

Finc Architects Ltd

Bellway Homes Ltd (Thames Valley)

Land at Park Lane, Charvil

Preliminaries

13-07-2026

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A10

Project particulars

Clauses

110 The Project

1. **Name:** Land at Park Lane, Charvil
2. **Nature:** New residential development comprising of 75 dwellings and associated open space

120 Employer (client)

1. **Name:** Bellway Homes Limited (Thames Valley)
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140 Landscape architect

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3. **Contact:** John Markwell
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200 Consultants

1. **Description:** Civil Engineer
2. **Name:** Tim Smith
3. **Contact:** Structa LLP
4. **Address:** Apple Walk 2
Kembrey Park
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SN2 8BL
5. **Telephone:** 01793 209 132
6. **Email:** tim.smith@structa.co.uk

Ω End of Section

A13

Description of the work

Clauses

120 The work

1. **Description:** Implementation of hard and soft landscape scheme, including associated furniture and play equipment.

140 Completion work by others

1. **Description:**
 - Levels and build-up design by Civil & Structural Engineers.
 - Garden boundaries, including fences and walls, by Architects.
 - Procurement options for surface materials, furniture, tree and planting stock by Contractor. In terms of plant materials, allow the Client and Landscape Architects to tag the required stock prior to ordering at the nursery at the contractors expense.
 - Programme for planting substitution by Contractor and Contract Administrator.
 - Programme for site visits for landscape delivery by Contractor and Contract Administrator. This is to ensure the scheme is being delivered as intended.

140A General Notes to the Contractor

1. **Description:**

The site is to be kept in a neat and tidy condition at all times. All rubbish and waste materials are to be cleared on a daily basis; materials are not to be stored on site adjacent to works and should be secured against damage prior to installation.

- Any damage caused by the Contractor and/or other sub-contractors to existing structures etc, to be 'made good' at their own expense.
- Co-ordination is required for the installation of M & E requirements, fixing of street furniture and play equipment.

Ω End of Section

A31

Provision, content and use of documents

Definitions and interpretations

110 Definitions

1. **Meaning:** Terms, derived terms and synonyms used in the preliminaries/ general conditions and specification are as stated here or in the appropriate referenced document.

120 Communication

1. **Definition:** Includes advise, inform, submit, give notice, instruct, agree, confirm, seek, provide or obtain information, consent or instructions, or make arrangements.
2. **Format:** In writing to the person named in clause A10/140 unless specified otherwise.
3. **Response:** Do not proceed until response has been received.

130 Products

1. **Definition:** Materials, both manufactured and naturally occurring, and goods, including components, equipment and accessories, intended for the permanent incorporation in the Works.
2. **Includes:** Goods, plant, materials, site materials and things for incorporation into the Works.

135 Site equipment

1. **Definition:** Apparatus, appliances, machinery, vehicles or things of whatsoever nature required in or about the construction for the execution and completion of the Works but not materials or other things intended to form or forming part of the Permanent Works.
2. **Includes:** Construction appliances, vehicles, consumables, tools, temporary works, scaffolding, cabins and other site facilities.
3. **Excludes:** Products and equipment or anything intended to form or forming part of the permanent works.

145 Contractor's choice

1. **Meaning:** Selection delegated to the Contractor, but liability to remain with the specifier.

150 Contractor's Design

1. **Meaning:** Design to be carried out or completed by the Contractor and supported by appropriate contractual arrangements, to correspond with specified requirements.

155 Submit proposals

1. **Meaning:** Submit information in response to specified requirements.

160 Terms used in specification

1. **Remove:** Disconnect, dismantle as necessary and take out the designated products or work and associated accessories, fixings, supports, linings and bedding materials. Dispose of unwanted materials. Excludes removal and disposal of associated pipework, wiring, ductwork or other services.
2. **Remediate:** Action or measures taken to lessen, clean up, remove or mitigate the existence of hazardous materials; in accordance with standards, or requirements as may be set out by statutes, rules, regulations or specification.
3. **Fix:** Receive, unload, handle, store, protect, place and fasten in position; dispose of waste and surplus packaging. To include all labour, materials and site equipment for that purpose.

4. **Supply and fix:** As above, but including supply of products, components or systems to be fixed, together with everything necessary for their fixing. All products, components or systems are to be supplied and fixed unless stated otherwise.
5. **Keep for reuse:** Do not damage designated products or work. Clean off bedding and jointing materials. Stack neatly, protect adequately and store until required by the employer/ purchaser, or until required for use in the works as instructed.
6. **Keep for recycling:** As 'keep for reuse', but relates to a naturally occurring material rather than a manufactured product.
7. **Make good:** Execute local remedial work to designated work. Make secure, sound and neat. Excludes redecoration and/ or replacement.
8. **Replace:** Supply and fix new products matching those removed. Execute work to match original new state of that removed.
9. **Repair:** Execute remedial work to restore something to its original working state. Make secure, sound and neat. Excludes redecoration and/ or replacement.
10. **Refix:** Fix removed products.
11. **Ease:** Adjust moving parts of designated products, or work to achieve free movement and good fit in open and closed positions.
12. **Match existing:** Provide products and work of the same appearance and features as the original, excluding ageing and weathering. Make joints between existing and new work as inconspicuous as possible.
13. **System:** Equipment, accessories, controls, supports and ancillary items (including installation) necessary for that section of the work to function.

170 Manufacturer and product reference

1. **Definition:** When used in this combination:
 - 1.1. **Manufacturer:** the person or legal entity under whose name or trademark the particular product, component or system is marketed
 - 1.2. **Product reference:** the proprietary brand name and/ or identifier by which the particular product, component or system is described.
2. **Currency:** References are to the particular product as specified in the manufacturer's technical literature current on the date of the invitation to tender.

200 Substitution of products

1. **Products:** If an alternative product to that specified is proposed, obtain approval before ordering the product.
2. **Reasons:** Submit reasons for the proposed substitution.
3. **Documentation:** Submit relevant information, including:
 - 3.1. manufacturer and product reference;
 - 3.2. cost;
 - 3.3. availability;
 - 3.4. relevant standards;
 - 3.5. performance;
 - 3.6. function;
 - 3.7. compatibility of accessories;
 - 3.8. proposed revisions to drawings and specification;
 - 3.9. compatibility with adjacent work;
 - 3.10. appearance;
 - 3.11. copy of warranty/ guarantee.
4. **Alterations to adjacent work:** If needed, advise scope, nature and cost.

5. **Manufacturers' guarantees:** If substitution is accepted, submit before ordering products.

210 Cross references

1. **Accuracy:** Check remainder of the annotation or item description against the terminology used in the section or clause referred to.
2. **Related terminology:** Where a numerical cross reference is not given, the relevant sections and clauses of the specification will apply.
3. **Relevant clauses:** Clauses in the referred to specification section dealing with general matters, ancillary products and execution also apply.
4. **Discrepancy or ambiguity:** Before proceeding, obtain clarification or instructions.

220 Referenced documents

1. **Conflicts:** Specification prevails over referenced documents.

230 Equivalent products

1. **Inadvertent omission:** Wherever products are specified by proprietary name the phrase 'or equivalent' is to be deemed included.

240 Substitution of standards

1. **Specification to British Standard or European Standard:** Substitution may be proposed complying with a grade or category within a national standard of another Member State of the European Community or an international standard recognised in the UK.
2. **Before ordering:** Submit notification of all such substitutions.
3. **Documentary evidence:** Submit for verification when requested as detailed in clause A31/200. Any submitted foreign language documents must be accompanied by certified translations into English.

250 Currency of documents and information

1. **Currency:** References to published documents are to the editions, including amendments and revisions, current on the date of the Invitation to Tender.

260 Sizes

1. **General dimensions:** Products are specified by their co-ordinating sizes.
2. **Timber:** Cross section dimensions shown on drawings are:
 - 2.1. Target sizes as defined in BS EN 336 for structural softwood and hardwood sections.
 - 2.2. Finished sizes for non-structural softwood or hardwood sawn and further processed sections.

Documents provided on behalf of the employer - No Amendments

Documents provided by contractor/ subcontractors/ suppliers - No Amendments

Ω End of Section

A33

Quality standards/ control

Standards of products and executions

110 Incomplete documentation

1. **General:** Where and to the extent that products or work are not fully documented, they are to be:
 - 1.1. Of a kind and standard appropriate to the nature and character of that part of the Works where they will be used.
 - 1.2. Suitable for the purposes stated or reasonably to be inferred from the project documents.
2. **Contract documents:** Omissions or errors in description and/ or quantity shall not vitiate the Contract nor release the Contractor from any obligations or liabilities under the Contract.

120 Workmanship skills

1. **Operatives:** Appropriately skilled and experienced for the type and quality of work.
2. **Registration:** With Construction Skills Certification Scheme.
3. **Verification:** When requested, operatives must produce evidence of skills/ qualifications.

130 Quality of products

1. **Generally:** New. (Proposals for recycled products may be considered).
2. **Supply of each product:** From the same source or manufacturer.
3. **Whole quantity of each product required to complete the Works:** Consistent kind, size, quality and overall appearance.
4. **Tolerances:** Where critical, measure a sufficient quantity to determine compliance.
5. **Deterioration:** Prevent. Order in suitable quantities to a programme and use in appropriate sequence.

135 Quality of execution

1. **Generally:** Fix, apply, install or lay products securely, accurately, plumb, neatly and in alignment.
2. **Colour batching:** Do not use different colour batches where they can be seen together.
3. **Dimensions:** Check on-site dimensions.
4. **Finished work:** Without defects, e.g. not damaged, disfigured, dirty, faulty, or out of tolerance.
5. **Location and fixing of products:** Adjust joints open to view so they are even and regular.

