Mayfield - Permanent Highways

Hard Landscape NBS

0131-MAY-SEW-Z01-ZZ-SP-L-008000

13-11-2024

Studio Egret West

3 Brewhouse Yard,
London
EC1V 4JQ

Mayfield Partnership

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Hard Landscape NBS

Stage 4

0131-MAY-SEW-Z01-ZZ-SP-L-008000
01

13-11-2024

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SEW Hard landscape drawings

Clauses

10 Mayfield Permanent Highways Drawings - SEW / BH / HL

1. **Transport Engineer's Highways Drawings**
2. 0042912-BHE-XX-XX-DR-C-2302
3. 0042912-BHE-XX-XX-DR-C-2303
4. **Landscape General Arrangement - Furniture & Soft Landscape**
5. 0131-MAY-SEW-Z01-ZZ-DR-L-005101
6. **Security Consultant's Drawings**
7. 25607-HLEA-XX-ZZ-DR-SC-754-001-HVM Setting Out
8. 25607-HLEA-XX-ZZ-DR-SC-754-002-Electronic Security Systems.

Ω End of Section

Q10
Kerbs/ edgings/ channels/ paving accessories

Clauses

2 To be read with preliminaries/general conditions.

Types of kerbs/edgings and channels

112 Precast Conservation Concrete Flush Kerb

1. Description: DK1 & K4 - Typical dropped and flush conservation kerb
2. Standard: To BS EN 1340.
3. Recycled content: 20% (minimum) to BS EN ISO 14021, manufactured with up to 48.3%
4. Designations: as manufactured
5. Manufacturer:: Marshal's plc.(www.marshalls.co.uk) +44 (0)330 0574472
6. Product reference:: 305 x 255 Conservation X Quadrant
7. Size (width x height x length): 305 x 255 x 915 mm
8. Special shapes: as required
9. Finish: Reconstituted granite
10. Colour: Silver Grey
11. Bending strength: Civil engineer to confirm
12. Weathering resistance: Class 3
13. Abrasion resistance: = 23mm (Wide Wheel AbrasionTest)
14. Slip/ skid resistance: Mean unpolished skid resistancevalue (USRV) : > 45.
15. Bedding: Cement mortar
16. Joints generally: Butt jointed
17. Sealant movement joints: At 5m (maximum) centres Civil engineer to confirm
18. Accessories: None

112A Precast Conservation Concrete Upstand Kerb

1. Description: K3 - Typical upstand conservation kerb
2. Standard: To BS EN 1340.
3. Recycled content: 20% (minimum) to BS EN ISO 14021, manufactured with up to 48.3%
4. Designations: as manufactured
5. Manufacturer:: Marshal's plc.(www.marshalls.co.uk) +44 (0)330 0574472
6. Product reference:: 305 x 255 Conservation X Quadrant
7. Size (width x height x length): 305 x 255 x 915 mm - 125mm upstand
8. Special shapes: as required
9. Finish: Reconstituted granite
10. Colour: Silver Grey
11. Bending strength: Civil engineer to confirm
12. Weathering resistance: Class 3
13. Abrasion resistance: = 23mm (Wide Wheel AbrasionTest)

14. Slip/ skid resistance: Mean unpolished skid resistancevalue (USRV) : > 45.
15. Bedding: Cement mortar
16. Joints generally: Butt jointed
17. Sealant movement joints: At 5m (maximum) centres Civil engineer to confirm
18. Accessories: None

115 Precast Conservation Concrete Carriageway Dropped & Flush Kerb

1. Description: DK & K2 - Typical dropped and flush carriageway conservation kerb
2. Standard: To BS EN 1340.
3. Recycled content: 20% (minimum) to BS EN ISO 14021, manufactured with up to 48.3%
4. Designations: as manufactured
5. Manufacturer:: Marshal's plc.(www.marshalls.co.uk) +44 (0)330 0574472
6. Product reference:: 145 x 145 Conservation X Kerb
7. Size (width x height x length): 145 x 145 x 915 mm
8. Special shapes: Bullnose kerb
9. Finish: Reconstituted granite
10. Colour: Silver Grey
11. Bending strength: Civil engineer to confirm
12. Weathering resistance: Class 3
13. Abrasion resistance: = 23mm (Wide Wheel AbrasionTest)
14. Slip/ skid resistance: Mean unpolished skid resistancevalue (USRV) : > 45.
15. Bedding: Cement mortar
16. Joints generally: Butt jointed
17. Sealant movement joints: At 5m (maximum) centres Civil engineer to confirm
18. Accessories: None

