Howard Lewis Playground

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D20 Excavating and filling

To be read with Preliminaries/General conditions

GENERALLY/THE SITE

145 VARIATIONS IN GROUND WATER LEVEL

• Give notice: If levels encountered are significantly different from levels in the site investigation report or previously measured.

150 EXISTING SERVICES, FEATURES AND STRUCTURES

- Services: See section A12 for locations.
- Site features to be retained: See section A12 for details.
- Structures: See section A34 for details of protection.

CLEARANCE/EXCAVATING

164 TREE ROOTS

- Protected area: Do not cut roots within precautionary protection area.
 - Size of area: Branch spread of the tree.
- Excavation in protected area:
 - Method: By hand.
 - Backfill as soon as possible or temporarily line with polyethylene sheet to reduce evaporation.
- Outside protected area: Give notice of roots exceeding 25 mm and do not cut without approval.
- · Cutting:
 - Make clean smooth cuts with no ragged edges.
 - Pare cut surfaces smooth with a sharp knife.
 - Treatment of cut roots: Not required.
- Backfill: As dug material, enriched with phosphate fertilizer.

168 SITE CLEARANCE

- Timing: Before topsoil stripping, if any.
- General: Clear site of rubbish, debris and vegetation. Do not compact topsoil.
- Treatment: Apply a suitable non-residual herbicide to areas to receive planting.

170 REMOVING SMALL TREES, SHRUBS, HEDGES AND ROOTS

- · Identification: Clearly mark trees to be removed.
- · Small trees, shrubs and hedges: Cut down
- · Roots: Grub up and dispose of without undue disturbance of soil and adjacent areas
- Safety: Comply with HSE/ Arboriculture and Forestry Advisory Group safety leaflets.

180 CHIPPING AND SHREDDING

• General: Permitted, remove arisings from site.

220 STRIPPING TOPSOIL

- General: Before beginning general excavation or filling, strip topsoil from areas where there will be regrading, buildings, pavings/ roads and other areas shown on drawings.
- · Depth:
 - Remove to an average depth of 150 mm.
 - Give notice where the depth of topsoil is difficult to determine.
- Handling: Handle topsoil for reuse or sale in accordance with clause 225.
- Around trees: Do not remove topsoil from below the spread of trees to be retained.
- Site storage: Keep separate from excavated sub-soil.

225 HANDLING TOPSOIL

- · Standard: To BS 3882.
- · Aggressive weeds:
 - Species: Included in the Weeds Act, section 2 or the appropriate Wildlife and Countryside Act for the relevant jurisdiction.
 - Give notice: Obtain instructions before moving topsoil.
- Contamination: Do not mix topsoil with:
 - Subsoil, stone, hardcore, rubbish or material from demolition work.
 - Other soil or material containing aggressive weeds, sharps, plastics and non soil forming materials and notifiable animal or plant diseases.
 - Oil, fuel, cement or other substances harmful to plant growth.
 - Other classifications of topsoil.
- Multiple handling: Keep to a minimum. Use topsoil immediately after stripping.

250 PERMISSIBLE DEVIATIONS FROM FORMATION LEVELS

- Beneath mass concrete foundations: ±25 mm.
- Beneath ground bearing slabs and r.c. foundations: ±15 mm.
- Embankments and cuttings: ±50 mm.
- Ground abutting external walls: ±50 mm, but such as to ensure that finished level is not less than 150 mm below dpc.

270 FOUNDATIONS GENERALLY

- · Give notice if:
 - A natural bearing formation of undisturbed subsoil is not obtained at the depth shown on the drawings.
 - The formation contains soft or hard spots or highly variable material.

330 UNRECORDED FEATURES

 Give notice: If unrecorded foundations, beds, voids, basements, filling, tanks, pipes, cables, drains, manholes, watercourses, ditches, etc. not shown on the drawings are encountered.

370 UNDERGROUND STRUCTURES IN LANDSCAPE AREAS

- Generally: Remove walls, roads, foundations, disused services, drains, manholes and the like to minimum depth.
- · Minimum depth below finished levels:
 - Grass, ground cover and perennial planting: 500 mm.
 - Shrub planting: 750 mm.
 - Within 2 m of tree planting: 1000 mm.
- Walls and slabs remaining: In every 10 m² of wall or slab, make a drainage hole at least 600 mm diameter.

DISPOSAL OF MATERIALS

410 EXCAVATED TOPSOIL STORAGE

• Storage: Stockpile in temporary storage heaps tbc on site .