140 Evidence of Compliance

1. **Proprietary products:** Retain on site evidence that the proprietary product specified has been supplied.
2. **Performance specification:** Submit evidence of compliance, including test reports indicating:
 - 2.1. Properties tested.
 - 2.2. Pass/ fail criteria.
 - 2.3. Test methods and procedures.
 - 2.4. Test results.
 - 2.5. Identity of testing agency.
 - 2.6. Test dates and times.
 - 2.7. Identities of witnesses.
 - 2.8. Analysis of results.

150 Inspections

1. **Products and executions:** Inspection or any other action must not be taken as approval unless confirmed in writing referring to:
 - 1.1. Date of inspection.
 - 1.2. Part of the work inspected.
 - 1.3. Respects or characteristics which are approved.
 - 1.4. Extent and purpose of the approval.
 - 1.5. Any associated conditions.

170 Manufacturer's recommendations/ instructions

1. **General:** Comply with manufacturer's printed recommendations and instructions current on the date of the Invitation to tender.
2. **Exceptions:** Submit details of changes to recommendations or instructions.
3. **Execution:** Use ancillary products and accessories supplied or recommended by main product manufacturer.
4. **Products:** Comply with limitations, recommendations and requirements of relevant valid certificates.

180 Water for the works

1. **Mains supply:** Clean and uncontaminated.
2. **Other:** If proposed, provide evidence of suitability.

Samples/ approvals - No Amendments

Accuracy/ setting out generally

320 Setting out

1. **General:** Submit details of methods and equipment to be used in setting out the Works.
2. **Levels and dimensions:** Check and record the results on a copy of drawings. Notify discrepancies and obtain instructions before proceeding.
3. **Inform:** When complete and before commencing construction.

330 Appearance and fit

1. **Tolerances and dimensions:** If likely to be critical to execution or difficult to achieve, as early as possible either:
 - 1.1. Submit proposals; or
 - 1.2. Arrange for inspection of appearance of relevant aspects of partially finished work.
2. **General tolerances (maximum):** To BS 5606, tables 1 and 2.

340 Critical dimensions

1. **Critical dimensions:** Set out and construct the Works to ensure compliance with the tolerances stated.

Services generally - No Amendments

Supervision/ inspection/ defective work - No Amendments

Work at or after completion

710 Work before completion

1. **General:** Make good all damage consequent upon the Works.
2. **Temporary markings, coverings and protective wrappings:** Remove unless otherwise instructed.
3. **Cleaning:** Clean the Works thoroughly inside and out, including all accessible ducts and voids. Remove all splashes, deposits, efflorescence, rubbish and surplus materials.
4. **Cleaning materials and methods:** As recommended by manufacturers of products being cleaned, and must not damage or disfigure other materials or construction.
5. **COSHH dated data sheets:** Obtain for all materials used for cleaning and ensure they are used only as recommended by their manufacturers.
6. **Minor faults:** Touch up in newly painted work, carefully matching colour and brushing out edges. Repaint badly marked areas back to suitable breaks or junctions.
7. **Moving parts of new work:** Adjust, ease and lubricate as necessary to ensure easy and efficient operation, including doors, windows, drawers, ironmongery, appliances, valves and controls.

Ω End of Section



Finc Architects Ltd

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Land at Park Lane, Charvil

Specification

13-07-2026

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Q10

Kerbs/ edgings/ channels/ paving accessories

Types of kerbs/edgings and channels

110 Proprietary precast concrete

1. Description: HIGHWAY KERBS
2. Standard: To BS EN 1340.
3. Size (width x height x length): 125 x 150 x 915 mm
4. Special shapes:
 - Transition kerbs
 - Dropper kerbs to footway crossings
5. Finish: Solid unit with pimple surface
6. Colour: British Standard Grey, as supplied/cast
7. Bedding: Concrete bedding to Civil Engineers details and specification.
8. Joints generally: Narrow mortar
9. Sealant movement joints: Cross reference with Civil Engineers

112 Precast concrete

1. Description: PIN KERB / CONCRETE EDGING
2. Standard: To BS EN 1340.
3. Designations: EF Edging, flat top
4. Size (width x height x length): 50 x 150 x 915 mm
5. Finish: Manufacturer standard, as cast
6. Colour: Standard, natural grey
7. Abrasion resistance: $\leq 23\text{mm}$ (Wide Wheel Abrasion Test)
8. Bedding: Concrete bedding to Civil Engineers details and specification.
9. Joints generally: Narrow mortar

170 Linear slot drainage channel systems

1. Description: Landscape, external surface drainage located in coordination with Civil Engineers drainage strategy
2. Manufacturer: Details and specification to Civil Engineers

250 Material samples

1. Samples representative of colour and appearance of designated materials: Submit before placing orders.
 - 1.1. Designated materials: Kerbs, edging and channels

Roads/paving accessories/ marking/ demarcation - Not Used

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. **General:** Details and specification to Civil Engineers.

540 Cement mortar bedding

1. **General:** Details and specification to Civil Engineers.

580 Drainage channel systems

1. **Installation:** To an even gradient, without ponding or backfall. Commence laying from outlets.
2. **Silt and debris:** Removed from entire system immediately before handover.
3. **Washing and detritus:** Safely disposed without discharging into sewers or watercourses.

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.

110 Thicknesses of sub-base/ subgrade improvement layers

1. General:

- Cross reference and refer to Civil & Structural Engineers details and specification for all sub-base, base, concrete footing, haunching, foundation and slab details. All preparation, laying, compaction, accuracy and checking of subgrade is to Civil Engineers specification.
- NBS Landscape specification for hard landscape is for wearing course finishes only.

Ω End of Section

Q22

Asphalt roads/ pavings

Types of paving

101 Bituminous material GENERAL

1. ALL bituminous material to Civil Engineers details and specification.
2. Refer to Landscape drawings for material locations and cross reference to civil engineers drawings, details and specification.
3. All tie ins and interfaces with kerbs, manhole covers, gully and other landscape finishes to be made sound.

110 Asphalt concrete paving 'RA' & 'PA'

1. **Description:** Sealed surface, black bituminous material to road and pavement.
 - RA - road asphalt
 - PA - pedestrian asphalt
2. **Manufacturer:** Refer to Civil Engineers details and specification.
3. **Standard:** Refer to Civil Engineers details and specification. Specification required to achieve:
 - Consistent in appearance.
 - Durable surface.
 - Low slip characteristics.
4. **Colour:** Black

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:** Refer to Civil Engineers details and specification. 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 bitumen. Refer to Civil Engineers details and specification.
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.

Completion

395 Slip resistance testing

1. **Surfaces to be tested:** Asphalt concrete paving 'RA' & 'PA'
 - 1.1. **Surface condition:** Dry and wet
2. **Timing:** As agreed with contract administrator
3. **Test standard:** To Civil Engineers specification requirements.

Ω End of Section

Q23

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

Types of surfacing

140 Self-binding gravel

1. Description: For open space footpaths
2. Subgrade improvement layer: Civil Engineers details and specification
3. Geotextile:
4. Drainage falls: Lay sub-base with 1:40 crossfall or 1:50 central camber.
5. Completion: Compact to produce a firm, regular surface, stable in use.

Laying

310 Timber edging

1. Description: To open space footpaths
2. Softwood board
 - 2.1. Size: 150 x 38 mm.
 - 2.2. Fixing: Galvanized nails into softwood pegs.
3. Softwood pegs
 - 3.1. Size: 50 x 50 x 600 mm long
 - Pre-pointed, sawn and treated.
 - Sustainably sourced timber (FSC)
 - 3.2. Fixing: Drive into ground.
 - 3.3. Centres: Typical 900 mm. Sufficient to maintain a straight alignment, tight butted ends at change of direction or free flowing curves as required by the design. Submit sample installation for approval prior to proceeding.
4. Preservative treatment: WPA Commodity Specification C4, with 15 year desired service life

315 Materials

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

320 Samples

1. Submit: Representative samples of all aggregates.

340 Laying generally

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

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.

360 Drainage falls

1. Sealed surfaces
 - 1.1. Falls and cross falls (minimum): 1:40.
 - 1.2. Camber (minimum): 1:50.
2. Unsealed surfaces (minimum): 1:30.

390 Protection from traffic and plant

1. Paved areas: Restrict access to prevent damage.

Completion

400 Slip resistance testing

1. Surfaces to be tested: All paved surfaces.
 - 1.1. Surface condition: Dry and wet
2. Timing: As agreed with contract administrator
3. Period of notice (minimum): 3 working days.
4. Test standard: To [BS EN 16165](#)
 - 4.1. Testing authority: A UKAS accredited laboratory
 - 4.2. Report: Submit.

Ω End of Section

Q25

Slab/ brick/ sett/ cobble pavings

Clauses - Not Used

Types of paving - Not Used

System performance - Not Used

Products

312 Concrete paving blocks 'BP1', 'BP2', 'BP3' & 'BP4'

1. Description:
 - BP1 - to raised table
 - BP2 - to shared surface
 - BP3 - to private drive (primary road)
 - BP4 - to private drive (others)
2. Physical properties
 - 2.1. Colour:
 - 2.2. Finish: Tumbled.
 - 2.3. Profile
 - 2.3.1. Paver type: Regular plan form.
 - 2.4. Dimensions and associated tolerances
 - 2.4.1. Nominal sizes:
 - 2.5. Weathering resistance: Class 3.
 - 2.6. Slip resistance: Mean polished skid resistance value (PSRV): >45. Mean unpolished skid resistance value (USRV): >45.
3. Strength: Not less than 3.6 MPa.
4. FireRating: A1.
5. EnergyUsed: 100%.
6. WaterUsed: 100%.
7. BREEAM rating: A (A+ can be achieved when used with recycled sub-base).
8. Pack size:
9. Product reference: [Tegula | Concrete Block Paving \(Tegula 60mm\)](#)
10. Laying pattern: Herringbone with soldier course

315 Concrete flags 'FP'

1. Description: To private footpath and patios
2. Standard: To BS EN 1339.
3. Physical properties
 - 3.1. Colour: Buff.
 - 3.2. Finish: Textured.
 - 3.3. Profile
 - 3.3.1. Flag type: Regular plan form.
 - 3.4. Dimensions and associated tolerances
 - 3.4.1. Nominal sizes: 450 x 450 x 50 mm.

