

Plincke Landscape Limited

Balderstone Park Playing Pitches

0522-PLI-Z1-ZZ-SP-L-0100

Balderstone Park Pitches-General
Landscape Specification

Tender

P02

12-12-2022

Contents

D20 Excavating and filling	1
E10 Mixing/casting/curing in situ concrete	6
Q10 Kerbs/ edgings/ channels/ paving accessories	8
Q20 Granular sub-bases to roads/pavings.....	11
Q22 Asphalt roads/ pavings.....	14
Q23 Gravel/ hoggin/ woodchip/ resin bound roads/ paving/ overlays.....	17
Q25 Slab/ brick/ sett/ cobble pavings	18
Q30 Seeding/turfing.....	21
Q40 Fencing	25
Q52 Play and sports equipment	28

D20

Excavating and filling

Clauses

2 To be read with preliminaries/general conditions

Generally/the site

145 Variations in ground water level

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

150A Existing services, features and structures

1. Unknown-contractor to carry out own investigations.

Clearance/excavating

164 Tree roots

1. Protected area: Do not cut roots within precautionary protection area.
 - 1.1. Size of area: extent of tree canopies as shown on drawings
2. Excavation in protected area
 - 2.1. Method: By hand
 - 2.2. Backfill as soon as possible or temporarily line with polyethylene sheet to reduce evaporation.
3. Outside protected area: Give notice of roots exceeding 25 mm and do not cut without approval.
4. Cutting
 - 4.1. Make clean smooth cuts with no ragged edges.
 - 4.2. Pare cut surfaces smooth with a sharp knife.
 - 4.3. Treatment of cut roots: Not required
5. Backfill: As dug material, enriched with amelioration as section Q31

166 Tree root barriers

1. Trench: Sever all roots.
 - 1.1. Depth: 600mm
2. Root barrier: reroot 600
3. Cutting roots: As clause 164.
4. Root barrier installation: Full depth of excavation. Fit closely to trench wall nearest the tree.
5. Backfill material: As dug material excavated from trench.
6. Backfilling: Lay and compact thoroughly in layers not more than 300 mm thick.

168 Site clearance

1. Timing: Before topsoil stripping, if any.
2. General: Clear site of rubbish, debris and vegetation. Do not compact topsoil.
3. Treatment: Apply a suitable residual herbicide to areas to receive gravel surfacing

170 Removing small trees, shrubs, hedges and roots

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

180 Chipping and shredding

1. **General:** Permitted, spread arisings on site in areas designated

220 Stripping topsoil

1. **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.
2. **Depth**
 - 2.1. Remove to an average depth of 150 mm.
 - 2.2. Give notice where the depth of topsoil is difficult to determine.
3. **Handling:** Handle topsoil for reuse or sale in accordance with clause 225.
4. **Around trees:** Do not remove topsoil from below the spread of trees to be retained.
5. **Site storage:** Keep separate from excavated sub-soil

225 Handling topsoil

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

255 Accuracy – linear dimensions

1. **Permissible deviations from linear dimensions generally:** 6mm

260 Inspecting formations

1. **Give notice:** Make advance arrangements for inspection of formations for roads and pavings.
 - 1.1. **Notice (minimum):** 3 days
2. **Preparation:** Just before inspection remove the last 150 mm of excavation.
3. **Trim to required profiles and levels.**
 - 3.1. **Loose material:** Remove
4. **Seal:** Within 4 hours of inspection, seal formations with blinding concrete.

270 Foundations generally

1. **Give notice if**

- 1.1. A natural bearing formation of undisturbed subsoil is not obtained at the depth shown on the drawings.
- 1.2. The formation contains soft or hard spots or highly variable material.

310 Unstable ground

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

330 Unrecorded features

1. **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

1. **Generally:** Remove walls, roads, foundations, disused services, drains, manholes and the like to minimum depth.
2. **Minimum depth below finished levels**
 - 2.1. Grass, ground cover and perennial planting: 500 mm.
 - 2.2. Shrub planting: 750 mm.
 - 2.3. Within 2 m of tree planting: 1000 mm.
3. **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

1. **Storage:** Stockpile in temporary storage heaps: to be agreed

420 Topsoil storage heaps

1. **Location:** to be agreed
2. **Standard:** To BS 3882.
3. **Height (maximum):** 1m
4. **Protection**
 - 4.1. Do not place any other material on top of storage heaps.
 - 4.2. Do not allow construction plant to pass over storage heaps.
 - 4.3. Prevent compaction and contamination.