441 SURPLUS SUBSOIL

- Excavated material: Stockpile in temporary storage heaps.
- · Retained material: Spread and level surplus subsoil on site.
 - Locations: tbc on site .
 - Protected areas: Do not raise soil level within root spead of trees that are to be retained.
- · Remaining material: Remove from site.

450 WATER

- Generally: Keep all excavations free from water until:
 - Formations are covered.
 - Below ground constructions are completed.
 - Basement structures and retaining walls are able to resist leakage, water pressure and flotation.
- Drainage: Form surfaces of excavations and fill to provide adequate falls.
- Removal of water: Provide temporary drains, sumps and pumping as necessary. Do not pollute watercourses with silt laden water.

M60 Painting/clear finishing

18A SPECIAL COATING LEAD FREE METAL PAINT

- Manufacturer: GB Sport and leisure, sales@gbsportandleisure.co.uk.
 - Product reference: Paint.
- Surfaces: existing metal play equipment.
 - Preparation: Submit method statement.
- Undercoats: As recommended by manufacturer.
 - Number of coats: 1.
- Finishing coats: As recommended by manufacturer.
 - Number of coats: 1.

25 SURFACES NOT TO BE COATED

Moving parts, slide surfaces etc. .

32 PREVIOUSLY COATED SURFACES GENERALLY

- Preparation: In accordance with BS 6150, clause 11.5.
- · Contaminated or hazardous surfaces: Give notice of:
 - Coatings suspected of containing lead.
 - Substrates suspected of containing asbestos or other hazardous materials.
 - Significant rot, corrosion or other degradation of substrates.
- Risk assessment and method statement for hazardous materials: Prepare for operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
- Removing coatings: Do not damage substrate and adjacent surfaces or adversely affect subsequent coatings.
- Loose, flaking or otherwise defective areas: Carefully remove to a firm edge.
- Alkali affected coatings: Completely remove.
- · Retained coatings:
 - Thoroughly clean.
 - Gloss coated surfaces: Provide key.
- Partly removed coatings: Apply additional preparatory coats.
- · Completely stripped surfaces: Prepare as for uncoated surfaces.

39 STEEL PREPARATION

- Corrosion and loose scale: Take back to bare metal.
- · Residual rust: Treat with a proprietary removal solution.
- · Bare metal: Apply primer as soon as possible.

61 COATING GENERALLY

- Application standard: In accordance with BS 6150, clause 9.
- Conditions: Maintain suitable temperature, humidity and air quality.
- Surfaces: Clean and dry at time of application.
- Thinning and intermixing: Not permitted unless recommended by manufacturer.
- Priming coats: Apply as soon as possible on same day as preparation is completed.
- Finish
 - Even, smooth and of uniform colour.
 - Free from brush marks, sags, runs and other defects.
 - Cut in neatly.
- Doors, opening windows and other moving parts: Ease before coating and between coats.

Q20 Granular sub-bases to roads/pavings

To be read with Preliminaries/ General conditions.

110 THICKNESSES OF SUB-BASE/ SUBGRADE IMPROVEMENT LAYERS

- · Thicknesses: See sections:
 - Q22 Coated macadam/asphalt roads/pavings.

130 HERBICIDES

- Type: Contact, non-selective.
- Application: To subgrade of footpath and wet pour surface areas.

140 EXCAVATION OF SUBGRADES

- Final excavation to formation or subformation level: Carry out immediately before compaction of subgrade.
- · Soft spots and voids: Give notice.
- Old drainage and service trenches: Excavate to remove soft or damanged material, then backfill with specified granular sub-base material and compact..
- Wet conditions: Do not excavate or compact when the subgrade may be damaged or destabilized.

145 PREPARATION AND COMPACTION OF SUBGRADES

- Timing: Immediately before placing sub-base.
- Soft or damaged areas: Excavate and replace with sub-base material, compacted in layers 300 mm (maximum) thick.
- Compaction: Thoroughly, by roller or other suitable means, adequate to resist subsidence or deformation of the subgrade during construction and of the completed roads/ pavings when in use. Take particular care to compact fully at intrusions, perimeters and where local excavation and backfilling has taken place.

