LANDSCAPE ARCHITECTURE
MASTERPLANNING
ARBORICULTURE

OUTLINE LANDSCAPE SPECIFICATION

HAYDON DRIVE, PINNER

OCTOBER 2025

Specification Record	
Project number:	25177
Project name:	Haydon Drive, Pinner, London
Client:	Hunters

Report status				
Issue number:	Report status:	Date:	Prepared by:	Approved by:
V1	Tender	08/10/2025	HS	BD

Contents Page

This outline specification covers all landscape works as illustrated on drawing numbers 25177.101 – 25177.106. This document should be read in conjunction with the contract Preliminaries document prepared by others.

D20
Excavating and filling

Generally/the site

145 Variations in ground water level

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

Clearance/excavating

164 Tree roots

1. Give notice of roots exceeding 25 mm and do not cut without approval.
2. Cutting
    2.1. Make clean smooth cuts with no ragged edges.
    2.2. Pare cut surfaces smooth with a sharp knife.
    2.3. Treatment of cut roots:
3. Backfill: As dug material, enriched with phosphate fertiliser.

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 non-residual herbicide to areas to receive planting.

220 Stripping topsoil

1. General: Before beginning general excavation or filling, strip topsoil from areas where there will be re-grading, buildings, pavings/ roads and other areas shown on drawings.
2. Depth
    2.1. Remove to an average depth of 400mm
    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: Notify the presence of 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

Permissible deviations from linear dimensions generally: 100mm.

260 Inspecting formations

1. Give notice: Make advance arrangements for inspection of formations for Foundations and filling formations; Service trenches, roads and pavings.
    1.1. Notice (minimum): 5 days
2. Preparation: Just before inspection remove the last 150 mm of excavation. Trim to required profiles and levels.
    2.1. Loose material: Remove.
3. 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.

330 Unrecorded features

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

360 Excess excavation

1. Excavation taken wider than required
    1.1. Backfill: As instructed.
2. Excavation taken deeper than required
    2.1. Backfill: with well-graded granular material or lean mix concrete.

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:
    2.2. Shrub planting: 750 mm.
    2.3. Within 2 m of tree planting: 1000 mm.
3. Walls and slabs remaining: In every 10 m^2 of wall or slab, make a drainage hole at least 600 mm diameter.

Disposal of materials

410 Excavated excess topsoil storage

Storage: Stockpile in temporary storage heaps to be located on site – location to be agreed with Contract Administrator.

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.

Q10
Kerbs

Types of kerbs/edgings and channels

110 Proprietary precast concrete edgings

1. Description: Edgings to pathways
2. Standard: To BS EN 1340:2003
3. Manufacturer: Marshalls
   3.1. Product reference: Flat Top Edging
4. Recycled content: As manufactured
5. Size: 50mmx150mmx 914mm
6. Special shapes: None
7. Finish: Smooth
8. Colour: Natural
9. Bedding: Fresh concrete races. Note requirement for where edging adjoins wetpour, kerb race on inside edge to be low enough to allow wetpour layers to adhere directly to kerb.
10. Joints generally: Dry 2-3mm gap
11. Sealant movement joints: Not required

111 Proprietary precast concrete kerbs

1. Description: Restraint edge to pavements and play area
2. Standard: To BS EN 1340:2003
3. Manufacturer: Marshalls
   3.1. Product reference: British standard bull nose kerb BN
4. Recycled content: As manufactured
5. Size: 125mmx255mm
6. Special shapes: Flush kerb units required for crossing point with transition dropper kerbs to suit
7. Finish: Smooth
8. Colour: Natural
9. Bedding: Fresh concrete races
10. Joints generally: Dry 2-3mm gap
11. Sealant movement joints: Not required

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

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

Standard: To BS 7533-6.

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.

Q20
Granular sub-bases to roads/ pavings

To be read with preliminaries/ general conditions.

110 Thicknesses of sub-base/ subgrade improvement layers

1. Thicknesses: See sections:
    1.1. Q23 Gravel/hoggin/wood chip/resin bound pavings
    1.2. Q25 Slab parings

130 Herbicides

1. Type: Translocated, non-selective.
2. Application: To subgrade of footpaths.

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:
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:
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.

170 Geotextile filter/ separator membrane

1. Description: All areas of hard paving.
2. Manufacturer: Contractor's choice.
    2.1. Product reference: Submit proposals.
3. Jointing: 300mm 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:
    1.1. Period of notice: After preparation and compaction of subgrades;
    1.2. For inspection of granular sub-base material before spreading;
    1.3. On completion of compaction of sub-base.

2. Period of notice: 5 working days.

210 Highways agency Type 1 unbound mixture for sub-base

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

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 hoggin 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.

220 Frost susceptible granular material

1. Definition (non frost susceptible material): To Highways Agency 'Specification for highway works' clause 801.8.
2. Depth of frost susceptible material below final surface of paving (minimum):
3. Testing: Test materials used if required and supply certificates.

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.

250 Laying granular sub-bases

1. Description: For pedestrian areas
2. General: Spread and levelled.
3. Compaction
   3.1. Timing: As soon as possible after laying.
   3.2. Method: By roller or other suitable means, adequate to resist subsidence or deformation of the sub-base during construction and of the completed paving when in use. Take particular care to compact fully at intrusions, perimeters and where local excavation and backfilling has taken place.

310 Accuracy

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: ± 20 mm.
   1.2. Sub-bases
      1.2.1. Roads and parking areas: + 10 - 10 mm.
      1.2.2. Footways and recreation areas: ± 12 mm .

320 Surfaces to receive sand bedding for paving

1. Description: Paving to sections Q23 and Q25
2. Blind surface: As necessary before compaction to ensure that surface is tight and dense enough to prevent laying course sand being lost into it during construction or use.
3. Material: Approved fine material.

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.

