPORTING TOPSOIL

- Give notice: Before stripping topsoil for transfer to site.
 - Notice period: 7 days.

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: 14 days.

650 NOTICE

- Give notice before:
 - Setting out.
 - Spreading topsoil.
 - Applying herbicide.
 - Applying fertilizer.
 - Visiting site during maintenance period.
- Period of notice: 2 weeks.

655 MECHANICAL TOOLS

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

665 SUBSOIL SURFACE PREPARATION FOR ORNAMENTAL PLANTING BEDS and AMENITY PLANTING 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: 150 mm depth free draining subsoil.
 - Stiff clay and cohesive subsoils: 300 mm depth free draining subsoil.
 - 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 100 mm.
- Remove from site: Arisings, contaminants and debris.

665A SUBSOIL SURFACE PREPARATION FOR TREE PITS

- 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 non-cohesive subsoils: 450 mm depth draining topsoil.
 - 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 100 mm.
- Remove from site: Arisings, contaminants and debris.

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 3.2mm .

710 SPREADING TOPSOIL ON AMENITY PLANTING AREAS, TREE PIT AREAS AND TURF AREAS

- 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 for turf areas, 250mm for ground cover planting areas and 300mm for tree pit areas.
- 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.

720A FINISHED LEVELS OF TOPSOIL AFTER SETTLEMENT

- In relation to adjoining paving, kerbs or hard surfaces: 25 mm above .
- In relation to adjacent grass areas: 25 mm above.
- 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.

COMPLETION

920A APPLYING MULCH

- Timing: At end of the maintenance period.
- Watering: Ensure that soil is thoroughly moistened prior to mulching, applying water where necessary.
- Planting beds: Re-mulch.
 - Depth (minimum): 50 mm.
- Trees: Remulch.
 - Depth (minimum): 75 mm.
- Container planting: Remulch.
 - Depth (minimum): 50 mm.

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.

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 weeks.

170 SETTING OUT

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

PREPARATION

250A SOIL REQUIREMENTS

- Type:
 - Turfed areas: Mulching and top dressing system, as section Q28.

TURFING

400A CULTIVATED TURF FOR ALL GRASSED AREAS

- Supplier: Rolawn.
 - Product reference: Rolawn Medallion Turf. Standard size: 1m2.
- Properties of soil used for turf production: Peat-free, 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: 2 weeks.

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: None.
- Watering: Thoroughly water completed turf immediately after laying. Check that water has penetrated into the soil below.

440A TURFING ON BANKS EXCEEDING 30° SLOPE

- Turf configuration: Diagonal or horizontal.
- Securing turfs:
 - Fixings: Galvanized wire pins, bent or hairpin pattern, 200 mm long x 4 mm diameter.
 - Frequency of fixings: Every fourth row.
- Removal of fixings: Before access is allowed to avoid possible injury, usually at the same time as the protective fencing.

450A TRIMMING TURF

- Newly planted tree pits: Neatly cut away around individual trees.
 - Diameter: minimum 800 mm diameter should be exposed around each tree..
 - Tree pit surface: Leave exposed.

PROTECTING/CUTTING

510 PROTECTIVE FENCING

- Fencing type: Chestnut pale fencing to BS 1722-4.
 - 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: 50 mm.
- Preparation:
 - Debris and litter: Remove.
 - Stones and earth clods larger than 25 mm in any dimension: Remove
- Height of first cut: 50 mm.
- Mower type: Contractor's choice.
- Arisings: Remove from site.

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 reseeding/ returfing.
- Timing of making good: The next suitable planting season.

620A 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 35 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: When rainfall is low and there is a need for watering. When instructed. Watering to be increased during warm season as needed.
Contractor to keep a record of watering times and submit for client's information.

Q31

External planting

Q31 External planting

To be read with Preliminaries/General conditions.

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 100 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: Remove remnants of old fence posts and mesh.

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.