170 GEOTEXTILE FILTER/ SEPARATOR MEMBRANE BELOW SUB-BASE

- · Manufacturer: Contractor's choice .
 - Product reference: Contractor's choice .
- · Jointing: 300 mm overlap .
- · Protect from:
 - Exposure to light, except during laying (maximum five hours).
 - Contaminants.
 - Materials listed as potentially deleterious by geotextile manufacturer.
 - Damage, until fully covered by fill.
 - Wind uplift, by laying not more than 15 m before covering with fill.
- · Preparation: Remove humps and sharp projections and fill hollows before laying.

210 HIGHWAYS AGENCY TYPE 1 UNBOUND MIXTURE FOR SUB-BASE

- Material: Type 1 unbound mixture to Highways Agency 'Specification for highway works', clauses 801 and 803.
 - Recycled aggregate: Permitted.

230 PLACING GRANULAR MATERIAL GENERALLY

- Preparation: Loose soil, rubbish and standing water removed.
- Structures, membranes and buried services: Ensure stability and avoid damage.

LAYING GRANULAR SUB-BASES FOR PEDESTRIAN AREAS 250

- · General: Spread and levelled.
- · Compaction:

 - Timing: As soon as possible after laying.
 Method: By roller or other action. Method: By roller or other suitable means, adequate to resist subsidence or deformation of the sub-base during construction and of the completed paving when in use. Take particular care to compact fully at intrusions, perimeters and where local excavation and backfilling has taken place.

310 **ACCURACY**

- Permissible deviation from required levels, falls and cambers (maximum):
 - Subgrades:

Roads and parking areas: +20 -30 mm.

Footways and recreation areas: ± 20 mm.

- Sub-bases:

Roads and parking areas: na.

Footways and recreation areas: +10 -30 mm.

330 **COLD WEATHER WORKING**

- · Frozen materials: Do not use.
- · Freezing conditions: Do not place fill on frozen surfaces. Remove material affected by frost. Replace and recompact if not damaged after thawing.

340 **PROTECTION**

- Sub-bases: As soon as practicable, cover with subsequent lavers, specified elsewhere.
- · Subgrades and sub-bases: Prevent degradation by construction traffic, construction operations and inclement weather.

Q22 Asphalt roads/ pavings

To be read with Preliminaries/ General conditions.

TYPES OF PAVING

115 ASPHALT CONCRETE PAVING TO FOOTWAYS

- Standard: To BS EN 13108-1.
- Subgrade improvement layer: Not required.
 - Compacted thickness: Not applicable.
- · Geotextile: Sheet.
 - Manufacturer: Contractor's choice.
 Product reference: Submit proposals.
- Granular sub-base: Highways Agency Type 1 unbound mixture, as section Q20.
 - Compacted thickness: 150 mm.
- Binder course: AC 20 dense bin.
 - Paving grade: 40/60.
 - Compacted thickness: 50mm.
- Surface course: AC 6 med surf.
 - Paving grade: 40/60.
 - Slip/ Skid resistance: No requirement.
 - Compacted thickness: 20 mm.
- · Reclaimed content:
 - Standard: To BS EN 13108-8.
 - Value (maximum): Submit proposals.
- Surface treatment: Not required.
- Other requirements: n/a.

115B ASPHALT CONCRETE PAVING - NO DIG CONSTRUCTION TO FOOTWAYS

- Standard: To BS EN 13108-1.
- Subgrade improvement layer: Not required.
 - Compacted thickness: Not applicable.
- Geotextile: Cell Web Sheet.
 - Manufacturer: www.geosyn.co.uk.
 - Product reference: Cell Web TRP 75mm.
- Granular sub-base: Highways Agency Type 1 unbound mixture, as section Q20.
 - Compacted thickness: 75 mm.
- Binder course: AC 20 dense bin.
 - Paving grade: 40/60.
 - Compacted thickness: 50mm.
- · Surface course: AC 6 med surf.
 - Paving grade: 40/60.
 - Slip/ Skid resistance: No requirement.
 - Compacted thickness: 20 mm.
- · Reclaimed content:
 - Standard: To BS EN 13108-8.
 - Value (maximum): Submit proposals.
- Surface treatment: Not required.
- Other requirements: n/a.

210 TIMBER EDGING FOOTWAY

- Softwood board:
 - Size: 38 x 150 mm.
 - Fixing: Galvanized nails into softwood pegs.
- · Softwood pegs:
 - Size: 50 x 50 x 450 mm long.
 - Fixing: Drive into ground.
 - Centres: 1200 mm.
- Preservative treatment: To provide a 15 year service life.
 - Type: Submit proposals.