421 Topsoil storage heap treatment

1. **Treatment:** sow with green manure

450 Water

1. **Generally:** Keep all excavations free from water until:
 - 1.1. Formations are covered.
 - 1.2. Below ground constructions are completed.
 - 1.3. Basement structures and retaining walls are able to resist leakage, water pressure and flotation.

2. **Drainage:** Form surfaces of excavations and fill to provide adequate falls.
3. **Removal of water:** Provide temporary drains, sumps and pumping as necessary. Do not pollute watercourses with silt laden water.

454 Ground water level, springs or running water

1. **Give notice:** If it is considered that the excavations are below the water table.
2. **Springs/ Running water:** Give notice immediately if encountered.

Filling

510 Hazardous, aggressive or unstable materials

1. **General:** Do not use fill materials which would, either in themselves or in combination with other materials or ground water, give rise to a health hazard, damage to building structures or instability in the filling, including material that is:
 - 1.1. Frozen or containing ice.
 - 1.2. Organic.
 - 1.3. Contaminated or noxious.
 - 1.4. Susceptible to spontaneous combustion.
 - 1.5. Likely to erode or decay and cause voids.
 - 1.6. With excessive moisture content, slurry, mud or from marshes or bogs.
 - 1.7. Clay of liquid limit exceeding 80 and/or plasticity index exceeding 55.
 - 1.8. Unacceptable, class U2 as defined in the Highways Agency 'Specification for highway works', clause 601.

530 Placing fill

1. **Surfaces of excavations and areas to be filled:** Free from loose soil, topsoil, organic material, rubbish and standing water.
2. **Freezing conditions:** Do not place fill on frozen surfaces. Remove material affected by frost. Replace and recompact if not damaged after thawing.
3. **Adjacent structures, membranes and buried services**
 - 3.1. Do not overload, destabilise or damage.
 - 3.2. Submit proposals for temporary support necessary to ensure stability during filling.
 - 3.3. Allow 14 days (minimum) before backfilling against in situ concrete structures.
4. **Layers:** Place so that only one type of material occurs in each layer.
5. **Earthmoving equipment:** Vary route to avoid rutting.

535 Compaction generally

1. **General:** Compact fill not specified to be left loose as soon as possible after placing.
2. **After compaction:** Surface of each layer must be well closed, showing no movement under compaction plant, and without cracks, holes, ridges, loose material and the like.
3. **Defective areas:** Remove and recompact to full thickness of layer using new material.

550 Geotextile sheet

1. **Manufacturer:** Contractor's choice
 - 1.1. **Product reference:** Contractor's choice
2. **Type:** Nonwoven
3. **Polymer type:** Contractor's choice
4. **Recycled content:** 90% (minimum) to BS EN ISO 14021

5. **Jointing:** 300 mm overlap
6. **Preparation of subgrade:** Before laying sheet, remove humps and sharp projections. Fill hollows
7. **Protect from**
 - 7.1. Exposure to light.
 - 7.2. Contaminants.
 - 7.3. Materials listed as potentially deleterious by geotextile manufacturer.
 - 7.4. Wind uplift.

615 Loose tip filling for landscape areas

1. **Filling:** Do not firm, consolidate or compact when laying. Tip and grade to approximate levels in one operation with minimum of trafficking by plant.

617 Type 1 unbound mixture

1. **Fill:** To Highways Agency 'Specification for highway works', clauses 801 and 803:
 - 1.1. Crushed rock (other than argillaceous rock).
 - 1.2. Crushed concrete.
 - 1.3. Recycled aggregates.
 - 1.4. Crushed non-expansive slag.
 - 1.5. Well-burned non-plastic colliery shale.
2. **Amendments to requirements in Highways Agency 'Specification for highway works':** None
3. **Filling:** To Highways Agency 'Specification for highway works', clause 802.

Bioremediation - Not Used

'specification for highway works: earthworks specification' appendices - Not Used

Ω End of Section

E10

Mixing/casting/curing in situ concrete

Clauses

2 To be read with preliminaries/general conditions.

Concrete

101 Specification

1. Concrete generally: To BS 8500-2.
2. Exchange of information: Provide concrete producer with information required by BS 8500-1, clauses 4 and 5.

110 Basic designated concrete

1. Description: Fence posts
2. Designation: ST1
3. Coarse recycled aggregates: RCA permitted
4. Consistence class: Contractor's choice
5. Additional requirements: Submit proposals.