Q23
Gravel/hoggin/wood chip/resin bound pavings

Types of surfacing

110 Hard binding gravel

1. Description: To pathways to rear gardens
2. Subgrade improvement layer: Not required
3. Geotextile: Non-woven geotextile to suppress weed growth
4. Granular sub-base:
   4.1. Compacted thickness: 150mm
5. Edging:
   5.1. Type: Timber edge, see Q23/310
6. Surface course: Crushed limestone to dust.
   6.1. Type: Breedon Golden Amber Gravel
   6.2. Source: Breedon Special Aggregates
   6.3. Colour: As supplied
   6.4. Size: 12mm to dust
   6.5. Thickness: 50mm
7. Completion: Compact to produce a firm, regular surface, stable in use.
8. Installation in full accordance with manufacturers' recommendations.
9. Accessories: Allow for inset manhole covers for any service covers within resin bound paved areas.

225 Proprietary resin bound chippings

1. Description: Sureset buff colour resin bound gravel to footpaths
2. Subgrade improvement layer: Not required
3. Geomembrane:
   4.1 Manufacturer: Terram
   4.2 Product reference: Terram 1000
4. Granular sub-base:
   4.1. Type 3 granular sub-base in accordance with supplier specification
   4.2. Compacted thickness: 175mm
5. Water collection: Permeable surface with cross fall of 1:40
6. Base course: Asphalt binder course
   6.1. AC 10 open graded asphalt in accordance with supplier specification
   6.2. Compacted thickness: 70mm
7. Surface course: Resin Bound Gravel
   7.1. Type: Sureset 6mm UVR
   7.2. Source: Sureset
   7.3. Colour: Aztec Gold or Barley Butter, submit buff colour samples for approval.
   7.4. Size: 6mm
   7.5. Thickness: 18mm
   7.6. Product reference: UVR ProResin system with 6mm aggregate
8. Application: Thoroughly mixed and uniformly spread.

9. Installation in full accordance with manufacturers' recommendations.
10. Accessories: Allow for inset manhole covers for any service covers within resin bound paved areas.

Laying

310 Timber edging

1. Softwood board
    1.1. Size: 150x38mm
    1.2. Fixing: galvanized nails into softwood pegs
2. Pegs
    2.1. Size: 38x38x450mm with pointed end
    2.2. Fixing: Drive into ground
    2.3. Centres: 2m max and at all changes in direction
3. Preservative treatment: all timber to be pressure treated with preservative for a service life of 15 years.

320 Samples

Submit: Representative samples of gravel aggregates.

340 Laying generally

1. Channel, 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. Other dressings or overlays: As manufacturers' recommendations.

360 Drainage falls

1. Unsealed surfaces
    1.1. Fall and cross falls: (minimum): 1:30 or in accordance with civil engineers drawings

390 Protection from traffic and plant

Paved areas: Restrict access to prevent damage.

Completion

400 Slip resistance testing

1. Surfaces to be tested: Resin bound gravel
    1.1. Period of notice (minimum): 3 days
2. Test standard
    2.1. Requirements: To ensure installed material meets manufacturer's slip resistance achieving a minimum Pendulum Test value (PTV) of 36 under wet conditions
3. Report: Submit signed and witnessed report to Contract Administrator

Ω End of Section

Q24
Interlocking block pavings

General information/ requirements

NOTE: FOR ALL DETAILS OF VEHICULAR ROAD SURFACE FINISHES, SUB-BASE, DRAINAGE SYSTEM, LEVELS AND KERBS REFER TO SPECIFICATION AND DRAWINGS BY HUNTERS

115 Permeable concrete block paving to vehicular roads/driveways

1. Description: To road and drives
2. Blocks: To BS EN 1338.
    - 2.1. Manufacturer: Brett
        - 2.1.1. Product reference: Alpha Flow NLAFL80
    - 2.2. Sizes: 210mm x 140mm x 80mm depth
    - 2.3. Colour/ Finish: Charcoal
    - 2.4. Special blocks: None
    - 2.5. Laying pattern: Herringbone
    - 2.6. Recycled content: As supplied
3. Accessories: Allow for inset manhole covers for any service covers within block paved areas.

116 Non-Permeable concrete block paving to shared surface crossing points

1. Description: To shared surface crossings
2. Blocks: To BS EN 1338.
    - 2.1. Manufacturer: Brett
        - 2.1.1. Product reference: Alpha NLAL80
    - 2.2. Sizes: 210mm x 140mm x 80mm depth
    - 2.3. Colour/ Finish: Autumn Gold
    - 2.4. Special blocks: None
    - 2.5. Laying pattern: Herringbone
    - 2.6. Recycled content: As supplied
3. Accessories: Allow for inset manhole covers for any service covers within block paved areas.

117 Permeable concrete block paving to parking bays

1. Description: To parking bays
2. Blocks: To BS EN 1338.
    - 2.1. Manufacturer: Brett
        - 2.1.1. Product reference: Alpha Flow NLAFL80
    - 2.2. Sizes: 210mm x 140mm x 80mm depth
    - 2.3. Colour/ Finish: Brindle
    - 2.4. Special blocks: Contrasting colour Charcoal colour blocks for parking bay demarcation
    - 2.5. Laying pattern: Herringbone with stretcher course for bay demarcation
    - 2.6. Recycled content: As supplied
3. Accessories: Allow for inset manhole covers for any service covers within block paved areas.

System performance

200 Execution generally

1. Refer to full specification by Hunters for permeable road surface system requirements.
2. Refer to manufacturer's installation guidance.
3. Standard: In accordance with BS 7533-3.

211 Colour banding

General: Unless premixed by manufacturer, select blocks/ pavers/ setts from at least 2 separate packs in rotation, to avoid colour banding.

240 Adverse weather

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

485 Laying blocks/ pavers/ setts

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

505 Regularity of paved surfaces

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

Completion

615 Completion of paving

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

Q25
Slab pavings

General

120 Concrete flag paving system

1. Description: To patios and front gardens
2. Granular sub-base:
    2.1. Compacted thickness: 150mm
3. Bedding layer: 50mm thick layer of sharp sand and cement
4. Blocks: To BS EN 1338.
    4.1. Manufacturer: Brett
        4.1.1. Product reference: Chaucer CUH35BF
    4.2. Sizes: 600mm x 300mm x 35mm depth
    4.3. Colour/ Finish: Buff
    4.4. Special blocks: None
    4.5. Laying pattern: half-lap stretcher
    4.6. Recycled content: As supplied
5. Accessories: Allow for inset manhole covers for any service covers within flag paved areas.