240 ACCEPTANCE OF SURFACES

- · Surface: Sound, clean and suitably close textured.
- · Level tolerances: To BS 594987.
- Kerbs and edgings: Complete, adequately bedded and haunched and to the required levels.

LAYING

310 LAYING GENERALLY

- Preparation: Remove all loose material, rubbish and standing water.
- Adjacent work: Form neat junctions. Do not damage.
- · Channels, kerbs, inspection covers etc: Keep clean.
- · New paving:
 - Keep traffic free until it has cooled to prevailing atmospheric temperature.
 - Do not allow rollers to stand at any time.
 - Prevent damage.
 - Lines and levels: With regular falls to prevent ponding.
 - Overall texture: Smooth, even and free from dragging, tearing or segregation.
 - State on completion: Clean.

320 ADVERSE WEATHER

- · Frozen materials: Do not use.
- Suspend laying:
 - During freezing conditions
 - If the air temperature reaches 0°C, or in calm dry conditions -3°C, on a falling thermometer.
 - Hot rolled asphalt: During periods of continuous or heavy rain or if there is standing water on the base.

330 LEVELS

• Permissible deviation from the required levels, falls and cambers (maximum): In accordance with BS 594987, clause 5.2.

340 FLATNESS/ SURFACE REGULARITY

- Deviation of surface: Where appropriate in relation to the geometry of the surface, the variation in gap under a 3 m straightedge placed anywhere on the surface to be not more than:
 - Base: Hand laid, 25 mm and Machine laid, 25 mm.
 - Binder course: Hand laid, 13 mm and Machine laid, 13 mm.
 - Surface course: Hand laid, 10 mm and Machine laid, 7 mm.
 - Where a straightedge cannot be used the surface must be of a comparable standard of accuracy when judged by eye.

COMPLETION

Q26 Special surfacings/ pavings for sport/ general amenity

To be read with Preliminaries/ General conditions.

SPORTS SURFACING

140 SURFACE GRADIENTS, EVENNESS AND FLATNESS

- Surface regularity: As specified by BS 7044-4.
- Deviation from the finished plane: When checked on a 10 m grid the difference in level between adjacent grid points, after taking design gradients into account, must not exceed ± 25 mm.
- · Profile: Crossfall in a single plane.
- Gradients: Not greater than 1:100 in any direction.

IMPACT ABSORBING SURFACINGS FOR PLAY AREAS

301 EXTENT OF IMPACT ABSORBING SURFACING

· General: Lay impact absorbing surfacing as indicated on drawings.

340A RUBBER GRASS SAFTEY MATS

- · Base: Laid on prepared level grass / turf.
 - Surface course: Impact absorbing rubber mats with honeycombed holes to allow grass growth.
 - Size 1x1.5x 23mm
 - Standard: To BS 7188.
 - Manufacturer: Submit proposals.
 - Product reference: Submit proposals.
 - Colour: black.
 - Critical fall height when tested to BS EN 1177: 2.6 m.
- Fixing: pegging and ties, to manufacturers specification. All exposed edges to be burried in grass to avoid creating trip hazard.

360 IN SITU SYNTHETIC SURFACING

- Sub-base: DOT Type 1 as section Q20.
 - Thickness: 150mm.
- · Base: Coated macadam as section Q22.
 - Thickness: 50-60mm.
- Surface course: Wet pour, in situ laid polyurethane bound EPDM rubber crumb surface.
 - Standard: To BS 7188.
 - Manufacturer: Contractor's choice.
 - Product reference: Submit proposals.
 - Colour: black.
 - Critical fall height when tested to BS EN 1177: 1.0 m.
 - Health and safety:
 - Substance known to be toxic or carcinogenic on skin contact or released as vapour or dust during normal use: Not permitted.
- Submit:
 - Resistance to abrasive wear, slip resistance, resistance to indentation and ease of ignition: Evidence of testing to BS 7188.
 - Critical fall height: Evidence of testing to BS EN 1177.

ASSOCIATED ACCESSORIES

COMPLETION

920 PLAY SURFACE TESTING

- Standard: To BS EN 1177 and BS 7188, where applicable.
- Testing body: A United Kingdom Accreditation Service (UKAS) independent laboratory.
- Timing: Within ten days of completing the surfacing works.
- · Test results: Submit.