- 3.5. Weathering resistance: $\leq 1.0 \text{ kg/m}^2$. (as a mean with no individual value), $> 1.5 \text{ kg/m}^2$ (freeze thaw durability).
- 3.6. Abrasion resistance: $\leq 23 \text{ mm}$, wide wheel abrasion test.
- 3.7. Slip resistance: > 45 .
- 3.8. Skid resistance: > 45 .
- 4. Laying pattern: Stack bond

330 Natural stone setts 'S'

- 1. Stone denomination
 - 1.1. Petrological family: Granite.
 - 1.2. Colour: Silver grey.
 - 1.3. Origin: Manufacturer's standard.
- 2. Physical properties
 - 2.1. Sett type: Regular plan form.
 - 2.2. Dimensions and tolerances
 - 2.2.1. Nominal sizes: $100 \times 100 \times 100 \text{ mm}$.
 - 2.3. Finish: Sawn.
- 3. Laying pattern: Stack bond

Execution

630 Regularity and levels of paved surfaces

- 1. Surface levels:
 - 1.1. Permissible deviation from specified levels (generally): $\pm 6 \text{ mm}$, in accordance with [BS 7533-102](#) and [National Highways, MCHW, Volume 1, Series 700](#)
 - 1.2. Height of finished paving above features
 - 1.2.1. At gullies: $+5$ to $+10 \text{ mm}$, in accordance with [BS 7533-102](#)
 - 1.2.2. At drainage channels : $+3$ to $+6 \text{ mm}$, in accordance with [BS 7533-102](#)
 - 1.2.3. At kerbs: $+3$ to $+6 \text{ mm}$, in accordance with [BS 7533-102](#)

640 Colour banding

- 1. General: Unless premixed by manufacturer, select from at least 3-5 separate packs in rotation to avoid colour banding.

645 Protection of paved surfaces

- 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. Mortar-bedded pavings: Keep free from traffic after laying
 - 4.1. Pedestrian traffic (minimum): Two days
 - 4.2. Vehicular traffic (minimum): Seven days
- 5. Access: Restrict access to paved areas to prevent damage from site traffic and plant.

650 Cementitious bases and sub-bases

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

715 Laying flag and slab paving – mortar laying course and jointing

1. Standard: In accordance with [BS 7533-101](#) and [BS 7533-102](#)
2. Flag installation and cutting: To [Interpave](#) publication [Concrete flag paving](#)
3. Laying course
 - 3.1. Nominal thickness: To Civil Engineers details and specification. Typically 30 mm before laying paving slabs.
 - 3.2. Joint width (nominal): 5-10 mm
 - Recessed, filled joints: joints to be no wider than 10 mm.
 - Unfilled joints: joints to be no wider than 5 mm.

730 Laying natural stone sett paving

1. Standard: In accordance with [BS 7533-101](#).
2. Laying type: Bound.
 - 2.1. Laying and jointing method: Moist bed fine concrete with full depth slurry joint
3. Laying course
 - 3.1. Target thickness after compaction: To Civil Engineers details and specification. Typically 40 mm before laying paving slabs.
4. Joint width (nominal): 5-8 mm

785 Tooled joints in mortar-bedded units

1. Joints: Completely filled with bedding mortar as work proceeds.
 - 1.1. Joint width: 6 mm
 - 1.2. Finish: Tool to a neat flush profile

795 Movement joints in mortar-bedded units

1. Standard: To be determined with the Civil Engineers base design at construction stage detail design.

Completion

905 Slip resistance testing

1. Surfaces to be tested: All paving
 - 1.1. Surface condition: Dry and wet
2. Timing: As agreed with contract administrator
3. Period of notice (minimum): Three working days.
4. Test standard: To [BS 1134](#)
 - 4.1. Testing authority: A [UKAS](#)-accredited laboratory
 - 4.2. Witnessing/ Certification: Arrange for tests to be witnessed/ certified by: Contract administrator
 - 4.3. Report: Submit.
 - 4.3.1. Format: As required under [BS 1134](#)

915 Completion of paving with mortar-filled joints

1. Standard: In accordance with [BS 7533-102](#).
2. Vacuum cleaning machines: Only permitted when the jointing mortar has fully cured to its design specification.

Ω End of Section

Q26

Special surfacings/ pavings for sport/ general amenity

Clauses - Not Used

Sports surfacing - Not Used

Impact attenuating surfacings for play areas

300 Extent of impact attenuating surfacing

1. General: Lay to the impact areas shown in the relevant parts of BS EN 1176.

360 Polyurethane-bound ethylene propylene diene monomer (EPDM) rubber crumb surfacings

1. Description: To play area
2. Surface course: Rubber mulch
 - 2.1. Standard: Tested to BS EN 1176 and BS EN 1177.
 - 2.2. Colour: Mixed (Red/ beige/ black).
 - 2.3. Recycled content: Manufacturer's standard (shredded lorry tyre rubber).
 - 2.4. Slip resistance – water wet (minimum): Manufacturer's standard.
 - 2.5. Depth:
 - 2.6. Binder: Specifically formulated polyurethane.
 - 2.7. Other requirements:

Associated accessories

430 Edges

1. Edge detail: Pin kerbs as section Q10

Execution - Not Used

Completion

920 Play surface testing

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

930 Documentation

1. Standard: To BS EN 1176-1.
2. Submission requirements
 - 2.1. Name and contact details of installer.
 - 2.2. Date of installation.
 - 2.3. Name and contact details of manufacturer.
 - 2.4. Type/ description/ reference of products used.
 - 2.5. Manufacturer's recommended inspection and maintenance procedures to maintain safety and impact attenuating performance.

3. Manufacturer's recommended cleaning and maintenance methods, where relevant.

940 Labelling

1. Signs: Provide permanent labelling in approved locations on all types of surfacing stating: Critical fall height, Date of installation, Manufacturer's name and contact details, and Product name.

Ω End of Section

Q28

Topsoil and soil ameliorants

System outline

101 Earthworks & Topsoil GENERAL

1. **General:** Cross reference subsoil and topsoil requirements of this specification with the depths indicated on the landscape planting plans, details and sections.
 - No soil either site won or imported is to be used without prior written approval of a soil analysis and confirmation of suitability under this contract. Refer to the Contract Administrator.
 - Grassed areas: Planting beds generally to have a combined minimum depth of subsoil and topsoil of 450 mm for grass + 150mm broken up ground with all stones over 20mm removed. Total depth of decompaction: 600mm
 - Shrub planting beds: Planting beds generally to have a combined minimum depth of subsoil and topsoil of 600 mm for shrubs + 150mm broken up ground with all stones over 20mm removed. Total depth of decompaction: 750mm
 - Trees: Planting beds generally to have a combined minimum depth of subsoil and topsoil of 900 mm for trees + 150mm broken up ground with all stones over 20mm removed. Total minimum depth of decompaction: 1050mm
2. **Formation:** Grading of subsoil/formation must take in to account the specific topsoil depths required for soft landscape application. All formation layers and levels to Civil Engineers details and specification.
3. **Excavating, filling and earthworks:** Formation to Engineers drawings and specification. Formation levels to be approved by Civils Engineers.
4. **Give notice:** Make advance arrangements for inspection of formations for any application of soft or hard landscape finish.
 - The Contract Administrator and Main Contractor are to offer the Landscape Contractor the formation earthworks for acceptance, prior to the Landscape Contractor placing any surface finishes, topsoil or excavating tree pits or trenches.

115 Topsoil system for turfing and seeding

1. **Description:** For amenity lawn areas
2. **Composition**
 - 2.1. **Topsoil:** Imported manufactured topsoil/ growing medium.
 - 2.2. **Ameliorants:** As recommended within soil analysis report.

135 Planting bed topsoil system for Ornamental Planting

1. **Description:** For ornamental planting areas
2. **Composition**
 - 2.1. **Topsoil:** Imported manufactured topsoil/ growing medium. Topsoil 190GT3230-PRO to BS 3882.
 - 2.2. **Ameliorants:** As recommended within soil analysis report.
 - 2.3. **Accessories:** Gel irrigation system

155 Mulching and top dressing system

1. **Description:** For all shrub beds and tree pits in soft areas
2. **Composition**
 - 2.1. **Material:** Ornamental bark mulching

- The product shall consist of matured British Conifer Bark with an even nominal particle size distribution of 30 -75mm.
- Dark brown in colour.
- Free of pests, disease, fungus and weeds.
- The pH to be between 4.5 and 5.5.
- The product shall be pest, disease and weed free and not have been treated with any additives.
- The product shall be Forest Stewardship Council (FSC) certified
- The product shall have been tested in accordance with the requirements of BS4790:1987, for fire resistance and be classified as having 'low' potential to burn.
- Submittal(s): Sample bag for approval. Delivery sample load.

2.2. **Source:** Submit design proposals. Local provenance where possible.

Products

300 Preparation materials generally

1. **Purity:** Free of pests and disease.
2. **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.
3. **Contamination:** Do not use topsoil contaminated with subsoil, rubbish or other materials that are:
 - 3.1. Corrosive, explosive or flammable.
 - 3.2. Hazardous to human or animal life.
 - 3.3. Detrimental to healthy plant growth.
4. **Subsoil:** In areas to receive topsoil or planting media, do not use subsoil contaminated with the above materials.
5. **Objectionable odour:** None.
6. **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

1. **Materials:** Products containing peat
River and canal dredgings

315 Imported topsoil to BS 3882 GENERAL

1. **Description:** For all planting areas, except wildflower meadow
2. **Quantity:** Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.
3. **Standard:** To [BS 3882](#).
4. **Classification:** Multipurpose
 - 4.1. **Soil textural class to BS 3882, Figure 1:** Within the parameters of 'sandy loam' textural class.
5. **Source:** Submit proposals.
 - 5.1. **Product reference:** Submit proposals.