System performance

200 Design – concrete flag paving system

1. Standard: In accordance with BS 7533-4.
2. Proposals: Submit technical information and manufacturer's literature.

Execution

240 Adverse weather

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

450 Laying geotextile sheet for conventional paving

1. Location: Immediately below laying course.
2. Jointing: As Q20/170
3. Laying: Fit neatly at edge restraints and other features that interrupt the sand laying course, e.g. drainage fittings, channels, manholes and kerbs.
    3.1. Edge detail: Turn sheet up to form an upstand against features.
        3.1.1. Height (minimum): Thickness of sand laying course.

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

640 Colour banding

General: Unless premixed by manufacturer, select slabs from at least 2 separate packs in rotation, to avoid colour banding.

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.

Q26
Special surfacing/ pavings for sport / general amenity

Impact attenuating surfacing for play areas

300 Extent of impact attenuating surfacing

General: Lay to the impact areas show in the relevant parts of BS EN 1177 and BS EN 1176 and as indicated on the equipment details as provided by the equipment manufacturer.

360 In situ synthetic surfacing

1. Description: Rubber wetpour colour surfacing to play area
2. Edging: Concrete edging to Q10/110
3. Geotextile: As Q20/170
4. Granular sub-base:
    4.1. Compacted thickness: 150mm
5. Manufacturer: Soft surfaces
6. Base:
    6.1. Material: SBR
        6.1.1. Product reference: SBR shockpad base
    6.2. Nominal thickness after compaction: Varies to meet critical fall height requirements of each item of equipment. Deeper SBR areas accommodated so that overall finished surface is flat.
    6.3. Colour: Black
7. Surface course:
    7.1. Material: EPDM rubber granules with resin binder
        7.1.1. Product reference: Wetpour EPDM rubber crumb layer 1-4mm mixed with polyurethane binder
        7.1.2. Base colour: light green / dark green mix
        7.1.3. Feature colours: light blue, purple and earth yellow
        7.1.4. Standard: To BS 7188
    7.2. Colours: Submit sample colours for approval prior to ordering.
    7.3. Critical Fall height when tested to BS EN 1177
    7.4. Special shapes: Contrasting colour areas as indicated on drawings, associated with each item of equipment.
8. Jointing: In accordance with manufacturers' recommendations, joints between same colour materials should not be visible.
9. Health and safety:
    9.1. Substance known to be toxic or carcinogenic on skin contact as vapor or dust during normal use: Do not use.
10. Submit:
    10.1. Resistance to abrasive wear, slip resistance, resistance to indentation and ease of ignition: Evidence of testing to BS 7188

Associated accessories

410 Flush edging to surfacing

Description: PCC flat top edging, see section Q10/110

Execution

710 In situ specialist play surfacing

1. Installation: in full accordance with manufacturers' guidelines.
2. Weather conditions: Frost free
3. Laying: Lay in continuous lengths with no seams or textural variations.
4. Maximum fall across play area: 1:100

Completion

920 In situ specialist play surfacing

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.

Q28
Topsoil and soil ameliorants

Generally/the site

102 Ground protection

1. As required, where ground is soft or may become compacted or damaged ground protection sheets/boards shall be installed by the contractor for the duration of the works.

System outline

115 Topsoil system for turfing and seeding

1. Description: All areas to be turfed
2. Composition
    2.1. Topsoil: In-situ topsoil – minimum depth 150mm.
    2.2. Ameliorants: Slow-release fertilizer as drawings.
    2.3. Accessories: None

135 Topsoil system for external planting

1. Description: All planting beds
2. Composition
    2.1. Topsoil: Site topsoil left in situ is estimated at 350-400mm depth.
    2.2. Ameliorants: Sanitized and stabilized composted materials and slow-release fertilizer as drawings.
    2.3. Accessories: None

145 Backfilling soil system to tree pits

1. Description: All tree pits, see drawing 25177.106
2. Composition
    2.1. Topsoil: Site sourced topsoil – to a depth of 450mm
    2.2. Ameliorants to topsoil: Sanitized and stabilized composted materials and slow-release fertilizer as drawings.
    2.3. Subsoil: Site sourced subsoil mixed with 50% sharp sand or imported sandy subsoil - to a depth of 350mm
    2.4. Base of pit: broken up to a depth of 100mm to help facilitate drainage.
    2.5. Accessories: Strimmer guard and tree staking

145 Backfilling soil system to specimen shrub pits

1. Description: All specimen shrub pits, see drawing 25177.106
2. Composition
    2.1. Topsoil: Site sourced topsoil – to a depth of 400mm
    2.2. Ameliorants to topsoil: Sanitized and stabilized composted materials and slow-release fertilizer as drawings.
    2.3. Subsoil: Site sourced subsoil mixed with 50% sharp sand or imported sandy subsoil - to a depth of 200mm
    2.4. Base of pit: broken up to a depth of 100mm to help facilitate drainage.
    2.5. Accessories: Staking

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.

360 Sanitized and stabilized composted materials certified to PAS 100

1. Description: Compost for planting beds and tree/shrub pits
2. Standard: PAS 100
3. Source: Contractor's choice
    3.1. Product reference: Contractor's choice
4. Horticultural parameters
    4.1. pH (1:5 water extract): 7.0-8.7
    4.2. Electrical conductivity (maximum, 1:5 water extract): 200mS/m
    4.3. Moisture content (m/m of fresh weight): 35-55%.
    4.4. Organic matter content (minimum): 25%
    4.5. Grading (air dried samples): 99% passing 25mm screen and 90% passing 5mm screen mesh aperture
    4.6. Carbon:Nitrogen ratio (maximum): 20:1.
5. Texture: Friable.
6. Objectionable odour: Not permitted.
7. Compost Certification Scheme certification: Required
8. Declaration of analysis: Submit.
9. Additional analyses: Not required
10. Samples: Provide on request

405 Fertilizer for all planting and tree/shrub pits

1. Description: Fertilizer for planting beds and tree pits
2. Manufacturer/ source: ENMAG
    2.1. Product reference: CRF
3. Standard: In accordance with the Fertilizer Industry Scheme (FIAS)
4. Purpose: Establishment fertilizer
5. Type: Slow release