116 Precast Conservation Concrete Carriageway Half Battered Kerb

1. Description: K1 - Typical half battered conservation kerb
2. Standard: To BS EN 1340.
3. Recycled content: 20% (minimum) to BS EN ISO 14021, manufactured with up to 48.3%
4. Designations: as manufactured
5. Manufacturer:: Marshal's plc.(www.marshalls.co.uk) +44 (0)330 0574472
6. Product reference:: 145 x 255 Conservation X Kerb
7. Size (width x height x length): 145 x 255 x 915 mm - 125mm upstand
8. Special shapes: Half battered
9. Finish: Reconstituted granite
10. Colour: Silver Grey
11. Bending strength: Civil engineer to confirm
12. Weathering resistance: Class 3
13. Abrasion resistance: = 23mm (Wide Wheel AbrasionTest)

14. Slip/ skid resistance: Mean unpolished skid resistancevalue (USRV) : > 45.
15. Bedding: Cement mortar
16. Joints generally: Butt jointed
17. Sealant movement joints: At 5m (maximum) centres Civil engineer to confirm
18. Accessories: None

117 Precast Concrete Pin Kerb

1. Description: K5 - Concrete Pin Kerb
2. Standard: To BS EN 1340.
3. Manufacturer:: Marshal's plc.(www.marshalls.co.uk) +44 (0)330 0574472
4. Product reference:: Bullnosed concrete pin kerb
5. Size (width x height x length): 50 x 150 x 915 mm
6. Special shapes: Straight edge
7. Finish: Concrete
8. Colour: Natural
9. Bending strength: To civil engineer's details
10. Bedding: To civil engineer's details
11. Joints generally: Butt jointed

200A Rigid metal edge

1. Description: E - Rigid metal edge
2. Manufacturer: EverEdge Ltd.
   2.1. Product reference: Titan [TT1540]
   2.2. Size: 2.5mm x 150mm
   2.3. Unit Lengths: 2500mm
   2.4. Thickness: 4mm
3. Type/ Material: Straight and Curved Steel edging with interlocking joints to accommodate design layout. (Confirm units to be used with Landscape Architect before ordering).
   3.1. Finish: Hot Dipped Galvanised
4. Fixings: 400mm length16mm dia.rebar pins inserted through 5 No. lugs welded to rear at approximately 500mm centre.
   4.1. Rebar pin bedded into concrete haunch. Sufficient reinforcement to accommodate vehicle loading as required for temporary events set up in the Park.
   4.2. Consult manufacturer for confirmation of installation details.

250 Material samples

1. Samples representative of colour and appearance of designated materials: Submit before placing orders.
   1.1. Designated materials: Precast concrete kerbs, metal edging and step nosing

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. 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.

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

Q22
Asphalt roads/ pavings

Clauses

2 To be read with preliminaries/ general conditions.

Types of paving

140A Trafficable Asphalt Carriageway Paving

1. Description: P1 - Trafficable asphalt carriageway paving
2. Standard: To BS EN 13108-4
3. Surface: 40mm thick SMA (10mm stone) PMB to BS EN 13108 PD6691
   3.1. Colour: Black
4. Binder course: Existing asphalt concrete binder course AC 20 plus regulating surface course as required. If binder course breaks, make up with AC20 dense base 40/60 recipe mix to BS EN 13108 PD6691
5. Road Build Up: Existing road build up to be retained

140B Asphalt Footway Paving

1. Description: P3 - Asphalt Footway Paving
2. Standard: To BS EN 13108-4
3. Surface: 20mm Surface course. Ac6 dense surface 100/150
   3.1. Colour: Black
4. Binder course: 40mm binder course. AC20 dense surface 100/150
5. Concrete course: 150mm wet lean concrete type ST1 to clause 1030 in table 10/1 - refer to Engineer's information
6. Granular sub-base: 75mm Type 1 granular sub base
7. Base: Compacted subgrade

Preparatory work/ requirements

220 Bituminous materials generally

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

240 Acceptance of surfaces

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

250 Abutments

1. Vertical edges of manholes, gullies, kerbs and other abutments: Clean and paint with a thin uniform coating of hot applied 40/60 paving grade bitumen.
2. Finishing: Tamp surface around projections.
   2.1. Level: Flush or not more than 3 mm above projections.