Materials, batching and mixing - Not Used

Project testing/ certification - Not Used

Placing/ compacting/ curing and protecting

680 Placing

1. Records: Maintain for time, date and location of all pours.
2. Timing: Place as soon as practicable after mixing and while sufficiently plastic for full compaction.
3. Temperature limitations for concrete: 30°C (maximum) and 5°C (minimum), unless otherwise specified. Do not place against frozen or frost covered surfaces.
4. Continuity of pours: Place in final position in one continuous operation up to construction joints. Avoid formation of cold joints.
5. Discharging concrete: Prevent uneven dispersal, segregation or loss of ingredients or any adverse effect on the formwork or formed finishes.
6. Thickness of layers: To suit methods of compaction and achieve efficient amalgamation during compaction.
7. Poker vibrators: Do not use to make concrete flow horizontally into position, except where necessary to achieve full compaction under void formers and cast-in accessories and at vertical joints.

840 Protection

1. Prevent damage to concrete, including
 - 1.1. Surfaces generally: From rain, indentation and other physical damage.
 - 1.2. Surfaces to exposed visual concrete: From dirt, staining, rust marks and other disfiguration.
 - 1.3. Immature concrete: From thermal shock, physical shock, overloading, movement and vibration
 - 1.4. In cold weather: From entrapment and freezing expansion of water in pockets, etc.

Ω End of Section

Q10

Kerbs/ edgings/ channels/ paving accessories

Clauses

2 To be read with preliminaries/general conditions.

Types of kerbs/edgings and channels

112 Precast concrete

1. Description: Kerbs and edgings
2. Standard: To BS EN 1340.
3. Recycled content: Contractor's choice
4. Designations: HB2 Kerb, half battered 125 x 255 mm CS2 Channel, square 150 x 125 mm (L) = left hand(R) = right hand TL Transition kerb HB2 to SP (L) TR Transition kerb HB2 to SP (R)HBIA Internal angle, half battered 125 x 255 mm HBXA External angle, half battered 125 x 255 mmEF Edgng flat top 200x50mm
5. Size (width x height x length): 125 x 255 x 915 mm
6. Special shapes: as above
7. Finish: As cast
8. Colour: Natural
9. Bending strength: No requirement
10. Weathering resistance: No requirement
11. Abrasion resistance: No requirement
12. Slip/ skid resistance: No requirement
13. Bedding: Fresh concrete races
14. Joints generally: Narrow mortar
15. Sealant movement joints: Not required
16. Accessories: None

Roads/paving accessories/ marking/ demarcation

395 Road marking (thermoplastic)

1. Standard: Road Safety Markings Association standard specification document for road marking and road studs (StanSpec).
2. Manufacturer: Submit proposals
 - 2.1. Product reference: Submit proposals
3. Colour: Yellow-disabled bays
4. Retroreflectivity to BS EN 1436: Class R2

Laying

510 Laying kerbs, edgings and channels

1. Cutting: Neat, accurate and without spalling. Form neat junctions.
 - 1.1. Long units (450 mm and over) minimum length after cutting: 300 mm.
 - 1.2. Short units minimum length after cutting: The lower of one third of their original length or 50 mm.

2. **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.
3. **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

1. **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

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

540 Cement mortar bedding

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

547 Bedding/ Backing of units on fresh concrete races

1. **Standard:** To BS 7533-6.

600 Radius kerbs/ channels

1. **Usage:** Radii of 15 m or less.

610 Angle kerbs

1. **Usage:** Internal and external 90° changes of direction.
2. **Cutting of mitres:** Not permitted.

620 Accuracy

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

625 Regularity of paved surfaces

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

630 Narrow mortar joints

1. **Jointing:** Ends of units buttered with bedding mortar as laying proceeds. Joints completely filled, tightly butted and surplus mortar removed immediately.
 - 1.1. **Joint width:** 3 mm.

Ω End of Section

Q20

Granular sub-bases to roads/pavings

To be read with preliminaries/ general conditions.

120 Checking of subgrades

1. Anticipated subgrade conditions
 - 1.1. Soil type: sandy clay
 - 1.2. Plasticity index: -
 - 1.3. CBR (minimum): 3
 - 1.4. Depth below formation level to groundwater table: refer to agronomist report
2. Subgrade variation: If material appears to vary from anticipated conditions, or if there are extensive soft spots, report condition and await instruction before proceeding.
3. Submit: Results and obtain instructions before proceeding.