316 Imported topsoil to BS 3882 WILDFLOWER MEADOW

1. **Description:** For wildflower meadow
2. **Quantity:** Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.
3. **Standard:** To [BS 3882](#).

4. **Classification:** Specific-purpose – low-fertility.
5. **Composition:** Well drained. Low fertility. Low in phosphorus. Poor in nutrients.
 - Submit sample and soil analysis for approval, before proceeding.
 - Site won meeting this specification or, blended soil, single source inert materials and weed free.
 - No ameliorants.
6. **Source:** Submit proposals.
 - 6.1. **Product reference:** Submit proposals.

360 Sanitized and stabilized composted materials certified to PAS 100

1. **Description:** For tree and shrub planting areas
2. **Standard:** In accordance with [PAS 100](#).
3. **Source:** Contractor's choice, local source.
 - 3.1. **Product reference:** Submit proposals.
4. **Horticultural parameters**
 - 4.1. pH (1:5 water extract): 6.5–8.7.
 - 4.2. Moisture content (m/m of fresh weight): 35–55%.
 - 4.3. Organic matter content (minimum): 25%.
 - 4.4. Carbon:nitrogen ratio (maximum): 20:1.
5. **Texture:** Friable.
6. **Objectionable odour:** Not permitted.
7. **Declaration of analysis:** Submit.
8. **Samples:** Supply 5 kg sample before ordering. Submit details of recent chemical and physical analysis before ordering.

405 Inorganic fertilizers

1. **Description:** For tree pits
2. **Manufacturer/ source:** Green-tech, or equal and approved
Rabbit Hill Park,
Great North Road,
Arkendale, Knaresborough.
HG5 0FF
W: www.green-tech.co.uk
T: 01423 332100
 - 2.1. **Product reference:** Sierrablen Flora Controlled Release Fertiliser
3. **Standard:** In accordance with the [Fertilizer Industry Assurance Scheme \(FIAS\)](#).
4. **Purpose:** Establishment fertilizer.
5. **Availability to plants:** Controlled release.

Execution

610 Topsoil analysis

1. **Soil to be analysed:** All topsoil.
 - All imported soil must have soil testing data, prior to delivery of bulk loads to site.
 - All subsequent bulk loads will comply with that original approved soil analysis.
 - All existing site-won topsoil and subsoil must have soil testing data, prior to its use.
2. **Soil analyst:** Tim O'Hare Associates, or equal and approved
Howbery Park
Wallingford

Oxfordshire
OX10 8BA
T: 01491 822653
E: info@toha.co.uk
W: www.toha.co.uk

3. **Samples:** Collect in accordance with [BS 3882](#).
4. **Submit**
 - 4.1. **Declaration of analysis:** In accordance with [BS 3882](#), clause 6 and Table 1.
 - 4.2. **Additional analysis:** Chemical contaminants. Potentially toxic elements (PTEs).
 - 4.3. **Report detailing soil analyst's recommendations.**

625 Sample loads

1. **Description:** For imported topsoil, subsoil and growing medium
2. **Deliver to site a sample load:** of not less than 5 m³.
3. **Give notice:** Allow inspection before making further deliveries to site. Retain for comparison with subsequent loads.
 - 3.1. **Notice period:** Seven days.

630 Documentation for imported topsoil

1. **Description:** For all areas
2. **Timing:** Submit at handover.
3. **Contents**
 - 3.1. Full description of all soil components.
 - 3.2. Record of source for all soil components.
 - 3.3. Record drawings showing the location and depth of all soils by type and grade.
 - 3.4. **Declaration of analysis:** in accordance with [BS 3882](#), clause 6 and Table 1.
4. **Number of copies:** As agreed with the Contract Administrator

635 Documentation for compost and composted materials

1. **Description:** For compost
2. **Timing:** Submit at handover.
3. **Contents**
 - 3.1. Full description of all compost components.
 - 3.2. Record of source for all compost components.
 - 3.3. Analyst's report for each test carried out.
 - 3.4. **Declaration of compliance:** In accordance with [PAS 100](#) and [PD CR 13456](#).
4. **Number of copies:** As agreed with the Contract Administrator

650 Notice

1. **Give notice before**
 - 1.1. Setting out.
 - 1.2. Spreading topsoil.
 - 1.3. Applying herbicide.
 - 1.4. Applying fertilizer.
 - 1.5. Visiting site during maintenance period.
2. **Period of notice:** Three working days.

655 Mechanical tools

1. **Restrictions:** Do not use within 100 mm of tree and plant stems. Do not damage adjacent planting.

660 Grading subsoil

1. **Standard:** In accordance with [BS 8601](#).
2. **General:** Grade to smooth flowing contours to achieve specified finished levels of topsoil.
3. **Areas of thicker topsoil:** Excavate locally.
4. **Avoid compaction.**
5. **Excess subsoil:** Remove.

665 Subsoil surface preparation

1. **Standard:** In accordance with [BS 3882](#).
2. **General:** Excavate and/ or place fill to required profiles and levels, as section D20.
3. **Loosening**
 - 3.1. When ground conditions are sufficiently dry to allow breaking up of soils, loosen thoroughly to specified depth
 - 3.1.1. Light and non-cohesive subsoils: 150 mm.
 - 3.1.2. Stiff clay and cohesive subsoils: 300 mm.
 - 3.1.3. Rock and chalk subgrades: Lightly scarify to promote free drainage.
 - 3.2. **Wet conditions:** Do not loosen subsoils.
4. **Stones:** Immediately before spreading topsoil, remove stones larger than 20 mm.
5. **Remove from site:** Arisings, contaminants and debris. Builders' rubble.

670 Inspecting formations

1. **Give notice:** Before spreading topsoil for planting beds and grass seeded areas.
2. **Notice period:** Seven days.

680 Surplus topsoil to be retained

1. **Generally:** Spread and level on site:
 - 1.1. **Protected areas:** Do not raise soil level within root spread of trees that are to be retained.

685 Surplus materials to be removed

1. **Topsoil removal from site:** Unless otherwise instructed under clause 680, topsoil remaining after completion of all landscaping work.
2. **Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings and other arisings:** Remove.

690 Topsoil storage heaps

1. **Location:** As agreed with the Main Contractor logistics and phasing plan. As agreed with the Contract Administrator.
2. **Height (maximum):** 2.0 m.
3. **Width (maximum):** 5.0 m.
 - 3.1. **Formation:** Loose-tip and shape from the side only, without running machinery on the heap at any time.
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, by fencing and covering as appropriate.

700 Grading of topsoil

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. **Give notice:** If required levels cannot be achieved by movement of existing soil.

705 Handling topsoil

1. **Standard:** In accordance with [BS 3882](#).
2. **Aggressive weeds:** Give notice and obtain instructions before moving topsoil.
3. **Plant:** Select and use plant to minimize disturbance, trafficking and compaction.
4. **Contamination:** Do not mix topsoil with:
 - 4.1. Subsoil, stone, hardcore, rubbish or material from demolition work.
 - 4.2. Other grades of topsoil.
5. **Multiple handling:** Keep to a minimum. Use or stockpile topsoil immediately after stripping.
6. **Wet conditions:** Handle topsoil in the driest condition possible. Do not handle during or after heavy rainfall, or when the moisture content is greater than the plastic limit.

710 Spreading topsoil on:

1. **Description:** All planting areas
2. **Standard:** In accordance with [BS 3882](#).
3. **Temporary roads/ surfacing:** Remove before spreading topsoil.
4. **Layers**
 - 4.1. **Depth (maximum):** 150 mm.
 - 4.2. Gently firm each layer before spreading the next.
5. **Depth after firming and settlement:** 400 mm.
6. **Crumb structure:** Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

715 Loose-tipping of topsoil

1. **Standard:** In accordance with [BS 3882](#).
2. **General:** Do not firm, consolidate or compact topsoil when laying. Tip and grade to approximate levels in one operation with minimum of trafficking by plant.

718 Final cultivation

1. **Description:** For planting beds
2. **Compacted topsoil:** Break up to full depth.
3. **Tilth:** Loosen, aerate and break up topsoil to a tilth suitable for blade grading.
4. **Depth:** 100 mm
5. **Particle size (maximum):** 2–8 mm.
6. **Timing:** Within a few days before planting.
7. **Weather and ground conditions:** Suitably dry.
8. **Surface:** Leave regular and even.
9. **Levels:** Minimum 150 mm below dpc of adjoining buildings.
10. **Undesirable material brought to the surface**

10.1. Remove visible weeds.

10.2. Remove roots and large stones with any dimension exceeding 20 mm.

720 Finished levels of topsoil after settlement

1. In relation to adjoining paving, kerbs or hard surfaces: 75 mm below.
2. In relation to dpc of adjoining buildings: Not less than 150 mm below.
3. In relation to adjacent grass areas: Tie in neatly and allow for settlement either turfing or seeding.
4. Seeded areas: Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.
5. Within root spread of existing trees and shrubs to be retained: Do not dig or cultivate.
6. Adjoining soil areas: Marry in.
7. Thickness of turf or mulch: Included.

810 Applying compost

1. Description: For planting beds and tree pits
2. Application rate for trees and shrubs: 50 mm-thick layer.
 - 2.1. Timing: Apply prior to cultivation.

845 Applying loose mulch

1. Description: For planting areas and tree pits
2. Timing: Immediately after planting
3. Preparation: Clear all weeds. Ensure that soil is thoroughly moistened, applying water where necessary.
4. Coverage of mulch (minimum)
 - 4.1. Planting beds (depth): 50 mm depth.
 - 4.2. Trees: 50 mm depth in a circular area of 500 mm radius measured from the tree stem
5. Finished level of mulch: 30 mm below adjacent grassed or paved areas.