Laying

310 Laying generally

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

320 Adverse weather

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

330 Levels

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

340 Flatness/ Surface regularity

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

Completion

390 Documentation

1. Standard: BS EN 13108-4
   1.1. Declaration of conformity: Submit.
2. Number of copies: 2
3. Submission: Two weeks prior to date when Contractor expects work to be complete

395 Slip resistance testing

1. Surfaces to be tested: Paving Type P1 & P3
   1.1. Surface condition: Dry and wet
2. Timing: Post final clean, prior to handover
3. Period of notice (minimum): 3 working days.
4. Test standard: To BS 7976-2
   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 7976

Ω End of Section

Q24
Interlocking brick/ block roads/ pavings

Types of paving

120 Conventional clay paver paving (occasional vehicle loading)

1. Description: P4 - Clay Footway Paving (Occasional vehicle loading) - To match Mayfield park
2. Subgrade improvement layer: To Civil Engineers Specification
   2.1. Compacted thickness: To Civil Engineers Specification
3. Geotextile: To Civil Engineers specification
4. Granular sub-base: 225mm thick Type 1 sub-base accordance with BS EN 13285 and MCHWTABLE 8/1 and clause 803
5. Base course: 125mm thick C32/40 unreinforced concrete base. Doweled contraction and expansion joints to be provided at 6m and 80m spacings.
6. Laying course
   6.1. Material: 40mm steintec tuffbed 2-pack bedding mortar to be laid in accordance with manufacturers specification
   6.2. Method of screeding, in accordance with BS 7533-3: To Civil Engineers specification
   6.3. Nominal thickness after compaction: To Civil Engineers specification
7. Pavers: To BS EN 1344:
   7.1. Manufacturer: Ketley Brick Company Ltd.
      7.1.1. Product reference: Staffordshire patterned pavers.
   7.2. Sizes: 200 x 100 x 65mm.
   7.3. Special pavers: Confirm with Landscape Architect
   7.4. Arrises: Square Edged
   7.5. Colour/ Finish: Staffordshire Blue / Diamond Chequered
   7.6. Requirements:
      7.6.1. Dimensional deviations: [Class R1].
      7.6.2. Freeze/ thaw resistance class: [FP100].
      7.6.3. Mean transverse breaking load: [Class T4].
      7.6.4. Abrasion resistance (mm): [Class A2].
      7.6.5. Slip/ Skid resistance: [PTV to BS 7976-2 of 45].
      7.6.6. Acid resistance: [No requirement].
8. Priming:
   8.1. Application: Clean underside of bricks before placing on bedding mortar.
9. Jointing
   9.1. Material: Fine Jointing Sand In accordance with BS 7533-3.
   9.2. Joint width: 3 mm.
10. Sealer/ Stabilizer: Not required
11. Setting out
   11.1. Bond: Bond: Running bond - to be laid at staggered quarter bond in order to maintain the pattern throughout the paved area.

120A Conventional clay paver paving (vehicle loading)

1. Description: P4A - Clay Footway Paving (vehicle loading) - To match Mayfield park
2. Subgrade improvement layer: To Civil Engineers Specification
   2.1. Compacted thickness: To Civil Engineers Specification
3. Geotextile: To Civil Engineers specification
4. Granular sub-base: 225mm thick Type 1 sub-base accordance with BS EN 13285 and MCHWTABLE 8/1 and clause 803
5. Base course: 150mm thick C32/40 unreinforced concrete base. Doweled contraction and expansion joints to be provided at 6m and 80m spacings.
6. Laying course
   6.1. Material: 40mm steintec tuffbed 2-pack bedding mortar to be laid in accordance with manufacturers specification
   6.2. Method of screeding, in accordance with BS 7533-3: To Civil Engineers specification
   6.3. Nominal thickness after compaction: To Civil Engineers specification
7. Pavers: To BS EN 1344:
   7.1. Manufacturer: Ketley Brick Company Ltd.
      7.1.1. Product reference: Staffordshire patterned pavers.
   7.2. Sizes: 200 x 100 x 65mm.
   7.3. Special pavers: Confirm with Landscape Architect
   7.4. Arrises: Square Edged
   7.5. Colour/ Finish: Staffordshire Blue / Diamond Chequered
   7.6. Requirements:
      7.6.1. Dimensional deviations: [Class R1].
      7.6.2. Freeze/ thaw resistance class: [FP100].
      7.6.3. Mean transverse breaking load: [Class T4].
      7.6.4. Abrasion resistance (mm): [Class A2].
      7.6.5. Slip/ Skid resistance: [PTV to BS 7976-2 of 45].
      7.6.6. Acid resistance: [No requirement].
8. Priming:
   8.1. Application: Clean underside of bricks before placing on bedding mortar.
9. Jointing
   9.1. Material: Fine Jointing Sand In accordance with BS 7533-3.
   9.2. Joint width: 3 mm.
10. Sealer/ Stabilizer: Not required
11. Setting out
   11.1. Bond: Bond: Running bond - to be laid at staggered quarter bond in order to maintain the pattern throughout the paved area.