140 Excavation of subgrades

1. Final excavation to formation or subformation level: Carry out immediately before compaction of subgrade.
2. Soft spots and voids: Give notice.
3. Old drainage and service trenches: Give notice
4. Wet conditions: Do not excavate or compact when the subgrade may be damaged or destabilized.

145 Preparation and compaction of subgrades

1. Timing: Immediately before placing sub-base.
2. Soft or damaged areas: Obtain instructions
3. 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.

150 Subgrades for vehicular areas

1. Preparation and treatment: To Highways Agency 'Specification for highway works', clauses 616 and 617.

170 Geotextile filter/ separator membrane

1. Description: To reinforced gravel areas
2. Manufacturer: Submit proposals
 - 2.1. Product reference: -
3. Jointing: 300 mm overlap
4. Protect from
 - 4.1. Exposure to light, except during laying (maximum five hours).
 - 4.2. Contaminants.
 - 4.3. Materials listed as potentially deleterious by geotextile manufacturer.
 - 4.4. Damage, until fully covered by fill.
 - 4.5. Wind uplift, by laying not more than 15 m before covering with fill.
5. Preparation: Remove humps and sharp projections and fill hollows before laying.

180 Notice

1. Give notice: On completion of compaction of sub-base
 - 1.1. Period of notice: 2 working days

205A Highways agency type 3 unbound mixture for sub-base

1. Permeable surfaces. no fines
2. Material: Type 3 unbound mixture to Highways Agency 'Specification for highway works', clauses 801 and 804.
 - 2.1. Recycled aggregate: Permitted
 - 2.2. CBR (minimum): No requirement

211 Granular material

1. Quality: Of a known suitability for use in sub-bases, free from excessive dust, well graded, all pieces less than 75 mm in any direction, minimum 10% fines value of 50 kN when tested in a soaked condition to BS 812-111 or a resistance to fragmentation of LA50 for the Los Angeles test to BS EN 1097-2, and in any one layer only one of the following:
 - 1.1. Crushed rock (other than argillaceous rock) or quarry waste with not more binding material than is required to help hold the stone together.
 - 1.2. Crushed concrete, crushed brick or tile, free from plaster, timber and metal.
 - 1.3. Gravel or hoggins with not more clay content than is required to bind the material together, and with no large lumps of clay.
 - 1.4. Natural gravel.
 - 1.5. Natural sand.
2. Filling: Spread and levelled in 150 mm maximum layers, each layer thoroughly compacted.

230 Placing granular material generally

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

240 Laying granular sub-bases for vehicular areas

1. General: Spread and levelled in layers. As soon as possible thereafter compact each layer.
2. Standard: To Highways Agency 'Specification for highway works' clause 802.
3. At drainage fittings, inspection covers, perimeters and where local excavation and backfilling has taken place: Take particular care to compact fully.

310 Accuracy

1. Permissible deviation from required levels, falls and cambers (maximum)
 - 1.1. Subgrades
 - 1.1.1. Roads and parking areas: +20 -30 mm.
 - 1.1.2. Footways and recreation areas: $\pm$ 20 mm.
 - 1.2. Sub-bases
 - 1.2.1. Roads and parking areas: $\pm$ 20 mm
 - 1.2.2. Footways and recreation areas: $\pm$ 12 mm

330 Cold weather working

1. Frozen materials: Do not use.

2. **Freezing conditions:** Do not place fill on frozen surfaces. Remove material affected by frost. Replace and recompact if not damaged after thawing.

340 Protection

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

Ω End of Section

Q22

Asphalt roads/ pavings

Clauses

2 To be read with preliminaries/ general conditions.

Types of paving

127 Porous asphalt concrete paving

1. Description: To car park and access road
2. Standard: To BS EN 13108-7.
3. Geomembrane: Geotextile membranes
 - 3.1. Manufacturer: Submit proposals
 - 3.1.1. Product reference: Submit proposals
4. Granular sub-base: As section Q20
 - 4.1. Compacted thickness: 200 mm
5. Water collection: Not required
6. Base: Contractor's choice
 - 6.1. Compacted thickness: Contractor's choice
7. Binder course: AC 20 open bin
 - 7.1. Paving grade: 100/150
 - 7.2. Compacted thickness: 60 mm
8. Surface course
 - 8.1. Manufacturer: Submit proposals
 - 8.1.1. Product reference: Submit proposals
 - 8.2. Type: PA 6 open surf
 - 8.3. Paving grade: 70/100
 - 8.4. Slip/ Skid resistance: PTV to BS 7976-2 of 45 (water) wet
 - 8.5. Compacted thickness: 25 mm
9. Reclaimed content
 - 9.1. Standard: To BS EN 13108-8.
 - 9.2. Value (maximum): Surface course 10%, other courses 50%

Preparatory work/ requirements

220 Bituminous materials generally

1. Suppliers names: Submit.
 - 1.1. Timing (minimum): Two weeks before starting work.
2. Test certificates: At the time of delivery for each manufacturing batch submit certificate:
 - 2.1. Confirming compliance with this specification and the relevant standard.
 - 2.2. Stating full details of composition of mix.