146 WATERING

- Quantity: Wet full depth of topsoil.
- Application: Even and without damaging or displacing plants or soil.
- Frequency: As maintenance schedule.

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 weeks.

170 SOIL REQUIREMENTS

- Type
 - Planted beds: Planting bed soil system, as section Q28.
 - Tree pits, shrub pits and other backfilling: Plant pit backfilling soil system, as section Q28.
 - External container planting: Container planting growing media system, as section Q28.
 - Mulch applied after planting: 75mm.

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 relevant parts of BS 3936.
 - Species: True to name.
 - Origin/ Provenance: British provenance.
- 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).

216A PLANTS/ TREES - SPECIFICATION CRITERIA

- Name, forms, dimensions and other criteria: To the relevant part of BS 3936.
As per soft schedules and as indicated on drawing 70044279-WSP-DR-L002

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;
 - Date supplied and consignment details or reference;
 - Impact of pest/ disease;
 - Name or designation of rootstock of budded or grafted plants;
 - Potting dates; and
- Propagation method and dates.

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 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: may alternatively use pallets or ins 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.

PLANT CONTAINERS

PREPARATION OF PLANTING BEDS/ PLANTING MATERIALS

300 HERBICIDE TO CLEAR OVERGROWN BEDS

- Locations: Whole site.
- Type: Suitable for supressing perennial weeds.
- Timing: Allow fallow period before cultivation.
 - Duration (minimum): As manufacturer's recommendation.

305A WEED CONTROL OF HERBACEOUS PERENNIALS AND GRASSES

- Locations: As drawing 700244279-WSP-DR-L-002.
- General: Prevent weeds from seeding and perennial weeds from becoming established, by contractor's choice of herbicide.

PLANTING SHRUBS/ HERBACEOUS PLANTS/ BULBS

401A REGULAR PLANT LAYOUT TO SHRUB PLANTING

- Spacing: As shown on plant schedule on drawing 70044279-WSP-DR-L002.
- Density: As shown on plant schedule on drawing 70044279-WSP-DR-L002.

401B REGULAR PLANT LAYOUT TO HEDGE PLANTING

- Spacing: As shown on plant schedule on drawing 70044279-WSP-DR-L002.
- Density: As shown on plant schedule - double staggered, spacing between centres at 300mm.

401C REGULAR PLANT LAYOUT TO TREE PLANTING

- Spacing: As shown as drawing 70044279-WSP-DR-L002.

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- Break up to a depth of 150 mm, incorporating 25 g of slow release fertilizer per planting pit.

420A CLIMBING PLANTS

- Planting: 150 mm clear of supporting structure (e.g. wall/ fence) with roots spread outward.
 - Branches: Lightly secured to supports.
- Climber supports: Trellis system. Product reference: Metal Trellis.
 - Base height: Ground level - height of the lowest extent of the support.
 - Distance from wall: as shown on drawing on 70044279-WSP-DR-L-002.
- Fixings: Stainless steel screw eyes.
 - Centres: 2.5 m.

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.

PLANTING TREES

500 TREE PLANTING

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

505 TREE PITS

- Sizes: 10-12cm girth trees - as schedule on drawing 70044279-WSP-DR-L-002.
- 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 150 mm.
 - Treatment: Not required.

- Pit sides: Scarify.
- Backfilling material: Topsoil, as section Q28.

535 TREE STAKES

- Stakes: Softwood, turned timber chestnut, larch or oak, straight, free from projections and large or edge knots and with pointed lower end.
 - Preservative treatment: Not required.
- Stake size (minimum): 50 mm diameter.
- Stake length (minimum): 1500 mm.