Completion

920 Applying mulch

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

Ω End of Section

Q30

Seeding/ turfing

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.
 - 1.2.1. Only apply herbicide in proximity to water courses with prior Environment Agency Permission.
 - 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:** 3 working days

170 Setting out

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

Preparation

210 Herbicide

1. **Description:** Minimise its use. Herbicide use is not encouraged. Use other techniques to prepare seedbed. Removal by hoeing, digging out or repeat cultivation is an effective control for most annual and biennial weeds.
2. **Type:** Suitable for suppressing perennial weeds.
3. **Timing:** Allow fallow period before cultivation.

3.1. Duration: As the manufacturer's recommendation

212 Seed bed cleaning before sowing

1. Description: For wildflower meadows
2. Operations: As the seed supplier's recommendations.
 - To prepare a seed bed first remove existing turf and weeds using repeated cultivation. Then plough or dig to bury the surface vegetation, harrow or rake to produce a medium tilth, and roll or tread to produce a level firm surface. Dispose of arisings.
 - The finished seedbed should be firm enough to walk on without leaving impressions.
 - As the area will be mown at a later stage the finished surface should be free of obstructions such as large stones or bricks, and free of deep ruts or ridges.

250 Soil requirements

1. Type
 - 1.1. Seeded areas: Soil for grass swards, as section Q28
 - 1.2. Turfed areas: Soil for grass swards, as section Q28

Seeding

311 Grass seed

1. Description: For amenity grass
2. Supplier: Emorsgate Seeds, or equal and approved
Neeps Bridge Farm
Middle Drove
Wisbech
Cambridgeshire
PE14 8JT
T: 01553 829028
E: enquiries@emorsgateseeds.com
 - 2.1. Mixture reference: EL1 Flowering Lawn Mixture
3. Application rate: Supplier's recommendations

312 Wildflower seed mixture 'WG1'

1. Description: For wildflower meadows
2. Supplier: Emorsgate Seeds, or equal and approved
Neeps Bridge Farm
Middle Drove
Wisbech
Cambridgeshire
PE14 8JT
T: 01553 829028
E: enquiries@emorsgateseeds.com
 - 2.1. Mixture reference: EM2F Standard General Purpose Wildflowers Seed
3. Origin of each species: British Native
4. Application rate: Supplier's recommendations

313 Wildflower seed mixture 'WG2'

1. Description: For wildflower meadows for SuDS basin and swale
2. Supplier: Emorsgate Seeds, or equal and approved
Neeps Bridge Farm
Middle Drove

Wisbech
Cambridgeshire
PE14 8JT
T: 01553 829028
E: enquiries@emorsgateseeds.com

2.1. Mixture reference: EM8 Meadow Mixture for Wetlands

3. Origin of each species: British Native
4. Application rate: Supplier's recommendations

319 Quality of seed

1. Description: For amenity grass
2. Freshness: Produced for the current growing season.
3. Certification: Blue label-certified varieties.
 - 3.1. Standard: EC purity and germination regulations.
 - 3.2. Official Seed Testing Station certificate of germination, purity and composition: Submit when requested.
4. Samples of mixtures: Submit when requested.

322 Quality of wildflower seed

1. Description: For wildflower meadows
2. Standard: In accordance with Flora Locale's 'Code of practice for collectors, growers and suppliers of native flora'
3. Samples: 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. Refer to suppliers recommendations.
 - 2.1. Distribution: Two equal sowings at right angles to each other and diagonally to the main axis

335 Grass sowing season

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

336 Wildflower sowing season

1. Wildflower seed generally: March to May or August to October

340 Pre-emergent herbicide

1. Description: For wildflower meadows
2. Standard: Pesticide Safety Directorate approved.
3. Application rate: In accordance with the manufacturer's written recommendation.
 - 3.1. Timing: Immediately after sowing.

352 Edges to seeded areas

1. Description: Adjacent to planting bends 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: Contractors choice, to the approval of the Contract Administrator. Steel pole and temporary plastic barrier fencing mesh (orange), or equal and approved.
2. Erection: On completion of seeding/ turfing.
3. Removal: After grass is well established. Fencing will remain the property of the Contractor

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: As agreed with the Contract Administrator

620 Maintaining

1. Description: In accordance to FINC's Landscape & Ecological Management Plan (ref. 2299.0008)

Ω End of Section

Q31

External planting

General information/ requirements

112 Site clearance generally

1. **General:** Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil
2. **Stones:** Remove those with any dimension exceeding 50 mm
3. **Contamination:** Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life
4. **Vegetation:** Clear scrub to ground level by flail mowing and remove arisings; retain and protect trees indicated on drawings
5. **Large roots:** Grub up and dispose of without undue disturbance of soil and adjacent areas

115 Site clearance for aquatic/ marginal planting

1. **Clearance**
 - 1.1. **General:** Remove loose debris and rubbish
 - 1.2. **Contamination:** Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life
2. **Vegetation/ Algae:** Skim surface to remove duckweed

118 Soil conditions

1. **Soil for cultivating and planting:** Moist, friable and (except in aquatic/ marginal planting) not waterlogged
2. **Frozen or snow-covered soil:** Give notice before planting. Provide additional root protection. Prevent planting pit sides and bases and backfill materials from freezing

120 Climatic conditions

1. **General:** Carry out the work while soil and weather conditions are suitable
 - 1.1. **Strong winds:** Do not plant

125 Times of year for planting

1. **Deciduous trees and shrubs:** Late October to late March
2. **Conifers and evergreens:** September/ October or April/ May
3. **Herbaceous plants (including marginal):** September/ October or March/ April
4. **Container-grown plants:** At any time, if ground and weather conditions are favourable
 - 4.1. **Watering and weed control:** Provide as necessary
5. **Dried bulbs, corms and tubers:** September/ October
6. **Colchicum (crocus):** July/ August
7. **Green bulbs:** After flowering in spring
8. **Wildflower plugs:** Late August to mid November or March/ April
9. **Aquatic plants:** May/ June or September/ October

130 Mechanical tools

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

145 General watering

1. **Quantity:** Wet full depth of topsoil
2. **Application:** Even, and without damage or displacement of plants or soil
3. **Frequency:** As necessary to ensure that plant is established and continues to thrive

150 Water restrictions

1. **General:** If water supply is or is likely to be restricted by emergency legislation, do not carry out planting until instructed. If planting has been carried out, obtain instructions on watering

160 Notice

1. **Give notice before**
 - 1.1. Setting out.
 - 1.2. Applying herbicide.
 - 1.3. Applying fertilizer.
 - 1.4. Delivery of plants/ trees.
 - 1.5. Planting shrubs.
 - 1.6. Planting trees into previously dug pits.
 - 1.7. Watering.
 - 1.8. Visiting site during maintenance period.
2. **Period of notice:** One week

170 Soil requirements

1. **Type**
 - 1.1. **Planted beds:** Planting bed soil system, as section Q28
 - 1.2. **Tree pits, shrub pits and other backfilling:** Plant pit backfilling soil system, as section Q28
 - 1.3. **External container planting:** Container planting growing media system, as section Q28
 - 1.4. **Mulch applied after planting:** Mulching and top dressing system, as section Q28

200 Plants/ trees – general

1. **Condition:** Materially undamaged, sturdy, healthy and vigorous
2. **Appearance:** Of good shape and without elongated shoots
3. **Hardiness:** Grown in a suitable environment and hardened off
4. **Health:** Free from pests, diseases, discoloration, weeds and physiological disorders
5. **Budded or grafted plants:** Bottom worked
6. **Root system and condition:** Balanced with branch system
7. **Species:** True to name
8. **Origin/ provenance:** Grown in the United Kingdom for at least one growing season, unless otherwise approved
9. **Definition:** Origin and provenance have the meaning given in the [National Plant Specification](#)

215 Plants/ trees – specification criteria

1. **Name, forms, dimensions, provenance and other criteria:** As scheduled and defined in the [National Plant Specification](#).

225 Bulbs/ corms/ tubers

1. **Standard:** The [National Plant Specification](#)

2. **Condition:** Firm, entire, not dried out or shrivelled
3. **Health:** Free from pests, diseases and fungus
4. **Handling:** Remove from packaging immediately
5. **Storage:** Permitted only when necessary
 - 5.1. **Location:** Well-ventilated, dark, covered, rodent-proof container, away from exhausts and fruit
 - 5.2. **Duration:** Minimum period
 - 5.3. **Temperature:** 18-21°C

235 Container-grown plants/ trees

1. **Growing medium:** With adequate nutrients for plants to thrive until permanently planted
2. **Plants:** Centred in containers, firmed and well-watered
3. **Root growth:** Substantially filling containers, but not root-bound, and in a condition conducive to successful transplanting
4. **Hardiness:** Grown in the open for at least two months before being supplied
5. **Containers:** With holes adequate for drainage when placed on any substrate commonly used under irrigation systems

245 Labelling to National Plant Specification and other information

1. **General:** Provide each plant/ tree (or group of plants/ trees) of a single species or cultivar with the supplier's labelling for delivery to site, showing:
 - 1.1. Full botanical name.
 - 1.2. Total number.
 - 1.3. Number of bundles.
 - 1.4. Part bundles.
 - 1.5. The supplier's name.
 - 1.6. The employer's name and project reference.
 - 1.7. Plant specification, in accordance with scheduled [National Plant Specification](#) categories.
2. **Additional information:** Submit on request: Country of origin

255 Plants/ trees reserved at supplier's premises

1. **Types/ species:** As plant schedule
2. **Pre-delivery inspection:** Give notice
3. **Labelling:** Identify inspected plants/ trees as reserved for use on this project

260 Plant/ tree substitution

1. **Plants/ trees unobtainable, or likely to be unobtainable at time of ordering.** Submit alternatives, stating:
 - 1.1. **Price:**
 - 1.2. **Difference from specified plants/ trees:**
2. **Approval:** Obtain before making any substitution

265 Plant handling, storage, transport and planting

1. **Standard:** To Committee of Plant Supply and Establishment (CPSE) [Recommendations for Plant Handling](#).
2. **Frost:** Protect plants from frost.