240 Acceptance of surfaces

1. Surface: Sound, clean and suitably close textured.
2. Level tolerances: To BS 594987.

3. **Kerbs and edgings:** Complete, adequately bedded and haunched and to the required levels.

250 Abutments

1. **Vertical edges of manholes, gullies, kerbs and other abutments:** Clean and paint with a thin uniform coating of cold applied thixotropic bitumen emulsion.
2. **Finishing:** Tamp surface around projections.
 - 2.1. **Level:** Flush or not more than 3 mm above projections.

Laying

310 Laying generally

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

320 Adverse weather

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

330 Levels

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

340 Flatness/ Surface regularity

1. **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:
 - 1.1. **Base:** Machine laid, 25 mm
 - 1.2. **Binder course:** Hand laid, 13 mm
 - 1.3. **Surface course:** Machine laid, 7 mm
 - 1.4. Where a straightedge cannot be used the surface must be of a comparable standard of accuracy when judged by eye.

350 Contractor's use of pavements

1. **Before use**
 - 1.1. **Timing:** allow newly laid sections to cool before trafficking.
 - 1.2. **Open-grained surface:** Fill with 0/4 mm size coated grit. Remove surplus.

- 1.3. Finish: Uncoated chipping and binder surface treatment.
2. Preparation for final surfacing
 - 2.1. Timing: Defer laying until as late as practicable.
 - 2.2. Immediately before laying final surfacing: Clean and make good the base/ binder course. Allow to dry.
 - 2.3. Adhesion: Tack coat to BS 434-1 or BS EN 13808
 - 2.3.1.Application rate: As manufacturer's recommendation
 - 2.3.2.Accuracy: Uniform, without puddles.
 - 2.4. Finishing: Allow emulsion to break completely before applying surface.

Completion

390 Documentation

1. Standard: BS EN 13108-1
 - 1.1. Declaration of conformity: Submit.
2. Number of copies: 1
3. Submission: Two weeks after request

Ω End of Section

Q23

Gravel/ hoggin/ woodchip/ resin bound roads/ paving/ overlays

Clauses

2 To be read with preliminaries/ general conditions.

Types of surfacing

160A Loose gravel

1. Description: To plastics paving ref q25 overspill parking area
2. Gravel: Loose laid and raked to uniform thickness.
 - 2.1. Type: angular igneous
 - 2.2. Source: Submit proposals
 - 2.3. Colour: -
 - 2.4. Size: 12mm single size
 - 2.5. Thickness: to fill plastics system +12mm

Laying

350 Cold weather working

1. Frozen materials: Do not use.
2. Freezing conditions: Do not lay pavings.
3. Cold bituminous surface dressings: Do not apply when ambient temperature is below 10°C.
4. Other dressings or overlays: As manufacturers' recommendations.

380 Laying granular surfaces in pedestrian areas and cycle tracks

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

390 Protection from traffic and plant

1. Paved areas: Restrict access to prevent damage.

Completion - Not Used

Ω End of Section

Q25

Slab/ brick/ sett/ cobble pavings

General

180 Plastics reinforcing paving system with gravel infill

1. Description: To parking bays
2. Subgrade improvement layer: Not required
3. Geomembrane: Geotextile membrane
 - 3.1. Manufacturer: Submit proposals
 - 3.1.1. Product reference: Submit proposals
4. Granular sub-base: Coarse graded aggregate for permeable paving, as section Q20
 - 4.1. Compacted thickness: 200 mm
5. Water collection: Not required
6. Laying course: 6mm single size angular grit regulating layer.
7. Paving units: Plastics pavers. SUDSPAVE CELLULAR CONFINEMENT SYSTEM
<https://www.abg-geosynthetics.com/products/permeable-surfaces/sudspave-permeable-pavers/>
 - 7.1. Bond: In accordance with manufacturer's recommendations
 - 7.2. Filling: Gravel as Q23
 - 7.3. Accessories: White infill squares to define individual parking bays

System performance

285 Design – gravel filled plastics paving system

1. Design: Complete the design of the gravel filled plastics paving system in accordance with manufacturer's instructions.
2. Ground conditions: Sand, silty sand, clayey sand - loose
3. Performance criteria: To parking bays
4. Proposals: Submit drawings, technical information, calculations and manufacturers' literature.