540 SINGLE ANGLED STAKING FOR CLEAR STEM TREES

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

550 DOUBLE STAKING FOR MULTI STEM TREES

- Staking:
 - Position: Either side of tree position and perpendicular to wind direction.
 - Driving: Vertically at least 300 mm into bottom of pit before planting.
 - Backfilling: Consolidate material around stake.
 - Firming: Sufficiently firm to prevent movement of the root ball/ rootstock.
- Height of stakes: Cut off at approximately one third of the height of the clear stem of tree.
- Horizontal bracing: Flexible webbing.
 - Fixing: Firmly fix using nails on windward side of tree and as close as possible to the stem without contacting the bark. Position cross bar horizontally and 25 mm from top of stakes.
- Ties: Adjustable.
- Tying: Secure rubber belting around tree stem firmly without causing constriction or chafing.
- Nails for fixing ties, belts and webbing: To BS 1202-1, galvanized, minimum 25 mm long and with 10 mm diameter heads.
- Nails for fixing cross bars: To BS 1202-1, galvanized round wire, minimum 75 mm long and 3.75 mm gauge.

PROTECTING/ MAINTAINING/ MAKING GOOD DEFECTS

710 MAINTENANCE

- Duration: Carry out the operations in the following clauses from completion of planting until Practical Completion.
- Frequency of maintenance visits: When instructed.

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: By 31 December of the year in which the defect is identified.

730 PROTECTIVE FENCING

- Fencing type: Cleft chestnut pale fencing, as section Q40.
- Erection: On completion of planting.
- Removal: By others.

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 hoeing.
- 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: As schedule.
- Watering: As required for healthy establishment, depending on weather conditions.

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.

780 MAINTENANCE INSTRUCTIONS

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

790 FINAL MULCHING

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

Q35

Landscape maintenance

Q35 Landscape maintenance

To be read with Preliminaries/ General Conditions.

GENERALLY

105 MAINTENANCE OBJECTIVES

- Location: site within red line boundary.
 - Duration: 5 years.
- Aims: Enhanced landscape quality and Improved landscape visual amenity.
- Restrictions: As described in the landscape maintenance plan.
- Results: Create and maintain an attractive residential environment, which is sympathetic to the character of the setting and architectural context, to provide a safe and secure external space for communal residential use.

110 NOTICE

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

130 REINSTATEMENT

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

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 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.

175 DISPOSAL OF ARISING

- General: Unless specified otherwise, dispose of arisings as follows: remove from site.

180 CHIPPING OR SHREDDING

- General: Not permitted on site.

181 MECHANICAL EQUIPMENT

- General: Minimize.
- Prohibited equipment: Chippers.
- Timing: use of mechanical equipment is not permitted outside the hours of 07:30 to 17:30 Monday to Friday, and 07:30 and 13:00 Saturday to avoid unnecessary disturbance to neighbouring residents.

190 LITTER

- Extraneous rubbish not arising from the contract work: Collect and 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.

211 MAINTENANCE OF GRASSED AREAS

- Standard: To BS 7370-3. Carry out maintenance appropriate to each category of turf, as follows:

- Objectives: To BS 7370-3, table 6.
- Programme: To BS 7370-3, clause 11.
- Mowing methods: To BS 7370-3, table 3.

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.

226 TREE STEMS

- Precautions: Do not allow nylon filament rotary cutters and other mechanical tools closer than 100 mm to the stem of any tree.
 - Operations close to stems: Complete using hand tools.

270 MOWING ROUGH GRASSED AREAS

- Grass height: Maintain between 25 and 50 mm.
- Arisings: Remove.

300 SCARIFYING

- Location: Ornamental lawns.
- Timing: February or March, before first cut.
- Operations: Relieve thatch conditions and remove dead grass.
- Depth (maximum): 15 mm into soil.
- Arisings: Remove.

310 RE-FORMING GRASS EDGES

- Location: Path edges and Planting bed edges.
- Edges: Draw back soil and re-form edges to clean straight lines or smooth flowing curves, sloping slightly back from vertical.