406 Fertilizer for amenity turf

6. Description: Winter Lawn Fertilizer

7. Manufacturer/ source: Germinal
   7.1. Product reference: Nova Tec Classic
8. Standard: In accordance with the Fertilizer Industry Scheme (FIAS)
9. Type: Slow release

410 Mulch for planting beds and tree pits

1. Description: Loose bark mulch for planting beds and tree pits
2. Manufacturer/ source: Melcourt Industries Ltd
   2.1. Product reference: Bark nuggets
3. Standard: In accordance with the Fertilizer Industry Scheme (FIAS)
4. Nominal particle size: 15-65mm
5. Fire-tested in accordance with BS 4790:1987
6. Forest Stewardship Council Certified

420 Green roof growing medium

1. Description: Extensive Green roof substrate to roofs of dwellings, bin stores and bike stores
2. Manufacturer/ source: Bauder
   2.1. Product reference: Bauder Extensive plant substrate lightweight growing medium
3. Handling: Minimize. Handle in the driest conditions possible. Do not handle or install when wet or frozen.
4. Sequence: gently firm each layer before spreading the next.
5. Accessories: Green roof system installed with drip line irrigation for establishment and watering in dry conditions.

Execution

635 Documentation for compost and composted materials

1. Timing: Submit at handover.
2. Contents
   2.1. Full description of all compost components.
   2.2. Record of source for all compost components.
   2.3. Analyst's report for each test carried out.
   2.4. Declaration of compliance: in accordance with PAS 100 and BSI PD CR 13456.
   2.5. Quality Compost Protocol certification: Required
3. Number of copies: 1 electronic copy

655 Mechanical tools

Restrictions: Not permitted for ornamental planting beds. Only permitted for preparation of tree pits and hedge trenches.

718 Final cultivation

1. Compacted topsoil: Break up to full depth.
2. Tilth: Loosen, aerate and break up topsoil to a tilth suitable for blade grading.
3. Depth: 150mm
4. Particle size (maximum): 10mm
5. Timing: After grading and fertilizing and within a few days before planting.
6. Weather and ground conditions: Suitably dry.

7. Surface: Leave regular and even.
8. Levels: 25mm above surrounding surfaces and grass areas.
9. Undesirable material brought to the surface
    9.1. Remove visible weeds.
    9.2. Remove roots and large stones with any dimension exceeding 50mm

810 Applying compost

1. Description: PAS100 compost
2. Application rate for trees and shrubs: 50mm thick for planting beds, 200mm for tree and specimen shrub pits
    2.1. Timing: Apply prior to cultivation.
3. Other requirements: none

820 Applying general fertilizer

1. Description: EMAG CRF
2. Application: Spread evenly, carefully incorporating below mulch materials.
    2.1. Timing: Immediately before cultivation.
    2.2. Application rate: 50g per m2
    2.3. Other requirements: none

845 Applying loose mulch

1. Description: Ornamental bark mulch to all planting beds, trees and hedges
2. Timing: Immediately after planting
3. Preparation: Ensure soil is thoroughly moistened, apply water where necessary.
4. Coverage of mulch (minimum)
    4.1. Planting beds (depth): 50mm
    4.2. Tree pits: 50mm
5. Finished level of mulch: 25mm above adjacent grass or paved areas.

Completion

920 Applying mulch

1. Timing: Immediately prior to end of rectification period
2. Watering: Ensure that soil is thoroughly moistened prior to mulching, applying water where necessary.
3. Planting beds and trees: Re-mulch.
    3.1. Depth (minimum): 50mm

Q30
Seeding/turfing

General information/requirements

115 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

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 seedlings or seed.
3. Frequency: As necessary to ensure the establishment and continued thriving of all seeding/turfing.

150 Water restrictions

Timing: If water supply is or is likely to be restricted by emergency legislation do not carry out seeding/turfing until instructed. If seeding/turfing has been carried out, obtain instructions on watering.

160 Notice

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: 1 week

170 Setting out

Delineation: In straight lines or smoothly flowing curves as shown on drawings.

Preparation

210 Herbicide

1. Type: Suitable for suppressing perennial weeds.
2. Timing: Allow fallow period before cultivation.
    2.1. Duration: As manufacturer's recommendation.

250 Soil requirements

To Section Q28/115. Minimum topsoil depth 150mm

Seeding

312 Wildflower seed

1. Description: Under existing established tree group to east of pathway from Chamberlain Lane
2. Supplier: Emorsgate
3. Product reference: EW1
4. Origin of each species: UK origin
5. Application: 10g/m2
6. To be used where areas of disturbed ground may require reinstatement or where there is bare ground, existing grass sward can be over sown to provide continuous sward

319 Quality of seed

1. Freshness: Produced for the current growing season.
2. Certification: Blue label certified varieties.
3. Standard: EC purity and germination regulations.

330 Sowing

1. General: Establish good contract with the seed bed
2. Method: To suit soil type. Proposed usage, location and weather conditions before and after sowing
3. Distribution: 2 equal sowings at right angles to each other.

336 Wildflower sowing season

Wildflower seed generally: March to May or August to October

Turfing

405 Amenity lawn turf

1. Description: Lawn turf rear gardens and amenity areas.
2. Supplier: Rowlawn
3. Product reference: Medallion
4. Dimensions: 610mm x 1640mm
5. Standard: To BS 3969, free from undesirable grasses and weeds.