3. **Handling:** Handle plants with care. Protect them from mechanical damage and do not subject them to shock, e.g. by dropping them from a vehicle.
4. **Plant packaging:** Contractor choice.
 - Sustainable approach encouraged with the nursery suppliers.
 - Return and re-use encouraged.
5. **Packaging of bulk quantities:** Contractor choice.
 - Sustainable approach encouraged with the nursery suppliers.
 - Return and re-use encouraged.
6. **Planting:** Upright or well balanced, with best side to front.

280 Treatment of tree wounds

1. **Cutting:** Keep wounds as small as possible.
 - 1.1. Cut cleanly back to sound wood using sharp, clean tools.
 - 1.2. Leave branch collars. Do not cut flush with stem or trunk.
 - 1.3. Set cuts so that water will not collect on cut area.
2. **Fungicide/ sealant:** Do not apply unless instructed.

290 Surplus material

1. **Subsoil:** Remove.
2. **Stones:** Remove.
3. **Debris:** Remove.
4. **Wrapping material:** Remove.
5. **Canes:** Remove.
6. **Ties:** Remove.
7. **Temporary labels:** Remove.
8. **Rubbish:** Remove.
9. **Prunings and other arisings:** Remove.

Plant containers - Not Used

Preparation of planting beds/ planting materials

300 Herbicide

1. **Description:** Use to be kept to a minimum.
 - Follow manufacturers guidance and recommendations for use.
 - Follow seed supplier recommendation for use in preparation of seed bed for wildflower seed planting.
2. **Type:** Suitable for suppressing perennial weeds

305 Weed control

1. **Description:** For invasive non-native weeds
2. **Locations:** All planting areas
3. **General:** Prevent weeds from seeding and perennial weeds from becoming established: By cultivation, by hand-weeding, or by hoeing.

Planting shrubs/ herbaceous plants/ bulbs

401 Regular plant layout

1. **Description:** To all planting beds
2. **Spacing:** In regular, staggered rows
3. **Density:** As plant schedule

405 Shrub planting pits

1. **Timing:** Excavate One to two days (maximum) before planting.
2. **Sizes:** Wide enough to accommodate roots when fully spread and 75 mm deeper than root system
3. **Pit bottom improvement** Break up to a depth of 150 mm, incorporating soil ameliorant/ conditioner at 50 g/m².

445 Planting bulbs/ corms/ tubers

1. **Depth:** Top of bulb/ corm/ tuber at a depth of approximately twice its height, and the base in contact with the bottom of the hole
2. **Backfilling:** Finely broken soil. Lightly firm to existing ground level
3. **Naturalized planting in existing grassed areas**
 - 3.1. **Scattering:** Random. Plant bulbs/ corms/ tubers where they fall
 - 3.2. **Planting:** Neatly remove a plug of turf and replace after planting

457 Planting aquatic/ marginal plant plugs

1. **Handling:** Keep plants watered and in the shade until planted. Do not allow to dry out
2. **Preparation:** Remove coarse weeds, etc. from planting sites
3. **Planting sites:** Refer to FINC's General Arrangement plans and schedules (drawing ref. 2299.1010-1015)
4. **Waterproofing membrane below soil:** Do not puncture.
5. **Planting:** Plant in a hole to suit plug size and shape. Create a cleft at the bottom of the hole to improve rooting. Gently firm the plant into the hole to ensure a good root hold into the substrate

470 Formal hedges

1. **Description:** To single species hedge
2. **Shrubs for hedges:** Consistent in species, cultivar and clone to ensure a uniform hedge.
3. **Planting:** In trenches large enough to take full spread of roots. Set out plants evenly.

471 Naturalized hedges

1. **Description:** To native hedgerow planting
2. **Trees and shrubs for hedges:** Native species, with diversity in height, growth habit and seasonal interest to enhance biodiversity.
3. **Planting:** In trenches large enough to take the full spread of roots. Set plants out evenly.

472 Fencing support for new hedges

1. **Description:** Chestnut pale fence
2. **Type:** Chestnut pale fence.
3. **Timing:** Before planting hedge.
4. **Support:** Lightly secure hedge plants to fence wires at appropriate intervals.

480 After planting

1. **Watering:** Immediately after planting, thoroughly, and without damaging or displacing plants or soil
2. **Firming:** Lightly firm soil around plants and fork and/ or rake soil, without damaging roots, to a fine tilth with gentle cambers and no hollows
3. **Top dressing:** Mulching and top dressing system, as section Q28
 - 3.1. **Depth:** 50 mm

486 Shrub protection

1. **Description:** To all new shrubs
2. **Manufacturer:** Greentech, or equal and approved
Rabbit Hill Business Park
Great North Road
Arkendale
HG5 0FF
E: sales@green-tech.co.uk
T: 01423 332100
W: www.green-tech.co.uk
 - 2.1. **Product reference:** Tubex Easywrap 60 (ref. 160PS1111)
3. **Material:** Blend of recycled and virgin polypropylene
4. **Size:** 600mm high, 50–65mm diameter expands as plant grows
5. **Colour:** Light green for optimal light transmission
6. **Support:** A single timber stake
7. **General:** Ensure that protection methods do not impede natural movement of shrubs or restrict growth

Planting trees

500 Tree planting

1. **Standard:** Prepare trees and transplant in accordance with [BS 8545](#)

505 Tree pits

1. **Sizes:** Varies, refer FINC's typical detail 2299.4001 for details.
2. **Sloping ground:** Maintain horizontal bases and vertical sides with no less than minimum depth throughout
3. **Excavated material:** Separate topsoil and subsoil material and stockpile for backfilling
4. **Pit bottoms:** excavate with slightly raised centre: Break up base to a depth of min 150 mm
 - 4.1. **Treatment:** As drawing 2299.4001
5. **Pit sides:** Refer drawing 2299.4001
6. **Backfilling material:** Topsoil, as section Q28

510 Tree pit root barriers

1. **Description:** Root barriers for tree pit
2. **Manufacturer:** [GreenBlue Urban Ltd](#) or equal and approved
 - 2.1. **Contact details**
 - 2.1.1. **Address:** Northpoint
Compass Park
Junction Road
Bodiam

East Sussex
TN32 5BS

- 2.1.2. Telephone: [+44 \(0\)1580 830800](tel:+441580830800)
- 2.1.3. Web: www.greenblue.com
- 2.1.4. Email: hello@greenblueurban.com
- 2.2. Product reference: [ReRoot Flat \(RER210X0.6A - 600 mm\)](#)
- 3. Material: 100% recycled extruded polypropylene (PP).
- 4. Purpose: Root barrier.
- 5. Standard: To BS EN ISO 12236-2006(2016), BS EN ISO 34-1:2015 and BS EN ISO 1133-1:2011(2016).
- 6. Third-party certification: BICS Laboratories Ltd 16/02/21.
- 7. Performance characteristics
 - 7.1. Tear resistance: To BS ISO 34-1:2015, 140.8 F, N (MD); 136.5 F, N (CMD).
- 8. Recycled content: Fully recycled.
- 9. Form: Single-ply.
- 10. Physical properties
 - 10.1. Colour: Black.
 - 10.2. Dimensions
 - 10.2.1. Thickness (minimum): 1 mm.
 - 10.2.2. Width (minimum): 600 mm.
 - 10.2.3. Roll length (minimum): 100 m.
- 11. CBR puncture resistance: To BS EN ISO 12236:2006(2016), 3.10 kN.
- 12. Melting point: Melt flow index to BS EN ISO 1133-1:2011 (2016) 190c, 2.16 kg, 0.12 g/10 min.

512 Tree irrigation and aeration units

- 1. Description: To tree pits
- 2. Manufacturer: [GreenBlue Urban Ltd](#) or equal and approved
 - 2.1. Contact details
 - 2.1.1. Address: Northpoint
Compass Park
Junction Road
Bodiam
East Sussex
TN32 5BS
 - 2.1.2. Telephone: [+44 \(0\)1580 830800](tel:+441580830800)
 - 2.1.3. Web: www.greenblue.com
 - 2.1.4. Email: hello@greenblueurban.com
 - 2.2. Product reference: [RootRain Urban \(RootRain Urban RRURB1A\)](#)
- 3. Description: A large-capacity tree pit irrigation and aeration system.
- 4. Pipe
 - 4.1. Material: Polypropylene.
 - 4.2. Colour: Black.
 - 4.3. Circumference: 2.5 m.
 - 4.4. Diameter: 60 mm.
 - 4.5. Recycled content (minimum): 100%.
- 5. Water inlet

- 5.1. Number: One.
- 5.2. Type: Grille inlet, PE-HD moulded grid top, 80 mm diameter.
- 6. Inlet: Automatic irrigation system adapter.

513 Tree irrigation bag

- 1. Description: Slow release watering bag for newly planted or established trees up to 20cm girth
- 2. Manufacturer: Greentech, or equal and approved
Rabbit Hill Business Park
Great North Road
Arkendale
HG5 0FF
E: sales@green-tech.co.uk
T: 01423 332100
W: www.green-tech.co.uk
 - 2.1. Product reference: Tree Irrigator Bag (ref. 200MP9001)
 - Green polyethylene with scrim reinforcement
 - Black zips
- 3. Installation and use: Place around tree trunk, with the zippers on uphill side of tree.
 - Wrap both sides around trunk until zippers meet and zip together from bottom to top.
 - Lift tag to expose fill opening at top of bag.
 - Insert hose into fill opening and begin filling with water.
 - Fill bag to 1/4 capacity, gently lift up on straps at top of bag to expand bottom.
 - Fill to desired level and let empty.
 - Bag continuously waters for approximately 5 to 9 hours.