320 LEVELLING HOLLOWES AND BUMPS IN TURF

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

345 CONTROL OF JAPANESE KNOTWEED

- Operations: Spot treat in June and September during suitable weather conditions and when plants are growing vigorously.
- Herbicide: In accordance with the Environment Agency 'Managing Japanese knotweed on development sites. The knotweed code of practice'.

- Application: In accordance with the Environment Agency 'Managing Japanese knotweed on development sites. The knotweed code of practice'.
- Arisings: In accordance with the Environment Agency 'Managing Japanese knotweed on development sites. The knotweed code of practice'.

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 40 mm.
- Preparation: Cultivate substrate to a fine tilth.
- Reinstatement: Contractor's choice of re-turfing or topsoiling and reseeding:
 - Re-turfing: 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.

381 REINSTATEMENT OF WORN OR DAMAGED LAWNS

- Worn or damaged areas: Make good by re-turfing or reseeding:
 - Re-turfing standard: To BS 7370-3, Clause 12.2.
 - Reseeding standard: To BS 7370-3, Clause 12.6.
- Turf or seed: To match existing in appearance and quality.
- Protection and watering: Provide as necessary to promote successful germination and/ or establishment.

FLOWER BEDS/ SEASONAL BEDDINGS

460 BEDS OF PERENNIALS OR PERENNIALS AND ANNUALS

- Plant supports: Stake and tie plants using pea sticks.
 - Length: 400 mm.
 - 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 fertilizer at a rate of 60 g/m².

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: Two full growing seasons from the date of planting.
- Weed control:
 - Method: Keep planting beds clear of weeds by use of suitable 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: As schedule and when instructed.

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: 250 g per feathered, standard or larger tree.

510 TREE STAKES AND TIES

- Inspection/ Maintenance times: As schedules and immediately after strong winds.
- 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, re-fix 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: During spring when no longer required to support tree.
 - Fill stake holes with lightly compacted soil.

520 REFIRMING OF TREES AND SHRUBS

- Timing: After strong winds, frost heave and other disturbances.
- Re-firming: 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 re-firm.

525 TREE GUARDS

- Loose or defective guards: Adjust, re-fix or replace to original specification and to prevent chafing.

530 TREE SHELTERS

- Loose or defective shelters: Adjust, re-fix or replace to original specification and to prevent chafing.
- Removal: 2 years after planting.

537 NESTING WILD BIRDS

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

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.

545 PRUNING OF EXCESSIVE OVERHANG

- Timing: As instructed.
- Operations: Remove growth encroaching onto grassed areas, paths, roads, signs, sightlines and road lighting luminaires.
- Special requirements: Allow ground cover plants to partially overlap paths and lawns.

550 PRUNING OF EXCESSIVE HEIGHT

- Timing: As instructed.

Operations: Remove excessive height Above 12 m.

555 PRUNING TREES AND SHRUBS

- Standard: To BS 7370-4.
- Special requirements: Growth retardants not permitted.

570 FORMATIVE PRUNING OF YOUNG TREES

- Standard: Type and timing of pruning operations to suit the plant species.
- 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: Approved specialist contractor.

575 PRUNING ORNAMENTAL SHRUBS

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

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.
 - Form: Trim back lateral branches moderately.

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.

625 CLIMBING PLANTS

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

630 DEAD AND DISEASED PLANTS

- Removal: As soon as possible.
- Replacement: In the next scheduled round of replacement planting.

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: 70 g/m².

640 THINNING BY REMOVAL OF SURPLUS PLANTS

- Plants to be thinned: Shrub beds.
- Standard: BS 7370-4.
- Timing: When foliage of adjacent plants has begun to touch.
- Roots:
 - Disturbance to adjacent plants: Minimise.
 - Soil: Refill holes with topsoil to leave an even graded surface.
 - Mulch: Maintain mulch as original specification.
 - Adjacent plants: Make good any minor damage immediately.
- Plants for retention: Select plants with a strong healthy habit.
- Mature planting density: As schedule on drawing 70044279-WSP-DR-L-002

645 WEED CONTROL GENERALLY

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

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.