Wildflower turf

1. Description: Wildflower turf for grass verges and open space (under oak tree) as shown on drawings.
2. Supplier: wildflowerturf.co.uk
3. Product reference: Shade tolerant WFT-Shade-41
4. Standard: To BS 3969, free from undesirable grasses and weeds.
5. Accessories: Finish areas with a layer of 'wildflower turf finisher' WFT-Finisher by wildflowerturf.co.uk
6. Around edges of wildflower area – next to kerbs or pathways) a single strip of amenity turf shall be laid to provide a neat interface with the edge of the grass area

420 Delivery and storage

1. Timing: Lay turf with minimum possible delay after lifting. If delay occurs, lay turf out on topsoil and keep moist.
2. Frosty weather or waterlogged ground: Do not lift turf.
3. Delivery: Arrange to avoid need for excessive stacking.
4. Stacking height (maximum): 1 m.
5. Dried out or deteriorated turf: Do not use.
6. Certification
    6.1. Standard: To BS 3969.
    6.2. Declaration: Supply on request

430 Turfing generally

1. Timing of laying
    1.1. Spring and summer: Within 18 hours of delivery.
    1.2. Autumn and winter: Within 24 hours of delivery.
2. Weather conditions: Do not lay turf when persistent cold or drying winds are likely to occur or soil is frost bound, waterlogged or excessively dry.
3. Working access: Planks laid on previously laid turf. Do not walk on prepared bed or newly laid turf.
4. Jointing: Laid with broken joints, well butted up. Do not stretch turf.
5. Edges: Whole turfs, trimmed to a true line.
6. Adjusting levels: Remove high spots and fill hollows with fine soil.
7. Consolidating: Lightly and evenly firm as laying proceeds to ensure full contact with substrate. Do not use rollers.
8. Dressing, brushed well in to completely fill all joints:
9. Watering: Thoroughly water completed turf immediately after laying. Check that water has penetrated into the soil below.

450 Trimming turf

1. Newly planted tree pits: Neatly cut turf away around individual trees and specimen shrubs.
    1.1. Diameter: 1000mm
    1.2. Tree pit surface: Bark mulch as Q28/410

Protecting/cutting

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.

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 50mm
3. Contamination: Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
4. Large roots: Grub up and dispose of without undue disturbance of soil and adjacent areas.
5. Additional requirements: See notes at the beginning of Section Q28

118 Soil conditions

1. Soil for cultivating and planting: Moist, friable and 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 and frozen ground: Do not plant.

125 Times of year for planting

1. Bare root and rootballed trees and shrubs: Late October to late March.
2. Container grown plants: At any time if ground and weather conditions are favorable.
    2.1. Watering and weed control: Provide as necessary.

130 Mechanical tools

1. Restrictions: Not permitted for ornamental planting beds. Only permitted for tree planting.

145 Watering

1. Quantity: Wet full depth of topsoil.
2. Application: Even and without damaging or displacing plants or soil.
3. Frequency: As necessary to ensure establishment and continued thriving of planting.

150 Water restrictions

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

160 Notice

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: 1 week

170 Soil requirements

1. Type
   1.1. Tree pits, shrub pits, woodland thicket and hedges: Existing site topsoil plus soil ameliorants as section Q28
   1.2. Mulch applied after planting: As section Q28/410

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.
   6.1. Standard: The National Plant Specification
7. Species: True to name.
8. Origin/ Provenance:
9. Definition: Origin and Provenance have the meaning given in the National Plant Specification.

216 Plants/ Trees – specification criteria

1. Name, forms, dimensions and other criteria: As defined in the National Plant Specification.

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.

246 Labelling and information

1. General: Provide each plant/tree with supplier's labeling for delivery to site to include the full botanical name, specification of plant/tree and supplier's name.

260 Plant/ Tree substitution

1. Plants/ trees unobtainable or known to be 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 CPSE 'Handling and establishing landscape plants'.
2. Frost: Protect plants from frost.
3. Handling: Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
4. Packaging of bulk quantities: Pallets or bins sealed with polythene and shrink wrapped.
5. 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.

285 Protection of existing grass

1. General: Protect areas affected by planting operations using boards/ tarpaulins.
    1.1. Excavated or imported material: Do not place directly on grass.
    1.2. Duration: Minimum period.

290 Surplus material

1. Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings and other arisings: Remove.

Preparation of planting beds/ planting materials

300 Herbicide

1. Description: As required for clearing existing vegetation to all new planting areas.
2. Locations: Planting beds
3. Type: Suitable for suppressing perennial weeds.
4. Timing: Allow fallow period before cultivation.
    4.1. Duration (minimum): As manufacturer's recommendations.

Planting shrubs/ herbaceous plants

400 Random plant layout for ornamental shrub beds

1. Description: For planting beds
2. Spacing: Evenly, avoiding straight lines.
3. Density: As plant schedule on drawings.

401 Regular plant layout hedges

1. Description: For hedges in straight lines
2. Spacing: As plant schedule on drawings.
3. Density: As plant schedule on drawings.

405 Shrub planting pits

1. Timing: Excavate 1-2 days (maximum) before planting.
2. Sizes: Wide enough to accommodate the roots when fully spread and 75mm deeper than the root system.
3. Pit bottom improvement: Break up to a depth of 150mm, incorporating 25g of slow-release fertilizer per planting pit.

445 Planting bulbs/ Corms/ Tubers

1. Depth: Top of bulb/ corm/ tuber at a depth of approximately twice its height, base in contact with bottom of hole.
2. Backfilling: Finely broken soil. Lightly firm to existing ground level.
3. Naturalized planting in existing grassed areas
    3.1. Scattering: Evenly spaced, plant bulbs in groups within tree rings.
    3.2. Planting: Neatly remove a plug of turf and replace after planting.

470 Formal hedges

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

471 Naturalized hedges

1. Planting: In trenches large enough to take full spread of roots. Set out plants evenly.

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: Bark mulch as per section Q28. To all planted areas except woodland thicket.
    3.1. Depth: 50mm

486 Protection to native planting

1. Manufacturer: Contactor to submit proposals.
    1.1. Product reference: Contactor to submit proposals.
2. Type: Biodegradable plastic shrub guard
3. Colour: Contactor to submit proposals.
4. Support: Cane

5. 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 transplants in accordance with BS 4428.
2. General: Mechanical tools can be used when preparing and planting tree pits.
3. Protect areas affected by planting operations using boards/ tarpaulins. Do not place excavated or imported materials directly on grass.