520 Cellular structural soil system

- 1. Description: CU-Structural Soil to be mixed and installed as per manufacturers specifications, ensuring the correct ratio of angular crushed stone (20-40mm) to loam soil (minimum 20% clay content)
- 2. Manufacturer: Submit proposals
 - 2.1. Product reference: Submit proposals
- 3. Geotextile membrane: Install on top of structural soil system prior to installation of hard surfacing
- 4. Installation: Ensure that all void spaces are filled with lightly compacted growing medium prior to installation of further layers or sub-bases

526 Underground guying

- 1. Description: For large trees 20-25cm girth and above
- 2. Manufacturer: [GreenBlue Urban Ltd](#) or equal and approved
 - 2.1. Contact details
 - 2.1.1. Address: Northpoint
Compass Park
Junction Road
Bodiam
East Sussex
TN32 5BS
 - 2.1.2. Telephone: +44 (0)1580 830800
 - 2.1.3. Web: www.greenblue.com
 - 2.1.4. Email: hello@greenblueurban.com
 - 2.2. Product reference: ARBORGUY anchorplate strapped & anchor system - SASAP06A

3. **Anchoring system:** Three no. drive-in anchors and Three no. timber dead-man anchors
4. **Installation:** Ensure that tree is positioned correctly and vertically, prior to tightening of guy line tensioners

535 Tree stakes

1. **Stakes:** Softwood, peeled chestnut, larch or oak; straight, free from projections and large or edge knots, and with pointed lower end
 - 1.1. **Preservative treatment:** To provide a 20-year service life
2. **Stake size (minimum):** 60 mm diameter
3. **Stake length (minimum):** 1800 mm

540 Single-angled staking

1. **Description:** For feathered trees
2. **Staking**
 - 2.1. **Position:** Close to tree position on windward or upslope side
 - 2.2. **Tying position:** Approximately one third of the height of the clear stem of the tree to be planted
 - 2.3. **Driving:** At an angle of 45° away from the tree position, and at least 300 mm into bottom of pit before planting
 - 2.4. **Backfilling:** Consolidate material around stake
 - 2.5. **Firming:** Sufficiently firm to prevent movement of the root ball/ rootstock
 - 2.6. **Excess length:** Cut off 200 mm above tree support position.
3. **Ties:** Adjustable. Cushioned.
 - 3.1. **Number of ties:** One
4. **Tying:** Secure tree firmly but not rigidly to stake. Prevent tree from touching stake using spacer blocks or cushions if required
5. **Nails:** To [BS 1202-1](#), galvanized; a minimum of 25 mm long, and with 10 mm diameter heads.

550 Double staking

1. **Description:** For trees up to 18cm girth
2. **Staking**
 - 2.1. **Position:** Either side of tree position, and perpendicular to wind direction
 - 2.2. **Driving:** Vertically at least 300 mm into bottom of pit before planting
 - 2.3. **Backfilling:** Consolidate material around stake
 - 2.4. **Firming:** Sufficiently firm to prevent movement of the root ball/ rootstock
3. **Height of stakes:** Cut off at approximately 650 mm above ground level
4. **Horizontal bracing:** Timber cross bar, 75 x 38 x 900 mm
 - 4.1. **Fixing:** Nailed to stake within 25 mm of the top of the stakes. Refer to suppliers recommendations.
5. **Ties:** Adjustable. Cushioned.
6. **Tying:** Secure rubber belting around tree stem firmly, without causing constriction or chafing
7. **Nails for fixing ties, belts and webbing:** To [BS 1202-1](#), galvanized; a minimum of 25 mm long and with 10 mm diameter heads
8. **Nails for fixing cross bars:** To [BS 1202-1](#), galvanized round wire; a minimum of 75 mm long and 3.75 mm gauge

566 Tree protection

1. **Description:** For feathered trees
2. **Manufacturer:** Greentech, or equal and approved
Rabbit Hill Business Park
Great North Road
Arkendale
HG5 0FF
E: sales@green-tech.co.uk
T: 01423 332100
W: www.green-tech.co.uk
 - 2.1. **Product reference:** Tubex Easywrap 60 (ref. 160PS1111)
3. **Material:** Blend of recycled and virgin polypropylene
4. **Size:** 600mm high, 50–65mm diameter expands as plant grows
5. **Colour:** Light green for optimal light transmission
6. **Support:** Single timber stake, see Q31/540
7. **General:** Ensure that protection methods do not impede the natural movement of trees or restrict growth

576 Tree pit surfacing – loose-fill

1. **Description:** To all tree pits
2. **Surfacing material:** Mulch, as section Q28
3. **Area:** Full extent of tree pit surface
4. **Depth:** 50 mm
5. **Watering:** Water soil thoroughly before laying
6. **Installation:** Ensure that the base of the tree stem is kept free from loose-filled material

Woodland/ matrix/ buffer zone planting

600 Woodland work generally

1. **Services:** Check for below-ground and above-ground services, including land drainage, in the vicinity. Give notice if they may be affected and obtain instructions before proceeding
2. **Safety:** Comply with safety guidelines found on [The Arboricultural Association's](#) website

680 Setting out for tree

1. **Planting density:** As plant schedule
2. **Layout:** Random groups of no less than three or no more than seven of the same species, ensuring that no three plants are aligned in any one direction

Protecting/ maintaining/ making good defects

710 Maintenance

1. **Duration:** Carry out the operations in the following clauses from completion of planting until The end of the rectification period.
2. **Frequency of maintenance visits:** In accordance with the agreed maintenance schedule

720 Failures of planting

1. **Defects due to materials or workmanship not in accordance with the contract:** Plants/ trees/ shrubs that have failed to thrive
 - 1.1. **Exclusions:** Theft or malicious damage after completion.

- 1.2. **Rectification:** Replace with equivalent plants/ trees/ shrubs.
2. **Replacements:** To match size of adjacent or nearby plants of the same species or to match the original specification: whichever is the greater
3. **Timing of making good:** In accordance with an agreed defects rectification programme

730 Protective fencing

1. **Fencing type:** Cleft chestnut pale fencing
2. **Timing:** On completion of planting
3. **Removal:** After planting is well established. Fencing will remain the property of the contractor. Remove and refill post holes following acceptance of rectified defects.

740 Cleanliness

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

750 Planting maintenance generally

1. **Weed control:** Maintain weed-free area around each tree and shrub
 - 1.1. **Diameter (minimum):** The surface of original planting pit
 - 1.2. **Keep planting beds clear of weeds:** By maintaining full thickness of mulch. Removing pernicious weeds by hand with protective gloves.
2. **Planted areas:** Fork over beds as necessary to keep soil loose, with gentle cambers and no hollows. Take care not to reduce depth or effect of mulch
3. **Precautions:** Ensure that trees and shrubs are not damaged by use of mowers, nylon filament rotary cutters and similar powered tools
4. **Firming up:** Gently firm loosened soil around trees/ shrubs. Straighten leaning trees/ shrubs
5. **Trees:** Spray crown when in leaf during warm weather.
 - 5.1. **Timing:** After dusk.
6. **Tree accessories:** Check condition of stakes, ties, guys, guards, and irrigation and ventilation systems
 - 6.1. **Broken or missing items:** Replace.
 - 6.2. **Loose stakes:** Re-firm in the ground or replace as necessary to provide support to the tree.
 - 6.3. **Loose guys:** Re-firm anchor points and adjust as necessary to provide support to the tree.
 - 6.4. **Ties:** Adjust to accommodate growth and prevent constriction or abrasion.
 - 6.5. **Damage to bark:** Cut back neatly with sharp knife. Prevent further damage.
 - 6.6. **Frequency of checks:** At each scheduled maintenance visit
7. **Watering:** As required for healthy establishment, depending on weather conditions

760 Planting maintenance – pruning

1. **General:** Prune to promote healthy growth and natural shape
 - 1.1. **Dead, dying, diseased wood and suckers:** Remove.
 - 1.2. **Timing:** In accordance with the agreed maintenance schedule
 - 1.3. **Trees:** Favour a single central leading shoot
2. **Arisings:** Remove.

770 Woodland planting maintenance

1. **Watering:** Only as necessary to prevent plants wilting

2. **Loose plants:** Re-firm surrounding soil, without compacting
3. **Weed control:** Cut down and remove weeds prior to setting seed in a 1 m-diameter area around each tree
4. **Vegetation except trees and coppice shoots to be retained:** Cut within the plantation area
 - 4.1. **Arisings:** Leave between rows.
5. **Mechanical, chemical or mulching methods of vegetation control:** Submit proposals.
6. **Ditches and drains:** Keep clear
7. **Watering:** Contractor's choice

780 Maintenance instructions

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

790 Final mulching

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

Ω End of Section

Q35

Landscape maintenance

Generally

105 Maintenance objectives

1. General: Refer to FINC's Landscape & Ecological Management Plan (ref. 2299.008) for landscape maintenance requirements.

Grassed areas - Not Used

Flower beds/ seasonal beddings - Not Used

Shrubs/ trees/ hedges - Not Used

Green walls - Not Used

Tree work - Not Used

Water areas - Not Used

Hard landscape areas/ fencing - Not Used

Ω End of Section

Q40 Fencing

Clauses

Read in conjunction with Preliminaries and general conditions

Fencing systems

210 Wooden post and rail fencing

1. Description: To ancient woodland perimeter
2. Posts: Half round vertical posts, 1830 mm long, three mortices.
3. Post foundations: Set in concrete.
4. Rails: Irregular sawn horizontal rails, 1930 mm long.
5. Height: 1200mm above ground level
6. Wood: FSC approved softwood. Sustainability sourced.
 - 6.1. Treatment: Jackure treated. 25 years service life.
 - 6.2. Finish: Natural. Planed.