655 WEED CUTTING BY HAND OR MACHINE

- Undesirable grass, brambles and herbaceous growth: Cut down cleanly to a maximum height of 75 mm.
- Herbicides: Give notice before use.

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 dead weeds.

670 WEED CONTROL WITH SUMMER HERBICIDE

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

675 DIGGING OVER

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

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: Every 6 weeks.
- 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: After flowering.
- Type of fertilizer: Slow release.
- Application: Spread evenly.

- Rate: 60 g/m².

700 SNOW REMOVAL FROM SHRUBS/ TREES

- Standard: To BS 7370-4.
- Plants subject to snow removal: All evergreens.
- Timing: When instructed.

705 WINTER LEAF REMOVAL

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

TREE WORK

810 TREE WORK GENERALLY

- Identification: Before starting work agree which trees, shrubs and hedges are to be removed or pruned.
- Protection: As section A34.
- Standards: To BS 3998 and Health & Safety Executive (HSE) 'Forestry and arboriculture safety leaflets'.
- Removing branches: Cut vertical branches similarly, with no more slope on the cut surface than is necessary to shed rainwater.
- Appearance: Leave trees with a well-balanced natural appearance.
- Chain saw work: Operatives must hold a Certificate of Competence.
- Tree work: To be carried out by an approved member of the Arboricultural Association.

815 ADDITIONAL WORK

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

820 PREVENTION OF WOUND BLEEDING

- Standard: To BS 3998.

825 PREVENTION OF DISEASE TRANSMISSION

- Standard: To BS 3998.

830 CLEANING OUT AND DEADWOODING

- Remove:
 - Dead, dying, or diseased wood, broken branches and stubs.
 - Fungal growths and fruiting bodies.
 - Rubbish, wind-blown or accumulated in branch forks.
 - Wires, clamps, boards and metal objects, if removable without causing further damage and not part of a support structure that is to be retained.

- Other unwanted objects, e.g. tree houses, swings.
- Climbing plants Removal may be appropriate to facilitate proper inspection or if they have filled the crown of a tree, unacceptably increasing its wind resistance.

835 CUTTING AND PRUNING GENERALLY

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

840 CROWN REDUCTION/ SHAPING

- General: Cut back selectively to lateral or sub lateral buds or branches to retain flowing branch lines without leaving stumps.
- Operations: Reduce crown by 15%.

845 CROWN LIFTING

- Clearances: Remove branch systems to give clearance.
 - Height: 2.5 m above footpaths.
- Removing branches: Remove whole branches back to the stem, or cut lower portions of branches back to lateral or sub lateral buds or branches. Do not leave stumps.

850 CROWN THINNING

- Removing branches: Remove inward growing, crossing, rubbing, dead and damaged branches.
- Thinning: Selectively remove secondary and small live branch growth evenly throughout the crown.
 - Quantity: 15 %.
- Cutting: Make no cuts of more than 50 mm diameter.
 - Branches: Cut back to lateral or sub lateral buds or branches without leaving stumps.
- Appearance: Leave a uniform and well-balanced structure of branches and foliage.

855 CUTTING TREE ROOTS

- Excavating: Use hand tools only.
- Protected area: Do not cut roots within an area which is the larger of:
 - The branch spread of the tree.
 - An area with a radius of half the tree's height, measured from the trunk.
- Outside protected area: Give notice of roots exceeding 50 mm in diameter. Do not cut without approval.
- Cutting:
 - Cutting: Make clean smooth cuts with a hand saw.
 - Wounds: Minimize. Avoid ragged edges.
 - Finishing: Pare cut surfaces smooth with a sharp knife.
- Backfilling:
 - Protection: Cover cut roots with clean sharp sand.
 - Material: Backfill with original topsoil.

