

Abbotswood specification

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D20 Excavating and filling

To be read with Preliminaries/General conditions

GENERALLY/THE SITE

150A EXISTING SERVICES, FEATURES AND STRUCTURES

- NRSWA search information will be available upon request however it is the Contractor's own responsibility to establish the presence and precise location of, and ramifications of the presence of all services and statutory undertakings on site when carrying out works in accordance with the Contract. The Contractor will be responsible for informing those bodies responsible for services etc. where damage is caused and will bear the subsequent cost of making good such damage.
" The Contractor will be responsible for informing such bodies where works may involve the encroachment, disconnection or hazard to those services etc. Where appropriate the Contractor will take adequate measures for the protection of all pipes, ducts, sewers, service mains, overhead cables and the like during the execution of the works.
" The Contractor must not interfere with the operation of existing services such as Gas, Water, Electricity, Telephones, buried cables or sewers, drains and roadside ditches without the permission of the Project Manager, statutory authority or private owner as appropriate. In all instances of damage/interference, the Project Manager must be notified.

CLEARANCE/EXCAVATING

164 TREE ROOTS

- Protected area: Do not cut roots within precautionary protection area.
 - Size of area: Circle around each tree of radius 12 times trunk diameter, measured 1.5 m above ground level.
- 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.

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 residual herbicide to areas to receive gravel surfacing.

180 CHIPPING AND SHREDDING

- General: Not permitted.

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 100 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: Not required.

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.

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.

310 UNSTABLE GROUND

- Generally: Ensure that the excavation remains stable at all times.
- Give notice: Without delay if any newly excavated faces are too unstable to allow earthwork support to be inserted.
- Take action: If instability is likely to affect adjacent structures or roadways, take appropriate emergency action.

320 RECORDED FEATURES

- Recorded foundations, beds, drains, manholes, etc: ..
- Contaminated earth: Remove and disinfect as required by local authority.

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.

DISPOSAL OF MATERIALS

441 SURPLUS SUBSOIL

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

Q21 In situ concrete roads/ pavings/ bases

To be read with Preliminaries/ General conditions.

GENERAL/ PREPARATION

140 READY-MIXED CONCRETE

- Production plant: Currently certified by a body accredited by UKAS to BS EN ISO/IEC 17065 for product conformity certification.
- Source of ready-mixed concrete: Obtain from one source if possible. Otherwise, submit proposals.
 - Name and address of depot: Submit before any concrete is delivered.
 - Delivery notes: Retain for inspection.
- Declarations of nonconformity from concrete producer: Notify immediately.

320 LAYING CONCRETE GENERALLY

- Timing: Place as soon as practicable after mixing and while sufficiently plastic for full compaction. After discharge from the mixer do not add water or retemper.
- Temperature of concrete at point of delivery:
 - In hot weather (maximum): 30°C.
 - In cold weather (minimum): 5°C.
- Cold weather:
 - Do not use frozen materials.
 - Do not place concrete against frozen or frost covered surfaces.
 - Do not place concrete when air temperature is below 3°C on a falling thermometer. Do not resume placing until rising air temperature has reached 3°C.
- Surfaces on which concrete is to be placed: Free from debris and standing water.
- Placing in final position: Place in one continuous operation up to construction joints.
 - Do not place concrete simultaneously on both sides of movement joints.
- Spreading: Spread and strike off with surcharge sufficient to obtain required compacted thickness.
- Adjacent work: Form neat junctions and prevent damage. Keep clean all channels, kerbs, inspection covers, etc.

330 COMPACTING

- General: Fully compact concrete to full depth (until air bubbles cease to appear on the surface) especially around reinforcement, cast-in accessories, into corners and at joints.
- Poker vibrators: Do not use to make concrete flow into position. Do not allow to come into contact with fabric reinforcement.
- Wet formed joint grooves: Rectify any irregularities by means of a vibrating float.
- Finish: A dense, even textured surface free from laitance or excessive water.
 - Excess concrete: Remove from top of groove formers.

660 PROTECTION

- Prevent damage to concrete:
 - From rain, indentation, physical damage, dirt, staining, rust marks and other disfiguration.
 - From thermal shock.
 - In cold weather, from freezing expansion of water trapped in pockets, etc.
 - By use as a building platform or for storing, mixing or preparing materials.