310 Close-boarded fencing

1. Description: To landscape buffer area
2. Posts: Softwood posts, 125 x 100 mm section.
3. Post foundations: Set in concrete.
4. Rails: 2400 x 38 x 87 mm weathered top.
5. Panels: 1800 mm high above ground level, pales only.
6. Fence topping: Capping rail.
7. System accessories: Jakcure end grain preservative. Matching lockable gates.
8. Colours: Natural timber.
9. Accessories: Single-leaf gate with lock

330 Wood post and panel barrier systems

1. Description: To play area
2. Posts: Softwood, 125 x 125 mm, 1800 mm long.
3. Post foundations: Set in concrete.
4. Rails: Two rails at top and two at bottom to sandwich pales, 100 x 38 mm.
5. Panels: Manufacturer's standard.
6. Site applied finishes: Natural, Jakcure®-treated finish.
7. System accessories: Matching single leaf gates.
8. Height: 1090 mm above ground

430 Wooden knee rail fencing

1. Description: To SuDS basin
2. Posts: 900 mm-high (200900).
3. Rails: 1800 mm-long (640300).
4. System accessories: Galvanized strap (201100).
5. Height: 600mm above ground level

6. Materials: Wood. FSC approved. Sustainability sourced.
 - 6.1. Treatment: Jackure treated. 25 year service life
 - 6.2. Finish: Natural. Planed.
7. Maximum centres of posts: As manufacturer's recommendations
8. Method of setting posts: As manufacturer's recommendations

Gates, posts and stiles - Not Used

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

720 Setting posts in concrete

1. Design : Refer to Civil & Structural Engineers details and specification.
2. Standard: To [BS 8500-2](#).
3. Mix: Refer to Civil & Structural Engineers details and specification.
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. General: Not allowed. Designed out. Ensure workmanship and methods acknowledge this requirement. Allow for surface dressing over all foundations for landscape features including bases for benches, bins, bollards, posts and fences.

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

930 Gates

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

Ω End of Section

Q50

Site/ street furniture/ equipment

Gates, barriers and parking controls

190 Bollards

1. Description: Timber bollard as visual aid and unwarranted vehicle access deterrent
2. Material: FSC approved durable hardwood timber. Sustainably sourced.
 - 2.1. Finish as delivered: Smooth, sawn. No snags, splits or disfiguring marks.
 - 2.2. Colour: Natural. Weathering grey.
3. Height above ground: 1000 mm
4. Sectional size: 140 x 140mm square
5. Top: Diamond
6. Special features: White reflective band, 150 mm high at top of bollard
7. Method of fixing: Root, 300 mm below ground, set in concrete base. No exposed surface concrete. Allow for surface finishes to over sail the base.

Site and street furniture

220 Benches

1. Description: Timber bench seating with backrest
2. Material: FSC approved durable hardwood timber. Sustainably sourced.
 - 2.1. Finish: Smooth, sawn. No snags, splits or disfiguring marks.
 - 2.2. Colour: Natural. Weathering grey.
3. Size: 2.0 m long
4. Accessories/ Special requirements: 200mm high backrest, hardwood legs
5. Method of fixing: Root, 300 mm below ground, set in concrete base. No exposed surface concrete. Allow for surface finishes to over sail the base.

240 Litter bins

1. Description: Timber litter bins
2. Material: FSC approved durable hardwood timber. Sustainably sourced.
 - 2.1. Finish: Smooth, sawn. No snags, splits or disfiguring marks.
 - 2.2. Colour: Natural. Weathering grey.
3. Accessories/ Special requirements: Double bin
4. Method of fixing: Root, 300 mm below ground, set in concrete base. No exposed surface concrete. Allow for surface finishes to over sail the base.

Installation

510 Concrete foundations generally

1. Design: Refer to Civil & Structural Engineers details and specification.
2. Standard: To BS 8500-2.
3. Concrete: Refer to Civil & Structural Engineers details and specification.
4. Admixtures: Do not use.
5. Foundation holes: Neat vertical sides.

6. **Depth of foundations, bedding, haunching:** Appropriate to provide adequate support and to receive overlying soft landscape or paving finishes.

515 Setting components in concrete

1. **Holes:** Refer to Civil & Structural Engineers details and specification.
2. **Components:** Accurately positioned and securely supported.
3. **Concrete fill:** Fully compacted as filling proceeds.
4. **Concrete foundations exposed to view:** Compacted until air bubbles cease to appear on the upper surface, then weathered to shed water and trowelled smooth.
5. **Temporary component support:** Maintain undisturbed for minimum 48 hours.

530 Preservative treated timber

1. **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.
2. **Heavily worked sections:** Re-treat.

Ω End of Section

Q52

Play and sports equipment

Clauses - Not Used

General

115 Playground

1. Description: Play area within public open space
2. Equipment: As drawing 2299.1010-1014.
3. Surfacing: Tiger mulch, as section Q26.
4. Containment: Wood post and panel barrier systems, as section Q40.
5. Accessories:
 - Benches, as section Q50.
 - Litter bins, as section Q50.
 - Planting, as drawing 2299.1010-1015 and section Q31.

System performance

215 Playground design

1. Design: Refer to FINC's General Arrangement Plans (ref. 2299.1010-1014)

Products

320 Balance beam

1. Description: Play equipment 7
2. Standard: To [BS EN 1176-1](#).
3. Age range: 3-12
4. Materials: Wood
5. Method of fixing: Set in concrete

321 Stepping posts

1. Description: Play equipment 5
2. Standard: To [BS EN 1176-1](#).
3. Age range: 5-12
4. Materials: Class 1 Robinia Timber
5. Method of fixing: Set in concrete

322 Play bridge

1. Description: Play equipment 6
2. Standard: To [BS EN 1176-1](#).
3. Age range: 3-12
4. Materials: Class 1 Robinia Timber
5. Method of fixing: Set in concrete

323 Stepping poles

1. Description: Play equipment 8

2. Standard: To [BS EN 1176-1](#).
3. Age range: 3-12
4. Materials: Class 1 Robinia Timber
5. Method of fixing: Set in concrete

330 Climbing frame

1. Description: Play equipment 11
2. Standard: To [BS EN 1176-1](#).
3. Age range: 14+
4. Materials: Wood
5. Method of fixing: Set in concrete

335 Climbing wall

1. Description: Play equipment 10
2. Age range: 14+
3. Material: Wood
4. Fixing: Set in concrete

340 Combined play structure

1. Description: Play equipment 9
2. Standard: To [BS EN 1176-1](#).
3. Age range: 5-12
4. Materials: Robinia Timber
5. Method of fixing: Set in concrete

350 Sensory play structure

1. Description: Play equipment 1
2. Standard: To [BS EN 1176-1](#).
3. Sensory features: Aural
4. Components: Drums and Chimes
5. Materials: Robina Timber
6. Method of fixing: Set in concrete

355 Imaginative play structure

1. Description: Play equipment 12
2. Standard: To [BS EN 1176-1](#).
3. Materials: Class 1 Robina Timber
4. Features: Timber shelter intend to create space for older kids
5. Method of fixing: Set in concrete

390 Rocking equipment

1. Description: Play equipment 3
2. Standard: To [BS EN 1176-1](#) and [BS EN 1176-6](#).
3. Age range: 3+
4. Type: See-saw
5. Number of seats: 4

6. Materials: Robina Timber
 - 6.1. Colour: ROBINA UNT.WOOD
7. Features: Inclusive
8. Method of fixing: Set in concrete

430 Spinning equipment

1. Description: Play equipment 2
2. Standard: To [BS EN 1176-1](#) and [BS EN 1176-5](#).
3. Age range: 3+
4. Materials: Robina Timber
 - 4.1. Colour: ROBINA UNT. WOOD
5. Features: Inclusive
6. Method of fixing: Set in concrete

440 Swinging equipment

1. Description: Play equipment 4
2. Standard: To [BS EN 1176-1](#) and [BS EN 1176-2](#).
3. Age range: 2+
4. Frame: Traditional
 - 4.1. Bays: 2
 - 4.2. Materials: Robina Timber
 - 4.3. Colour: ROBINA UNT. WOOD
5. Seats: Flat and Nest
6. Features: Inclusive
7. Method of fixing: Set in concrete

Execution

720 Concrete foundations generally

1. Design: Refer to Civil & Structural Engineers details and specification.
2. Standard: To [BS 8500-2](#).
3. Concrete: Refer to Civil & Structural Engineers details and specification.
4. Admixtures: Do not use.
5. Foundation holes: Neat vertical sides.
6. Depth of foundations, bedding, haunching: Appropriate to provide adequate support and to receive overlying soft landscape or paving finishes.

725 Setting components in concrete

1. Holes: Refer to Civil & Structural Engineers details and specification.
2. Components: Accurately positioned and securely supported.
3. Concrete fill: Fully compacted as filling proceeds.
4. Concrete foundations exposed to view: Finished to weathering profile to shed water and trowel smooth.
5. Temporary component support: Maintain undisturbed for minimum 48 hours.

740 Preservative treated timber

1. 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

1. Minor damage in areas up to 40 mm² (including on fixings and fittings): Make good.
 - 1.1. 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.
 - 1.2. Thickness: Sufficient to provide a zinc coating at least equal to the original layer.

Completion

910 Inspection

1. Standard: To BS EN 1176-1 In accordance with equipment manufacturer's maintenance and inspection instructions
2. Timing: As required by the Contract Administrator
3. Period of notice (minimum): 3 working days.

920 Cleaning

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

930 Testing

1. Standard: To BS EN 1176-1.

940 Labels

1. Standard: To BS EN 1176-1 To BS EN 14974
2. Labels: Provide permanent labelling on all types of play equipment.
3. Location: Where visible when erected on site.

950 Documentation

1. Standard: To BS EN 1176-1
2. Contents
 - 2.1. Copies of test reports.
 - 2.2. General product information.
 - 2.3. Installation information.
 - 2.4. Inspection and maintenance information.
3. Number of copies: As required by the Contract Administrator
4. Submission: As required by the Contract Administrator

970 Operating tools

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

Ω End of Section