860 REMOVING TREES, SHRUBS AND HEDGES

- Standards: To BS 3998 and Health & Safety Executive (HSE)/ Arboricultural and Forestry Advisory Group Safety Leaflets.
- Existing services: Check for below and above ground services. Give notice if they may be affected.
- Shrubs and smaller trees: Cut down and grub up roots.
- Tree stumps:
 - Treatment: Cut as close to ground as possible and kill by applying a suitable herbicide into drilled holes immediately after felling.
 - Removal by winching: Give notice. Do not use other trees as supports or anchors.
- Protection: Avoid damage to neighbouring trees, plants and property.
- Work near retained trees: Where tree canopies overlap and in confined spaces generally, take down trees carefully in small sections to avoid damage to adjacent trees that are to be retained.
- Filling holes:
 - Material: Use as-dug material and/ or imported soil as required.
 - Finishing: Consolidate and grade to marry in with surrounding ground level.

865 BARK DAMAGE

- Wounds:
 - Do not attempt to stop sap bleeding.
 - Bark: Remove ragged edges using a sharp knife.
 - Wood: Remove splintered wood from deep wounds.
 - Size: Keep wounds as small as possible.
- Liquid or flux oozing from apparently healthy bark: Give notice.

870 CAVITIES IN TREES

- Investigation: Remove rubbish and rotten wood. Probe the cavity to find the extent of any decay, and give notice.

- Water filled cavities: Do not drain.
- Sound wood inside cavities: Do not remove.
- Cavity openings: Cover, as scheduled, with galvanized wire mesh, lightly secured.

HARD LANDSCAPE AREAS/FENCING

900 SNOW CLEARANCE

- Clearance: On reaching a depth of 5 mm.
- De-icing: To footpaths.
 - Material: Rock salt to BS 3247.
 - Timing: When freezing precipitation is forecast.
 - Application rate: Spread evenly at a rate of 10 g/m².

910 HARD SURFACES AND GRAVEL AREAS

- Herbicide: Apply a suitable foliar acting or residual herbicide. Allow recommended period for herbicide to take effect before clearing arisings.
- Hard surfaces: Remove litter, leaves and other debris.
- Surface gutters and channels: Remove mud, silt and debris.
- Drainage gullies: Empty traps and flush clean.
- Gravel areas: Rake over. Remove weeds, litter, leaves and debris, and level off.
- Repairs to flexible bituminous pavings: In accordance with the original paving specification or BS 7370-2, clause 4.12.
- Stain removal: In accordance with BS 7370-2, table 4.

920 FENCING

- Fences: Inspect and repair to maintain protection against intruders.

930 GRAFFITI REMOVAL

- Method: Air abrasion.
- Subsequent treatment: Transparent, two-part, anti-graffiti coating.
 - Finish: Matt.

Q40

Fencing

Q40 Fencing

To be read with Preliminaries/ General conditions.

FENCING SYSTEMS

220A METAL TRELLIS SUPPORT STRUCTURE FOR CLIMBERS

- Manufacturer: Jacksons Fencing.
Web: www.jacksons-fencing.co.uk
Tel: +44(0)8004082234
 - Product reference: Trellis System
- Height: 1800mm. Width: 700mm
- Material: Metal panel to be fixed onto existing brick wall.
Fixings clamped and fitted to walls in 6 positions.
Fixings: Fix mesh/ clips to existing wall, using angle fixing brackets (6 per panel) and m5 x 25 bolts and nuts.

Method: to be assembled loosely before attaching to the mesh panel.
- Conformity: Submit manufacturer's and installer's certificates, to BS 1722-8.