505 Tree pits

1. Sizes: 1m x 1m x 0.8m deep and 0.6m x0.6m x 0.6m deep – refer to drawing 251177.106
2. Sloping ground: Maintain horizontal bases and vertical sides with no less than minimum depth throughout.
3. Excavated material: Topsoil and subsoil to be kept separate.
4. Pit bottoms: Excavate with slightly raised centre: Break up base to 100mm
5. Pit sides: Scarify.
6. Backfilling material for tree pit system: As per Q28/145
7. Accessories: Staking and root barriers to be in accordance with Tree pit drawings 25177.106
8. Root barrier locations: GreenBlue Urban ReRoot 600 vertical root barrier installed in accordance with structural engineer's instructions. Refer to suggested location on drawings 25177.102 25177.104-105

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: Not required
2. Stake size (minimum): 75mm diameter
3. Stake length (minimum): 1800mm

550 Double or triple staking for all trees

1. Description: All standard trees to be double staked, all Extra-heavy trees to be triple staked– refer to drawing 251177.106
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 rootball/ rootstock.
3. Height of stakes: Approximately 700mm above ground level
4. Horizontal bracing: Timber cross bar 75mmx38mmx900mm
   4.1. Fixing: Firmly fix with nails on windward side of tree and as close as possible to the stem without making contact with the bark. Position cross bar horizontally and 25mm from top of stakes.
5. Ties: Expanding ties for double staking and hessian natural tree ties for triple staking
6. Tying: Secure tree firmly but not rigidly to crossbar. Prevent tree from touching cross bar using spacer block or cushion if required.
7. Nails for fixing ties, belts and webbing: To BS 1202-1, galvanized, minimum 25 mm long and with 10 mm diameter heads.
8. Nails for fixing cross bars: Contractor's choice

566 Tree protection

1. Manufacturer: Contractor's choice
    1.1. Product reference: Contractor's choice
2. Type: Strimmer guard
3. General: Ensure that protection methods do not impede natural movement of trees or restrict growth.

576 Tree pit surfacing – loose fill mulch

1. Surfacing material: Bark mulch as per section Q28
2. Depth: 50mm
3. Watering: Water soil thoroughly before laying.
4. Installation: Ensure the base of the tree stem is kept free from loose filled material.

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: To meet the requirements of the specification. Anticipated to be not less than once every three weeks during growing season.

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 same species or match original specification, whichever is the greater.
3. Timing of making good: During the next suitable planting season

740 Cleanliness

1. Soil and arisings: Remove from planting beds and hedges.
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 larger of 1 m or the surface of original planting pit.
    1.2. Keep planting beds clear of weeds:
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.

7. Watering: As required for healthy establishment, depending on weather conditions. Contractor should monitor weather conditions and be prepared for watering plants and trees in dry 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: As appropriate to the species
   1.3. Trees: Favour a single central leading shoot.
2. Arisings: Remove.

780 Maintenance instructions

General: Before end of the maintenance period, submit printed instructions recommending procedures to be established by the Employer for ongoing maintenance of the planting work.

790 Final mulching

1. Timing: At end of the maintenance period.
2. Watering: Ensure that soil is thoroughly moistened prior to remulching, applying water where necessary.
3. Planting beds and hedges: Remulch.
4. Depth (minimum): 50mm
5. Trees: Remulch.
6. Depth (minimum): 50mm

Q35
Landscape maintenance soft landscape

Generally

100 Maintenance during defects liability period

1. Maintenance periods: The following defects periods apply, during which time the Contractor is responsible for maintaining the planting, including watering
    1.1. Contractor's maintenance responsibility for trees: 24 months from completion of planting works
    1.2. Contractor's maintenance responsibility for shrubs and hedges: 12 months from completion of planting works
    1.3. Contractor's maintenance responsibility for amenity and wildflower grass areas: up until the first cut is carried out
    1.4. Contractor's maintenance responsibility for green roof: until Practical Completion with a defects period of 12 months
2. Inspection: At the end of each defects period, the landscape elements is inspected and any replacement planting carried out in accordance with the terms of the contract.
3. Replanting requirements: Any trees or plants, which, within the defect liability period, die, or become seriously damaged, diseased or dying shall be replaced during the next planting season with other trees/plants of the same species and size. Any changes are to be first agreed with the Local Planning Authority.
4. Handover: After replanting has been carried out and inspected by the Contract Administrator, the maintenance responsibility will pass to the Employer.

105 Maintenance objectives

1. Location: Maintenance for all trees hedges and shrub beds.
2. Aims: Improved landscape visual amenity, screening, provide habitat/increase biodiversity.
3. Restrictions: Safe access for pedestrians and vehicles to be maintained at all times.
4. Results: Successful establishment of the soft landscape elements and to ensure all soft landscape features are fit for purpose and maintained in a neat and tidy condition in full accordance with the drawings and specification.

110 Notice

1. Give notice before
    1.1. Application of herbicide.
    1.2. Application of fertilizer.
    1.3. Watering.
    1.4. Each site maintenance visit.
2. Period of notice: 7 days

130 Reinstatement

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

140 Control of mammalian pests and invasive plant species

1. Give notice if pests or invasive species affect shrub/tree success and establishment.
    1.1. Method: To be agreed with client.

155 Watering

1. Supply: To be agreed with client
2. Quantity: Wet to field capacity.
3. Application: Do not damage or loosen plants.
4. Compacted soil: Loosen or scoop out, to direct water to rootzone.
5. Frequency: As necessary for the continued thriving of all planting.

160 Water restrictions

General: If water supply is, or is likely to be, restricted by emergency legislation, submit proposals for an alternative suitable source of water. Obtain instructions before proceeding.

175 Disposal of arisings

1. General: Unless specified otherwise, dispose of arisings as follows: Remove to recycling facility.
2. It should not be assumed that a compost area is available on site this should be agreed separately with the client

180 Chipping or shredding

General: Not permitted on site.

181 Mechanical equipment

1. General: Minimize.
2. Prohibited equipment: Litter vacuums
3. Timing: Use of mechanical equipment allowed between 9am and 6pm only.

190 Litter

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

195 Protection of existing grass

General: Protect areas affected by maintenance operations using boards/tarpaulins. Do not place excavated or imported materials directly on grass.

197 Cleanliness

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.