Q28 Topsoil and soil ameliorants

To be read with Preliminaries/ General conditions.

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: Products containing peat.

315 IMPORTED TOPSOIL TO BS 3882 FOR GRASS SEEDING / TURF

- 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: Contractor's choice.

700 GRADING OF TOPSOIL

- Topsoil condition: Reasonably dry and workable.
- Contours: Smooth and flowing, with falls for adequate drainage.
 - Hollows and ridges: Not permitted.
- Give notice: If required levels cannot be achieved by movement of existing soil.

705 HANDLING TOPSOIL

- Standard: In accordance with BS 3882.
- Aggressive weeds: Give notice and obtain instructions before moving topsoil.
- Plant: Select and use plant to minimize disturbance, trafficking and compaction.
- Contamination: Do not mix topsoil with:
 - Subsoil, stone, hardcore, rubbish or material from demolition work.
 - Other grades of topsoil.
- Multiple handling: Keep to a minimum. Use or stockpile topsoil immediately after stripping.
- Wet conditions: Handle topsoil in the driest condition possible. Do not handle during or after heavy rainfall or when it is wetter than the plastic limit less 3%, to BS 1377-2..

710 SPREADING TOPSOIL ON GRASSED / TUFT 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: 100 mm.
- Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

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.
- 170A **SETTING OUT**
- Boundaries: Mark clearly.
 - Delineation: In straight lines or smoothly flowing curves.

SEEDING

- 310 **GRASS SEED FOR ALL GRASSED AREAS UNDER PLAY EQUIPMENT**
- Mixture: hard wearing general mix.
 - Application rate: 25 g/m².
- 312 **WILDFLOWER SEED MIXTURE FOR NATURALIZED AREAS**
- Supplier: tbc.
 - Mixture reference: tbc.
 - Origin of each species (as defined in Flora Locale's Code of practice for collectors, growers and suppliers of native flora): British Native.
 - Application rate: 5 g/m².
- 330 **SOWING**
- General: Establish good seed contact with the root zone.
 - Method: Manually broadcast, raked and rolled.
 - Distribution: 2 equal sowings at right angles to each other.
- 335 **GRASS SOWING SEASON**
- Grass seed generally: April to June or August to October.
- 336 **WILDFLOWER SOWING SEASON**
- Wildflower seed generally: August to October.

TURFING

410A TURF TO BS 3969 FOR ALL GRASSED AREAS

- Standard: To BS 3969, free from undesirable grasses and weeds.
 - Grade: General purpose utility turf with no perennial ryegrass.
- Source: Submit proposals.
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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: n/a.

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: ..
- Watering: Thoroughly water completed turf immediately after laying. Check that water has penetrated into the soil below.

PROTECTING/CUTTING

530 FIRST CUT OF GRASSED AREAS

- Timing: When grass is reasonably dry.
 - Height of initial growth: 40-75 mm.
- Preparation:
 - Debris and litter: Remove.
 - Stones and earth clods larger than 25 mm in any dimension: Remove
- Height of first cut: 40 mm.
- Mower type: Cylinder.
- Arisings: Spread evenly over cut areas.

590 CLEANLINESS

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

Q52 Play and sports equipment

To be read with Preliminaries/ General conditions.

GENERAL

215A BESPOKE PLAYGROUND DESIGN

Complete the design of the new equipment in accordance with the design brief for the contractor's designed portion. Prior to construction, the contractor shall submit drawings, technical information, calculations and any manufacturers' literature for approval. The design is to include

" New equipment as determined by design process.

Functional requirements:

" The existing timber play equipment oithin the new playground proposals.

The new equipment should exceed the current offer and the proposals should indicate how this is achieved.

" Ensure longevity of timber and fixings. Minimum 15 year life span.

" Contractor to submit proposals for any new timber and finishes for play equipment construction for approval.

" Contractor to ensure that all proposals meet the safety requirements of RoSPA..

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): 600 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 In accordance with equipment manufacturer's maintenance and inspection instructions .
- Timing: 2 weeks after request by contract administrator.
- 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.

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 prior to date when work is expected to be practically complete.

970 OPERATING TOOLS

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