930 DOCUMENTATION

- General: For all types of surfacing, provide the following:
 - Name and contact details of installer.
 - Date of installation.
 - Name and contact details of manufacturer.
 - Type/ description/ reference of products used.
 - Manufacturer's recommended inspection and maintenance procedures to maintain safety and impact absorbing performance.
 - Manufacturer's recommended cleaning and maintenance methods, where relevant.

Q28 Topsoil and soil ameliorants

To be read with Preliminaries/ General conditions.

SYSTEM OUTLINE

115 SOIL SYSTEM FOR GRASS SWARDS FOR PLAYGROUND

- Composition:
 - Soil: Imported topsoil to BS 3882.
 - Ameliorants: None.Accessories: None.

PRODUCTS

300 PREPARATION MATERIALS GENERALLY

- Purity: Free of pests and disease.
- Foreign matter: On visual inspection, free of fragments and roots of aggressive weeds, sticks, straw, subsoil, pieces of brick, concrete, glass, wire, large lumps of clay or vegetation, and the like.
- Contamination: Do not use topsoil contaminated with subsoil, rubbish or other materials that are:
 - Corrosive, explosive or flammable.
 - Hazardous to human or animal life.
 - Detrimental to healthy plant growth.
- Subsoil: In areas to receive topsoil or planting media, do not use subsoil contaminated with the above materials.
- · Objectionable odour: None.
- Give notice: If any evidence or symptoms of soil contamination are discovered on the site or in topsoil or planting media to be imported.

310 MATERIALS NOT PERMITTED

Materials: Peat.

315 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.
 - Grade: Within the parameters of 'sandy loam' textural class.
- Source: Submit proposals.
 - Product reference: Contractor's choice.

EXECUTION

630 DOCUMENTATION FOR IMPORTED TOPSOIL FOR TURFING

- Timing: Submit at handover.
- · Contents:
 - Full description of all soil components.
 - Record of source for all soil components.
 - Record drawings showing the location and depth of all soils by type and grade.
 - Declaration of analysis: in accordance with BS 3882, Annex E.
- · Number of copies: Two.

655 MECHANICAL TOOLS

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

665 SUBSOIL SURFACE PREPARATION

- General: Excavate and/ or place fill to required profiles and levels, as section D20.
- · 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 50 mm.
- Remove from site: Arisings, contaminants and debris and Builders rubble.

680 SURPLUS TOPSOIL TO BE RETAINED

- · Generally: Spread and level on site:
 - Locations: Any areas where topsoil is required for new planting.
 - Protected areas: Do not raise soil level within root spread of trees that are to be retained.

700 GRADING OF TOPSOIL

- · Topsoil condition: Reasonably dry and workable.
- Contours: Smooth and flowing, with falls for adequate drainage.
 - Hollows and ridges: Not permitted.
- Finished levels after settlement: 25 mm above adjoining paving, kerbs, manholes etc.
- Give notice: If required levels cannot be achieved by movement of existing soil.

705 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 BS 1377-2.

710 SPREADING TOPSOIL

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

718 FINAL CULTIVATION FOR TURFING

- · Compacted topsoil: Break up to full depth.
- Tilth: Loosen, aerate and break up topsoil to a tilth suitable for blade grading.
- Depth: 100 mm.
- Particle size (maximum): 5 mm.
- · Timing: Within a few days before planting.
- Weather and ground conditions: Suitably dry.
- · Surface: Leave regular and even.
- · Levels: 50 mm above adjoining lawns.
- Undesirable material brought to the surface:
 - Remove visible weeds.
 - Remove roots and large stones with any dimension exceeding 50 mm.

825 APPLYING FERTILIZER TO PROPOSED GRASS AREAS TO TURFED AREAS

- Application: Before final cultivation and three to five days before seeding/ turfing.
- · Coverage:
- Spread evenly, in transverse directions.
 - Rate: 50 g/m².

845 APPLYING LOOSE MULCH FOR PLANTING BEDS

- Timing: Immediately after planting.
- · Preparation: Clear all weeds.
- · Coverage of mulch (minimum):
 - Planting beds (depth): 75 mm depth of medium grade bark mulch.
 - Trees: In a circular area of 500 mm radius measured from the tree stem.
 - Container planting: na.
- Finished level of mulch: na.

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.

PREPARATION

250 SOIL REQUIREMENTS

- Type:
 - Seeded areas: na.
 - Turfed areas: Soil for grass swards, as section Q28.
 - Reinforced grass areas: Soil for grass swards, as section Q28.