Shrubs/trees/hedges

500 Establishment of new planting

1. Duration: 12 months
2. Weed control
    2.1. Method: Keep planting beds clear of weeds by maintaining full thickness of mulch; hand-
    2.2. weeding and/or use of appropriate herbicides.
    2.3. Area: Maintain a weed free area around each tree and shrub, minimum diameter the larger of 1 m or the surface of the original planting pit.
3. Soil condition: Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch.
4. Watering: As required for the successful establishment and thriving of all trees and planting.

502 Establishment of new planting – fertilizer

1. Time of year: March or April.
2. Type: Slow release
3. Spreading: Spread evenly.
   3.1. Application rate: As manufacturer's recommendations.

510 Tree stakes and ties

1. Inspection/ Maintenance times: As scheduled and immediately after strong winds.
2. Stakes
   2.1. Replace loose, broken or decayed stakes to original specification.
   2.2. If longer than half of clear tree stem height, cut to this height in spring. Retie to tree firmly but not tightly with a single tie.
3. Ties: Adjust, refix or replace loose or defective ties, allowing for growth and to prevent chafing.
   3.1. Where chafing has occurred, reposition or replace ties to prevent further chafing.
4. Removal of stakes and ties:
   4.1. Fill stake holes with lightly compacted soil.

520 Refirming of trees and shrubs

1. Timing: After strong winds, frost heave and other disturbances.
2. Refirming: Tread around the base until firmly bedded.
3. Collars in soil at base of tree stems, created by tree movement: Break up by fork, avoiding damage to roots. Backfill with topsoil and refirm.

537 Nesting wild birds

1. Survey: Not required. Do not undertake maintenance operations to trees, hedges and scrub in the bird nesting season (mid- February to mid-August)
2. Accidental disturbance: Report immediately.

540 Pruning generally

1. Pruning: In accordance with good horticultural and arboricultural practice.
   1.1. Removing branches: Do not damage or tear the stem or bark.
   1.2. Wounds: Keep as small as possible and cut cleanly back to sound wood.
   1.3. Cutting: Make cuts above and sloping away from an outward facing healthy bud, angled so that water will not collect on cut area.
   1.4. Larger branches: Prune neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.
2. Appearance: Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well-balanced natural appearance.
3. Tools: Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.
4. Disease or infection: Give notice if detected.
5. Growth retardants, fungicide or pruning sealant: Do not use unless instructed.

545 Pruning of excessive overhang

1. Timing: As required

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

555 Pruning trees and shrubs

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

570 Formative pruning of young trees

1. Standard: Type and timing of pruning operations to suit the plant species.
2. Time of year: Do not prune during the late winter/ early spring sap flow period.
3. Young trees up to 4 m high
    3.1. Crown prune by removing dead branches and reducing selected side branches by one third to preserve a well-balanced head and ensure the development of a single strong leader.
    3.2. Remove duplicated branches and potentially weak or tight forks. In each case cut back to live wood.
4. Whips or feathered trees: Do not prune.
5. Operatives: Approved specialist contractor

575 Pruning ornamental shrubs

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

580 Pruning flowering species of shrubs and roses

1. Time of year
    1.1. Winter flowering shrubs: Spring.
    1.2. Shrubs flowering between March and July: Immediately after the flowering period.
    1.3. Shrubs flowering between July and October: Back to old wood in winter.
    1.4. Rose bushes: Early spring to encourage basal growths and a balanced, compact habit.

600 Trimming rapidly establishing hedges

1. General: Allow to reach planned height as rapidly as possible.
    1.1. Form: Trim back lateral branches moderately.

620 Removal of dead plant material

Operations: At the end of the growing season, check all shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems.

630 Dead and diseased plants

1. Removal: As soon as possible
2. Replacement: In the next suitable planting season

635 Reinstatement of shrub areas

1. Dead and damaged plants: Remove.
2. Mulch/ matting materials
    2.1. Carefully move to one side and dig over the soil, leaving it fit for replanting.

3. Do not disturb roots of adjacent plants.
4. Replacement plants
    4.1. Use pits and plants: To original specification or to match the size of adjacent or nearby plants of the same species, whichever is the greater.
    4.2. Additional requirements:
5. Dressing: Slow release fertilizer:
    5.1. Type: ENMAG CRF
    5.2. Application rate: As manufacturer's recommendations.

645 Weed control generally

1. Weed tolerance: At all times, weed cover less than 5% and no weed to exceed 150 mm high.
2. Adjacent plants, trees and grass: Do not damage.

650 Hand weeding

1. General: Remove weeds entirely, including roots.
2. Disturbance: Remove the minimum quantity of soil, and disturb plants, bulbs and mulched surfaces as little as possible.
3. Completion: Rake area to a neat, clean condition.
4. Mulch: Reinstate to original depth.

665 Weed control with winter herbicide

1. Type: Suitable residual soil acting herbicide.
2. Time of year: Unless otherwise agreed, complete before end of March.
3. Timing: Allow recommended period for herbicide to take effect before clearing dead weeds.

670 Weed control with summer herbicide

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

680 Soil aeration

1. Compacted soil surfaces
    1.1. Prick up: To aerate the soil of root areas and break surface crust.
    1.2. Size of lumps: Reduce to crumb and level off.
    1.3. Damage: Do not damage plants and their roots.

690 Maintenance of loose mulch

1. Thickness (minimum): 50mm
    1.1. Top up: Annually
2. Mulch spill on adjacent areas: Remove weeds and rubbish and return to planted area.
3. Weeding: Remove weeds growing on or in mulch by hand weeding and/or herbicide treatment.

705 Winter leaf removal

1. Operations: Collect accumulations of drifted leaves from the vicinity and from planting beds.
2. Arisings: Remove to recycling facility

Q37
Green Roofs

General information/ requirements

NOTE: FOR ALL DETAILS OF GREEN ROOF SYSTEM INCLUDING WATERPROOF MEMBRANE AND DRIP LINE IRRIGATION REFER TO SPECIFICATION BY HUNTERS

Products

400 Vegetation blanket - wildflowers

1. Description: Native wildflower pre-planted blanket to green roofs of houses, bin stores and bike sheds
2. Manufacturer: Bauder
    2.1. Product reference: WB
3. Vegetation coverage (minimum): 75%:
4. Rooting medium: Extensive roof substrate, see section Q28/420
5. Minimum substrate depth: 100mm
6. Accessories: for housing lay alongside 50% cover of wildflower blankets to achieve species diversity, alternate blanket types when laying. For bin stores and bike sheds use 100% wildflower blankets.