132 Natural stone footway paving

1. Description: P5 - Natural stone footway paving (occasional vehicle loading)
2. Subgrade improvement layer: To civil engineer's specification
3. Granular sub-base: 225mm thick type 1 subbase. Based on assumed CBR value of 5%

4. Base: 125mm thick C32/40 unreinforced concrete base. Doweled contraction and expansion joints to be provided at 6m and 80m spacings.
5. Laying course
   5.1. Material: 40mm steintec tuffbed 2-pack bedding mortar to be laid in accordance with manufacturers specification
6. Setts: To BS EN 1342.
   6.1. Supplier: Marshalls - www.marshalls.co.uk
      6.1.1. Product reference: Westmoor Crest
   6.2. Sizes: 200x100x65mm
   6.3. Colour/ Finish: Bush hammered
7. Method of cutting sett sides: Diamond sawn.
8. Jointing
   8.1. Material: Stientec tufftop jointing mortar joints to BS 7533. Min strength 40N/mm2
   8.2. Joint width: 2-4 mm.
9. Setting out:
   9.1. Bond: Stretcher bond

132A Natural stone footway paving (vehicle loading)

1. Description: P5A - Natural stone footway paving (vehicle loading)
2. Subgrade improvement layer: To civil engineer's specification
3. Granular sub-base: 225mm thick type 1 subbase. Based on assumed CBR value of 5%
4. Base: 150mm thick C32/40 unreinforced concrete base. Doweled contraction and expansion joints to be provided at 6m and 80m spacings.
5. Laying course
   5.1. Material: 40mm steintec tuffbed 2-pack bedding mortar to be laid in accordance with manufacturers specification
6. Setts: To BS EN 1342.
   6.1. Supplier: Marshalls - www.marshalls.co.uk
      6.1.1. Product reference: Westmoor Crest
   6.2. Sizes: 200x100x80mm
   6.3. Colour/ Finish: Bush hammered
7. Method of cutting sett sides: Diamond sawn.
8. Jointing
   8.1. Material: Stientec tufftop jointing mortar joints to BS 7533. Min strength 40N/mm2
   8.2. Joint width: 2-4 mm.
9. Setting out:
   9.1. Bond: Stretcher bond

Execution

200 Execution generally – natural stone and clay paver paving

1. Standard: In accordance with BS 7533-3.

211 Colour banding

1. General: Unless premixed by manufacturer, select blocks/ pavers/ setts from at least 3 separate packs in rotation, to avoid colour banding.

230 Control samples

1. General: Carry out sample area of finished work:
   1.1. Location: To be agreed with Client
   1.2. Size (minimum): 2mx2m
   1.3. Features to be included: Edging
2. Give notice: When ready for inspection.
3. Timing: Obtain approval of appearance before proceeding.

230A Control samples Type A

1. General: Carry out sample area of finished work:
   1.1. Location: To be agreed with Client
   1.2. Size (minimum): 2mx2m
   1.3. Features to be included: Edging
2. Give notice: When ready for inspection.
3. Timing: Obtain approval of appearance before proceeding.
4. Sample Area:: Retain Sample Area during the entire works.

240 Adverse weather

1. 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: Lap by 300mm
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.

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:
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.

620 Slip resistance testing

1. Surfaces to be tested: P4, P4a, P5 & P5a
   1.1. Surface condition: Dry and wet. PTV to BS7976-2 of 45 (water) wet
2. Timing: Two weeks prior to handover, but after initial cleaning.
3. Period of notice (minimum): 3 working days.
4. Test standard: To BS 7976-2.
   4.1. Testing authority: An approved 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 7976-2.