Products

450 Gravel filling

1. Description: Ref Q23
2. Material: Ref Q23

Execution

620 Adverse weather

1. General
 - 1.1. 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.
 - 1.2. Frozen materials: Do not use. Do not lay bedding on frozen or frost covered bases.
2. Paving with mortar joints and/ or bedding
 - 2.1. Protect from frost damage, rapid drying out and saturation until mortar has hardened.
3. Paving laid and jointed in sand/ fine aggregate
 - 3.1. Stockpiled laying course sand/ fine aggregate: Protect from saturation.

- 3.2. Exposed areas of unbound laying course and uncompacted areas of unbound paving: Protect from heavy rainfall.
- 3.3. Saturated unbound laying course: Remove and replace, or allow to dry before proceeding.
- 3.4. Laying dry sand/ fine aggregate 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

- 1. Appearance: Smooth and even with regular joints and accurate to line, level and profile.
- 2. Falls: To prevent ponding.
- 3. Bedding of paving units: Firm so that rocking or subsidence does not occur or develop.
 - 3.1. Bedding/ Laying course: Consistently and accurately graded, spread and compacted to produce uniform thickness and support for paving units.
- 4. Slopes: Lay paving units upwards from the bottom of slopes.
- 5. Paving units: Free of mortar and sand stains.
- 6. Cutting: Cut units cleanly and accurately, without spalling, to give neat junctions with edgings and adjoining finishes.

630 Levels of paving

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

635 Regularity of paved surfaces

- 1. Maximum variation in gap under a 3 m straight edge placed anywhere on the surface (where appropriate in relation to the geometry of the surface)
 - 1.1. Precast concrete paving blocks and clay pavers for flexible pavements: 10 mm.
 - 1.2. Precast concrete flags or natural stone slabs: 3 mm.
- 2. Difference in level between adjacent paving units (maximum): 2 mm.
- 3. Sudden irregularities: Not permitted.

645 Protection

- 1. Cleanliness: Keep paving clean and free from mortar droppings, oil and other materials likely to cause staining.
- 2. Materials storage: Do not overload pavings with stacks of materials.
- 3. Handling: Do not damage paving unit corners, arrises, or previously laid paving.
- 4. Access: Restrict access to paved areas to prevent damage from site traffic and plant.

655 Condition of sub-bases/ bases before spreading laying course

- 1. Trenches and excavation of soft or loose spots in subgrade: Fill and thoroughly compact.
- 2. 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.
- 3. Prepared existing and new bound bases (roadbases): Sound, clean, free from rutting or major cracking. Remove sharp stones, projections and debris.

4. Sub-base/ Roadbase level tolerances: To BS 7533-7, Annex A.
5. Levels and falls: Accurate and within the specified tolerances.
6. Drainage outlets: Within 0-10 mm of the required finished level.
7. Features in unbound paving (including mortar bedded restraints and drainage ironwork): Complete to required levels; adequately bed and haunch in mortar.

770 Laying gravel filled plastics pavers

1. Laying: Tamp down into lightly compacted laying course Secure with fasteners Stand on laid pavers when laying next row.
2. Filling: Allow to settle and refill level with surface.

Completion - Not Used

Ω End of Section

Q30 Seeding/turfing

Clauses

2A To be read with preliminaries/general conditions.

General information/requirements

115 Seeded and turfed areas

1. **Growth and development:** Healthy, vigorous grass sward, free from the visible effects of pests, weeds and disease.
2. **Appearance:** A closely knit, continuous ground cover of even density, height and colour.

120 Climatic conditions

1. **General:** Carry out the work while soil and weather conditions are suitable.

145 Watering

1. **Quantity:** Wet full depth of topsoil.
2. **Application:** Even and without displacing seed, seedlings or soil.
3. **Frequency:** As necessary to ensure the establishment and continued thriving of all seeding/turfing.