TURFING

400 CULTIVATED TURF PLAY GROUND

- Supplier: Submit proposals.
 - Product reference: Suitable for general amenity use.
- 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: Sward species composition.

430 TURFING GENERALLY

- · Time of year: To be agreed.
- 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.

450 TRIMMING TURF

- Newly planted tree pits: Neatly cut away around individual trees.
 - Diameter: 500MM.
 - Tree pit surface: Bark mulch.

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.

Q50 Site/street furniture/equipment

To be read with Preliminaries/ General conditions.

SITE AND STREET FURNITURE

225A TIMBER TREE SEAT FOR PLAYGROUND

- Manufacturer: Touch Wood Enterprises Ltd. http://touchwoodplay.co.uk/. or similar approved.
 - Product reference: Hexagonal tree seat.
- · Material: Rustic timberl.
- Size: 1.88 m long.
- Accessories/ Special requirements: post holes to be hand dug to avoid gamage to tree roots.
- · Method of fixing: Root, 300 mm below ground, set in concrete.

INSTALLATION

510 CONCRETE FOUNDATIONS GENERALLY

- Standard: To BS 8500-2.
- Concrete: Designated, not less than GEN 1.
- · 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.

515 SETTING COMPONENTS IN CONCRETE

- Holes: 250 x 250 x minimum 300 mm deep.
- · 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.

520 SETTING IN EARTH

- · Holes: As small as practicable.
- Components being fixed: Accurately positioned and securely supported.
- Buried depth (minimum): 300 mm.
- · Earth refill: Well rammed as filling proceeds.

530 PRESERVATIVE TREATED TIMBER

- Surfaces exposed by minor cutting and drilling: Treated by immersion or with two flood coats of a solution recommended for the purpose by main treatment solution manufacturer.
- · Heavily worked sections: Re-treat.

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.

Q52 Play and sports equipment

To be read with Preliminaries/ General conditions.

PRODUCTS

320 BALANCE BEAM TO PLAYGROUND

- Standard: To BS EN 1176-1.
- Manufacturer: Playdale Playgrounds or similar approved.
 - Product reference: 2.6m log beam.
- Age range: 3-14.
- Materials: Wood.
 - Finish: None.
 - Colour: n/a.
- Length: 2.6.
- Height: 0.35-1.45.
- Features: n/a.
- · Method of fixing: Set in concrete.

320A INTERTWINE BALANCE BEAM TO PLAYGROUND

- Standard: To BS EN 1176-1.
- Manufacturer: Playdale Playgrounds or similar approved.
 - Product reference: Intertwine timber adventure trail unit.
- · Materials: Wood.
 - Finish: as manufactured.
 - Colour: n/a.
- Length: 3.5m.
- Height: 0.3-1.45.
- Features: n/a.
- · Method of fixing: Set in concrete.

320B LOG STEP TO PLAYGROUND

- Standard: To BS EN 1176-1.
- Manufacturer: Playdale Playgrounds or similar approved.
 - Product reference: Timber log step.
- · Materials: Wood.
 - Finish: as supplied.
 - Colour: n/a.
- Height: 0.6m set 0.2m above ground level.
- Features: n/a.
- Method of fixing: Set in concrete.

330A TIMBER POLE STILTS TO PLAYGROUND

- Standard: To BS EN 1176-1.
- Manufacturer: Playdale Playgrounds or similar approved.
 - Product reference: Timber Zig Zag Stilts, six number.
- Age range: 5-14.
- · Materials: round timber.
 - Finish: natural.
 - Colour: none.
- · Plan size: As data sheet.
- Height: top of pole height 1.5 m.
- · Features: foot hold .
- · Method of fixing: Set in concrete.

430 SPINNING EQUIPMENT TO PLAYGROUND

- Standard: To BS EN 1176-1 and -5.
- Manufacturer: Wicksteed.
 - Product reference: Swirl DDA complient acessible roundabout, Ref 6020-090, or similar approved.
- Age range: 3-15.
- Materials: Galvanized steel.
 - Finish: as manufactured.
 - Colour: Manufacturer's standard.
- Diameter: 2.0 m.
- · Deck height: Flush.
- · Features: Wheelchair bay.
- Method of fixing: Set in concrete.