401 Vegetation blanket - sedum

1. Description: Sedum pre-planted blanket to extensive green roofs of houses
2. Manufacturer: Bauder
    2.1. Product reference: SB
3. Vegetation coverage (minimum): 75%:
4. Rooting medium: Extensive roof substrate, see section Q28/420
5. Minimum substrate depth: 100mm
6. Accessories: lay alongside 50% cover of wildflower blankets to achieve species diversity, alternate blanket types when laying.

Execution

800 Vegetation blanket installation

1. Handling blankets
    1.1. Timing: Lay within 36 hours of lifting from growing position.
    1.2. Excessive stacking: Not permitted.
    1.3. Material loss (maximum): 3% of total surface area.
4. Growing medium condition: Thoroughly watered.
5. Laying blankets
    5.1. Dry, damaged, frosty or waterlogged blankets: Do not lay.
    5.2. Orientation: Diagonal or perpendicular to slope of roof.
    5.3. Joints: Stagger. Butt together or slightly overlap to prevent gaps. Do not stretch blankets. Secure with biodegradable pegs if recommended by Bauder.
    5.4. Edges: Finish with whole blankets.

5.5. Consolidation: Firm as laying proceeds to ensure full contact with the growing medium. Do not use rollers.

6. Dressing: As recommended by Bauder
   6.1. Application: Brush in to fill joints.
7. Watering: Thorough, immediately after laying and dressing.

Q40
Fencing

Fencing systems

NOTE: FOR ALL OTHER FENCE TYPES REFER TO SPECIFICATION BY HUNTERS

210 Fencing to play area

1. Manufacturer: Contractors' choice
   1.1 Product reference: Anti trap vertical bar railings to meet EN1176 – either bow top or flat top
2. Height from ground to top of panel: 1.2m
3. Finish: Polyester powder coated in RAL 8019 grey brown
4. Maximum centres of posts: To manufacturer's recommendations
5. Method of setting posts: Concreted in
6. Accessories: All fixings to be galvanised
7. Conformity: Submit manufacturer's and installer's certificates, to BS 1176

211 Gates to play area

1. Manufacturer: Contractors' choice
   1.1 Product reference: Self-closing gate to meet EN1176
2. Height from ground to top of panel: 1.2m
3. Finish: Polyester powder coated in RAL 1021 yellow
4. Method of setting posts: Concreted in
5. Accessories: 1no. gate for pedestrians, 1no gate to include double leaf to allow maintenance access, minimum total width of maintenance gate 2m. Maintenance leaf of gate shall be lockable
6. Conformity: Submit manufacturer's and installer's certificates, to BS 1722-7.

Execution

710 Installation generally

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

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.

Completion

910 Cleaning

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

Ω End of Section

Q50
Site/ street furniture/ equipment

Site and street furniture

350 Seat, bin and sign to playground

Refer to section Q52/156 for all street furniture references

Installation

510 Concrete foundations generally

1. Standard: To BS 8500-2.
2. Admixtures: Do not use.
3. Foundation holes: Neat vertical sides.
4. 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. Components: Accurately positioned and securely supported.
2. Concrete fill: Fully compacted as filling proceeds.
3. Concrete foundations exposed to view: Compacted until air bubbles cease to appear on the upper surface, then weathered to shed water and trowelled smooth.
4. Temporary component support: Maintain undisturbed for minimum 48 hours.
5. Inaccuracies or defects in prepared bases or supplied structures: Report immediately. Obtain instructions before proceeding.

Q52
Play and sports equipment

Products

156 Play equipment

1. Description: All fixed play equipment, robinia timber frames
   1.1. Manufacturer: Kompan
   1.2 Product references:
   Tower with slide – NRO1003
   Agility 4 trail – NRO863
   Forest bugs see-saw – NRO117
   Spinner bowl in green – ELE400024
   Baby seat swing – NRO902
2. Surfacing: Impact absorbing surface as section Q26/340
3. Method of fixing: In full accordance with manufacturer's recommendation
4. Accessories: I no. bin Broxap ref: BX45G 2562. 2 no. seats Kompan ref: NRO213and 1 no. playground sign fixed to railing to meet EN1176 requirements including contact details. Text and content of sign to be prepared as a proof and submitted for approval prior to ordering. Material and size of sign to be agreed.

351 Play boulders

1. Description: 3no, Caledonian play boulders to centre of play area
   1.1. Manufacturer: CED stone
   1.2 Product references:
   Min 600mm dia, naturally rounded play boulders, slip resistance with no cracks of fissures, Submit photographs for approval prior to ordering.
2. Surfacing: Impact absorbing surface as section Q26/340
3. Method of fixing: self-weighted, position so there is no movement and bed into sub-base in as required. If any movement is possible or gaps are present at base of boulder which could present a finger trap then the Contractor shall submit proposals for fixing with concrete haunch.
4. Components: Installed with correct gaps to meet EN 1176

Execution

710 Play equipment installation generally

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

720 Concrete foundations generally

1. Standard: To BS 8500-2.
2. Concrete: Designated, not less than GEN 1 or Standard prescribed, not less than ST2.
3. Admixtures: Do not use.
4. Foundation holes: Neat vertical sides.
5. 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. Hole: As manufacturer's standard
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.
6. Inaccuracies or defects in prepared bases or supplied structures: Report immediately. Obtain instructions before proceeding.

725 Preservative treated timber

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

750 Damage to galvanized surfaces

1. Minor damage in areas up to 40 mm^2 (including on fixings and fittings): Make good.
2. 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.
3. Thickness: Sufficient to provide a zinc coating at least equal to the original layer.

760 Site Painting

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

Completion

910 Inspection

1. Timing: 2 weeks prior to date when work is expected to be practically complete.
2. Period of notice (minimum): 3 working days.
3. Submit: Digital report to Contract administrator and agree a programme for any remedial works.

920 Cleaning

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

930 Testing

Standard: To BS EN 1176 and EN 1177 by a suitably qualified Independent Playground Inspector

940 Labels

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