250A PREFABRICATED WOOD PANEL FENCING - VENETIAN FENCING, ON TOP OF WALL

- Manufacturer: Jacksons Fencing.
Website: www.jacksons-fencing.co.uk
Tel: +44 (0)1233 750393
 - Product reference: Venetian Hit and Miss Panel.
- Standard: To BS 1722-11.
- Type of infill: Horizontal slats 607mm long.
 - Finish: Nominal planed finish.
- Height: 1830mm.
Accessories for panels: capping rails and posts.
Capping rails: for use with intermediate slotted slots 1880mm x 120mm x 20mm planed finished size jakcured.
To be secured with galvanised 'shank' nails.
- Posts: Wood . Products: - Slotted Fence Posts for post in between panels
- Slotted Fence End Posts - for securing edge of panels
Manufacturer: Jacksons Fencing
 - Size: 100mm x 100mm
 - Finish: Nominal planed finish with two 54mm x 25mm slots for fence panels.
- Method of setting posts:
 - Posts to be inset to 1200mm high brick wall - refer to architects for wall detail.
 - Concrete depth: Filled to not less than half the hole depth.

Conformity: Submit manufacturer's and installer's certificates, to BS 1722-11.

Matching Gate: Venetian gate - as per detail 70044279-WSP-DR-L302.

Product: Venetian Gate

Manufacturer: Jacksons Fencing.

Dimensions: 1780mm high, 1000mm wide.

Matching Venetian Panels.

Right Hand hanging.

Accessories: sliding bolt mechanism and padlock. To contractor's choice.

GATES, POSTS AND STILES

550A SLOTTED FENCE POSTS FOR INTERLOCKING PANELS - VENETIAN FENCING

- Manufacturer: Jacksons Fencing.
Website: www.jacksons-fencing.co.uk
Tel: +44 (0)1233 750393
- Standard: To BS 5709.
 - Material: Timber
- Size: 100mm x 100mm
 - Finish: [Nominal planed finish with two 54mm x 25mm slots for fence panels].
Treatment: As section Z12 and Wood Protection Association Commodity Specification C3.
- Adhesive: Synthetic resin to BS EN 301, type 1.
- Workmanship: As section Z10.
- Method of fixing: onto a 1200mm brick wall - to architects detail.
Fixing: - Posts to be inset to 1200mm high brick wall - refer to architects for wall detail.
 - a heavy duty galvanized L type support, 90mm x 90mm x 40mm wide/ 3 mm thick.As per detail venetian fence and wall - drawing 700044279-WSP-DR-L-303.
- Accessories: 8mm diameter 200mm long galvanised chemical anchor bolts - to secure the bolts into the wall.

550B SLOTTED FENCE END POSTS FOR END PANEL - VENETIAN FENCING

- Manufacturer: [Jacksons Fencing].
Website: www.jacksons-fencing.co.uk
Tel: +44 (0)1233 750393
Standard: To BS 5709.
 - Material: Timber
 - Size: 100mm x 100mm
 - Finish: [Nominal planed finish with two 54mm x 25mm slots for fence panels].
Treatment: As section Z12 and Wood Protection Association Commodity Specification C3.
- Adhesive: Synthetic resin to BS EN 301, type 1.
- Workmanship: As section Z10.

Method of fixing: [onto a 1200mm brick wall - to architects detail].

Fixing: - Posts to be inset to 1200mm high brick wall - refer to architects for wall detail.

- a heavy duty galvanized U type fence post foot, support and anchor (3mm thick).

With 6 side holes of 6mm each and 2 base holes of 8mm each.

As per detail venetian fence and wall - drawing 700044279-WSP-DR-L-303.

Accessories: [8mm diameter 200mm long galvanised chemical anchor bolts - to secure the bolts into the wall].

ACCESSORIES

635 GATE OPENERS - MAIN ENTRANCE GATE

- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Type: Sliding.
- Mechanism: Contractor's choice.
- Number of transmitters: Three.
- Accessories: Manual release.

EXECUTION

710 INSTALLATION GENERALLY

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

715A COMPETENCE

- Operatives: Contractors must employ competent operatives.
- Qualifications: Submit certification of training.
 - NHSS Sector Scheme 2A sub categories: (a).