150 Water restrictions

1. **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

1. **Give notice before**
 - 1.1. Setting out.
 - 1.2. Applying herbicide.
 - 1.3. Applying fertilizer.
 - 1.4. Preparing seed bed.
 - 1.5. Seeding or turfing.
 - 1.6. Visiting site during maintenance period.
2. **Period of notice:** 2 weeks- Contact Lead Consultant or Landscape Architect

170 Setting out

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

Preparation

250A Cultivation

1. • **Compacted topsoil:** Break up to full depth of topsoil.
2. • **Break up and loosen ground** to 200mm below topsoil bed formation.
3. • **Tilth:** Reduce topsoil to a tilth suitable for blade grading.
 - 3.1. **Depth:** 75 mm.

3.2. Particle size (maximum): 5 mm.

4. • Material brought to the surface: Remove stones and clay balls larger than 30 mm in any
5. dimension, roots, tufts of grass, rubbish and debris.

260 Grading

1. • Topsoil condition: Reasonably dry and workable.
2. • Contours: Smooth and flowing, with falls for adequate drainage.
 - 2.1. Hollows and ridges: Not permitted.
3. • Finished levels after settlement: 25 mm above adjoining areas.
4. • Blade grading: May be used to adjust topsoil levels provided depth of topsoil is nowhere
5. less than 100 mm .
6. • Give notice: If required levels cannot be achieved by movement of existing soil.

280 Final cultivation

1. • Timing: After grading and fertilizing.
2. • Seed bed: Reduce to fine, firm tilth with good crumb structure.
 - 2.1. Depth: 25 mm.
 - 2.2. Surface preparation: Rake to a true, even surface, friable and lightly firmed but not over
3. compacted.
 - 3.1. Remove surface stones/earth clods exceeding: 25mm
4. General areas: 40 mm.
5. Fine lawn areas: 10 mm.
6. • Adjacent levels: Extend cultivation into existing adjacent grassed areas sufficient to ensure
7. full marrying in of levels.

Seeding

312A Amenity grass seed. NOT SPORTS PITCH AREAS AS

1. Description: For all low maintenance areas
2. Supplier: Contractors choice
 - 2.1. Mixture reference: A22 Low Maintenance Mix
3. Application rate: 50 g/m2

320 Quality of seed

1. Description: For all grassed areas
2. Freshness: Produced for the current growing season.
3. Certification: Blue label certified varieties.
 - 3.1. Standard: EC purity and germination regulations and Department for Environment, Food and Rural Affairs Higher Voluntary Standard.
 - 3.2. Official Seed Testing Station certificate of germination, purity and composition: Submit when requested.
4. Samples of mixtures: Submit when requested.

330 Sowing

1. General: Establish good seed contact with the root zone.
2. Method: To suit soil type, proposed usage, location and weather conditions during and after sowing

- 2.1. Distribution: 2 equal sowings at right angles to each other

335 Grass sowing season

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

350 Turf edging to seeded areas

1. Description: Adjacent to car parking
2. Standard: To BS 3969, with no perennial ryegrass.
 - 2.1. Seed mix: Similar to seeded area.
3. Timing: Before sowing.
4. Preparation: Rake back a 750 mm wide margin around prepared seed beds.
 - 4.1. Level of seed bed: Married in with turf.
5. Placement: Single row laid end to end and trimmed to a line.
6. Watering: On completion.

352 Edges to seeded areas

1. Description: Adjacent to planting beds and tree pits
2. Timing: After seeded areas are well established.
3. Edges: Clean straight lines or smooth curves.
 - 3.1. Mulch and soil: Draw back to permit edging.
4. Arisings: Remove.
5. Completion: Respread soil and mulch.

Turfing - Not Used

Protecting/cutting

510 Protective fencing

1. Fencing type: Chestnut pale fencing to BS 1722-4
 - 1.1. Height: 1.2 m
2. Erection: On completion of seeding/ turfing.
3. Removal: After grass is well established. Fencing will remain the property of the Contractor

530 First cut of grassed areas

1. Timing: When grass is reasonably dry.
 - 1.1. Height of initial growth: 40-75 mm
2. Preparation
 - 2.1. Debris and litter: Remove.
 - 2.2. Stones and earth clods larger than 25 mm in any dimension: Remove
3. Height of first cut: 25 mm
4. Mower type: Contractor's choice
5. Arisings: Remove from site

590 Cleanliness

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

Maintenance

610 Failures of seeding/ turfing

1. Duration: Carry out the following operations from completion of seeding/ turfing until: the end of the rectification period.
2. Defective materials or workmanship: Areas that have failed to thrive.
 - 2.1. Exclusions: Theft or malicious damage.
3. Method of making good: Recultivation and reseeding/ returfing.
4. Timing of making good: The next suitable planting season