440 SWINGING EQUIPMENT TO PLAYGROUND

- Standard: To BS EN 1176-1 and -2.
- · Manufacturer: Wicksteed. Or similar approved.
 - Product reference: Single bay Viking swing with 2 x number flat seats, Ref 6040-103, or similar approved.
- · Age range: 3 adult.
- Type: 1.
- · Frame: Traditional.
 - Bays: 1.
 - Materials: Galvanized steel.
 - Finish: None.
 - Colour: Manufacturer's standard.
 - Height: 2.4 m.
- · Seats: 2 Flat.
 - Materials: Manufacturer's standard.
 - Ground clearance: Manufacturer's standard.
- · Features: Anti-wrap chain.
- · Method of fixing: Set in concrete.

440A TRAMPOLINE TO PLAYGROUND

- · Manufacturer: Russel Play. Or similar approved .
 - Product reference: Eurotramp, Kids Tramp Playground XL Ref (97500).
- · Type: In ground.
- · Materials: As supplied.
 - Finish: as manufactured.
 - Colour: Manufacturer's standard.
 - Height: ground level.
 - Width: 2.1x2.1m squared.
 - Method of fixing: Set in ground as manufactures instructions.

440B SWINGABOUT REPLACEMENT SEAT AND CHAIN ASSEMBILY TO PLAYGROUND

- Manufacturer: HAGS contact: Joshua Frost-Lunn < JFrost-Lunn@hags.co.uk>.
 - Product reference: Replace existing tyre seat on old SMP Swingabout unit with new basket swing assembly from HAGS Mega Vortex unit.
- · Seats: 1 round basket swing seat.
 - Features: 4 x 15011612 Oilite Bush (to replace existing worn lugs .
- · Method of fixing: Set in concrete.

440C SWINGING STEPS TO PLAYGROUND

- Standard: To BS EN 1176-1 and -2.
- · Manufacturer: Playdale. Or similar approved.
 - Product reference: Swinging timber step unit (4 number steps).
- Frame: Timber.
 - Steps: 4 number.
 - Materials: as manufacturedl.
 - Finish: as supplied.
 - Height: 0.55-2.5 m.
- - Ground clearance: Manufacturer's standard.
- · Method of fixing: Set in concrete.

EXECUTION

710 PLAY EQUIPMENT INSTALLATION GENERALLY

 Standard: To manufacturer's written instructions provided in accordance with BS EN 1176-1.

720 CONCRETE FOUNDATIONS GENERALLY

- Standard: To BS 8500-2.
- Concrete: Designated, not less than GEN 1 or Standard prescribed, not less than ST2.
- · 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.

725 SETTING COMPONENTS IN CONCRETE

- Holes: 250 x 250 x minimum 300 mm deep.
- Components: Accurately positioned and securely supported.
- · Concrete fill: Fully compacted as filling proceeds.
- Concrete foundations exposed to view: Finished to weathering profile to shed water and trowel smooth.
- Temporary component support: Maintain undisturbed for minimum 48 hours.

730 SETTING COMPONENTS IN EARTH

- Holes: As small as practicable.
- · Components being fixed: Accurately positioned and securely supported.
- Buried depth (minimum): 200 mm.
- · Earth refilling: Well rammed as filling proceeds.

740 PRESERVATIVE TREATED TIMBER

• Surfaces exposed by minor cutting and drilling: Treated by immersion or with two flood coats of a solution recommended for the purpose by main treatment solution manufacturer.

750 DAMAGE TO GALVANIZED SURFACES

- Minor damage in areas up to 40 mm² (including on fixings and fittings): Make good.
 - Materials: 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.

760 SITE PAINTING

 Timing: Prepare surfaces and apply finishes as soon as possible after installing components.

COMPLETION

910 INSPECTION

- Standard: To BS EN 1176-1.
- Timing: 2 weeks prior to date when work is expected to be practically complete. Rospa contact: Elizabeth Cheshire echeshire@rospaplaysafety.co.uk.
- Period of notice (minimum): 3 working days.

920 CLEANING

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

930 TESTING

• Standard: To BS EN 1176-1.

940 LABELS

- Standard: To BS EN 1176-1.
- Labels: Provide permanent labelling on all types of play equipment.
- · Location: Where visible when erected on site.

950 DOCUMENTATION

- Standard: To BS EN 1176-1.
- · Contents:
 - Copies of test reports.
 - General product information.
 - Installation information.
 - Inspection and maintenance information.
- · Number of copies: 2.
- Submission: 2 weeks after request by contract administrator.

970 OPERATING TOOLS

• Tools: Supply tools required for operation, maintenance and cleaning purposes.