720 SETTING POSTS IN CONCRETE

- Standard: To BS 8500-2.
- Mix: Designated concrete not less than GEN1 or Standard prescribed concrete not less than ST2.
- Alternative mix for small quantities: 50 kg Portland cement to 150 kg fine aggregate to 250 kg 20 mm nominal maximum size coarse aggregate, medium workability.
- Admixtures: Do not use.
- Holes: Excavate neatly and with vertical sides.
- Filling: Position post/ strut and fill hole with concrete to not less than the specified depth, well rammed as filling proceeds and consolidated.

- Backfilling of holes not completely filled with concrete: Excavated material, well rammed and consolidated.

730 EXPOSED CONCRETE FOUNDATIONS

- Filling: Compact until air bubbles cease to appear on the upper surface.
- Finishing: Weathered to shed water and trowelled smooth.

740 SETTING POSTS IN EARTH

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

750 DRIVEN POSTS

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

760 NAILED WOOD RAILS

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

770 SITE CUTTING OF WOOD

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

780 MAKING GOOD GALVANIZED SURFACES

- Treatment of minor damage (including on fasteners and fittings): Low melting point zinc alloy repair rods or powders made for this purpose, or at least two coats of zinc-rich paint to BS 4652.
- Thickness: Apply sufficient material to provide a zinc coating at least equal in thickness to the original layer.

790 SITE PAINTING

- Timing: Prepare surfaces and apply finishes as soon as possible after fixing.

COMPLETION

910 CLEANING

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

920 FIXINGS

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

930 GATES

- Hinges, latches and closers: Adjust to provide smooth operation. Lubricate where necessary.
 - Timing: Before handover.

Q50

Site/street furniture/equipment

Q50 Site/street furniture/equipment

To be read with Preliminaries/ General conditions.

SITE AND STREET FURNITURE

220A BENCH SEAT DAE

- Manufacturer: Public Spaces.web: publicspaces.eu
Product reference: Montseny Seat DAE.
- Material: painted cast iron; coated Iroko wood.
 - Finish: Polyester powder coated as section Z31.
 - Colour: RAL black 9005.
- Size: 1500mm l x 575mm w x 830mm h.
- Accessories/ Special requirements: stainless steel screws and nuts.
- Method of fixing: Anchored to ground with blind anchor bolts.

INSTALLATION

510 CONCRETE FOUNDATIONS GENERALLY

- Standard: To BS 8500-2.
- Concrete: to Engineers' specification.
- Admixtures: Do not use.
- Foundation holes: Neat vertical sides.
- Depth of foundations, bedding, haunching: Appropriate to provide adequate support and to receive overlying soft landscape or paving finishes.

515A SETTING COMPONENTS IN CONCRETE

- Components: Accurately positioned and securely supported.
- Concrete fill: Fully compacted as filling proceeds.
- Concrete foundations exposed to view: Compacted until air bubbles cease to appear on the upper surface, then weathered to shed water and trowelled smooth.
- Temporary component support: Maintain undisturbed for minimum 48 hours.

545 ERECTION OF TIMBER AND PREFABRICATED STRUCTURES

- Checking: 5 days (minimum) before proposed erection date, check foundations, holding down bolts, etc.
- Inaccuracies or defects in prepared bases or supplied structures: Report immediately. Obtain instructions before proceeding.

550 DAMAGE TO GALVANIZED SURFACES

- Minor damage in areas up to 40 mm² (including on fixings and fittings): Make good.
 - Material: Low melting point zinc alloy repair rods or powders made for this purpose or at least two coats of zinc-rich paint to BS 4652.

- Thickness: Sufficient to provide a zinc coating at least equal to the original layer.

560 SITE PAINTING

- Timing: Prepare surfaces and apply finishes as soon as possible after fixing.



4th Floor
6 Devonshire Square
London
EC2M 4YE

wsp.com

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