620 Maintaining

1. Description: General grassed areas
2. Duration: Carry out the following operations from completion of seeding/ turfing until: practical completion.
3. Maximum height of growth at any time: 75 mm
4. Preparation: Before each cut remove all litter and debris.
5. Cutting: As and when necessary to a height of 25 mm.
 - 5.1. Arisings: Remove
6. Bulb planting areas: Do not cut until bulb foliage has died down.
7. Trimming: All edges.
 - 7.1. Arisings: Remove.
8. Weed control: Substantially free of broad leaved weeds.
 - 8.1. Method: Application of a suitable selective herbicide.
9. Stones brought to the surface: Remove regularly.
 - 9.1. Size: Exceeding 25 mm in any dimension.
10. Areas of settlement: Make good.
11. Watering: Contractor's choice

680 Maintenance fertilizer for all grassed areas

1. • Duration: Carry out the following operations from completion of seeding/ turfing until: the
2. end of the rectification period.
3. • March application: 15:10:10 Spring turf fertilizer at 35 g/m².
4. • September application: 5:10:10 Autumn turf fertilizer at 50 g/m².

Ω End of Section

Q40 Fencing

Clauses

2 To be read with preliminaries/ general conditions.

Fencing systems

125A Open mesh steel panel general purpose fencing

1. Manufacturer: Submit proposals
 - 1.1. Product reference: Submit proposals
2. Standard: To BS 1722-14, category 1.
3. Height: 4050mm, 2050mm (to south boundary)
4. Mesh and wire: 200x50mm twin mesh, 5mm verticals, 2x6mm horizontals.
5. Posts: 60x100mm posts
6. Maximum centres of posts: 2500mm
7. Method of setting posts: As drawing 0210
8. Bottom of fencing: as drwg 0210
9. Accessories: As drawing 0210
10. Conformity: Submit manufacturer's and installer's certificates, to BS 1722-14.
11. Finish: Galvanised mild steel, polyester powder coated in RAL 6006 (olive grey).

Gates, posts and stiles

570 Gates

1. Manufacturer: Submit proposals SHS frame, designed to prevent gates sagging.
2. Sizes: 5m clear opening, double leaf vehicle gate. gate capable of being secured in open/closed position.
3. Posts: 150x150mm SHS posts set in concrete.
4. Fittings: • Fittings:
 - 2 hook eye adjustable hinges
 - Lockable drop bolts
 - Cushioned slam plate
 - Heavy duty mortice locking mechanism
 - Gate opener• Safety:
 - minimum hinge gap should not be less than 25 mm and should not be more than 89 mm
 - minimum gap where the leading edge closes to the fence post should not be less than 12 mm and should not be more than 25 mm
 - Gates to be secured in both the open and closed positions
 - A clearance of between 60 mm and 110 mm should be maintained beneath the gate.
5. Method of fixing: Posts set in 450 mm square x 750 mm deep concrete
6. Accessories: Infill-mesh to match fencing.

Accessories - Not Used

Execution

710 Installation generally

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

715 Competence

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

720 Setting posts in concrete

1. Standard: To BS 8500-2.
2. Mix: Designated concrete not less than GEN1 or Standard prescribed concrete not less than ST2.
3. 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.
4. Admixtures: Do not use.
5. Holes: Excavate neatly and with vertical sides.
6. Filling: Position post/ strut and fill hole with concrete to not less than the specified depth, well rammed as filling proceeds and consolidated.
7. Backfilling of holes not completely filled with concrete: Excavated material, well rammed and consolidated.

730 Exposed concrete foundations

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

780 Making good galvanized surfaces

1. 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.
2. Thickness: Apply sufficient material to provide a zinc coating at least equal in thickness to the original layer.

790 Site painting

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

Completion

910 Cleaning

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

920 Fixings

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

Ω End of Section

Q52

Play and sports equipment

Clauses - Not Used

General - Not Used

System performance - Not Used

Products

580 Goals

1. Description: Rugby League
2. Standard: In accordance with RFL guidance.
3. Manufacturer: Submit proposals
 - 3.1. Product reference: Submit proposals
4. Size: 5m width
5. Posts
 - 5.1. Dimensions: as above-to suit RFL requirements.
 - 5.2. Materials: Galv Steel tube
 - 5.3. Finish: PPC white
6. Accessories: Post protectors
7. Method of fixing: Into in-ground sockets. Hinged goals capable of being erected/taken down with grounds maintenance tractor.

Execution - Not Used

Completion - Not Used

Ω End of Section



Specification created using NBS Chorus