Ω End of Section

Q25
Slab/brick/sett/cobble pavings

Clauses

2 To be read with preliminaries/ general conditions.

General - Not Used

System performance - Not Used

Products

322 Corduroy Tactile Paving Flag

1. Description: Corduroy tactile paving flags
2. Location: As shown
3. Standard: To DD CEN/TS 15209:2008
4. Subgrade improvement layer: to Civil Engineers Specification
5. Compacted thickness: to Civil Engineers Specification
6. Material: Concrete Paver
   6.1. Manufacturer: Marshalls PLC.
   6.2. Product reference: Tactile Hazard Warning Textured
   6.3. Nominal sizes: 400 x 400 x 50mm
   6.4. Colour: Buff
   6.5. Type of surface: Tactile corduroy special paver
7. Laying of Pavers:
   7.1. Bond: Stack
   7.2. Laid to falls
8. Jointing
   8.1. Material: Fine dry bedding sand In accordance with BS 7533-3. :
   8.2. Joint: 3mm wide

322A BlisterTactile Paving Flag

1. Description: Blister tactile paving flags
2. Location: As shown
3. Standard: To DD CEN/TS 15209:2008
4. Subgrade improvement layer: to Civil Engineers Specification
5. Compacted thickness: to Civil Engineers Specification
6. Material: Concrete Paver
   6.1. Manufacturer: Marshalls PLC.
   6.2. Product reference: Tactile Hazard Warning Textured
   6.3. Nominal sizes: 400 x 400 x 50mm
   6.4. Colour: Buff
   6.5. Type of surface: Tactile blister special paver
7. Laying of Pavers:

7.1. Bond: Stack
7.2. Laid to falls
8. Jointing
8.1. Material: Fine dry bedding sand In accordance with BS 7533-3. :
8.2. Joint: 3mm wide

365A Geotextile sheet

1. Description: -below laying course
2. Manufacturer: Terram
2.1. Product reference: T1000
2.2. Recycled content: None permitted
3. Recycled content:

Execution

615 Control samples

1. Sample areas: Complete as part of the finished work.
1.1. Types of paving: Brick and natural stone paving (P4, P4a, P5 & P5a)
1.2. Location: to be agreed with client
1.3. Size (minimum): 2x2m
1.4. Included features: Edging
2. Approval of appearance and surface: Obtain before proceeding.

620 Adverse weather

1. General
1.1. Temperature: Do not lay or joint paving if the temperature is below 3°C on a falling thermometer or below 1°C on a rising thermometer.
1.2. Frozen materials: Do not use. Do not lay bedding on frozen or frost covered bases.
2. Paving with mortar joints and/ or bedding
2.1. Protect from frost damage, rapid drying out and saturation until mortar has hardened.
3. Paving laid and jointed in sand/ fine aggregate
3.1. Stockpiled laying course sand/ fine aggregate: Protect from saturation.
3.2. Exposed areas of unbound laying course and uncompacted areas of unbound paving: Protect from heavy rainfall.
3.3. Saturated unbound laying course: Remove and replace, or allow to dry before proceeding.
3.4. Laying dry sand/ fine aggregate jointed paving in damp conditions: Brush in as much jointing sand as possible. Minimize site traffic over paving. As soon as paving is dry, top up joints and complete compaction.

625 Laying pavings – general

1. Appearance: Smooth and even with regular joints and accurate to line, level and profile.
2. Falls: To prevent ponding.

3. Bedding of paving units: Firm so that rocking or subsidence does not occur or develop.
   3.1. Bedding/ Laying course: Consistently and accurately graded, spread and compacted to produce uniform thickness and support for paving units.
4. Slopes: Lay paving units upwards from the bottom of slopes.
5. Paving units: Free of mortar and sand stains.
6. Cutting: Cut units cleanly and accurately, without spalling, to give neat junctions with edgings and adjoining finishes.

630 Levels of paving

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

637 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

1. General: Unless premixed by manufacturer, select from at least 3 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. Mortar bedded pavings: Keep free from traffic after laying:
   4.1. Pedestrian traffic (minimum): 2 days
   4.2. Vehicular traffic (minimum): 7 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.

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

1. Trenches and excavation of soft or loose spots in subgrade: Fill and thoroughly compact.
2. Granular surfaces: Lay and compact so as to be sound, clean, smooth and close-textured enough to prevent migration of bedding/ laying course materials into the sub-base during compaction and use, free from movement under compaction plant and free from compaction ridges, cracks and loose material.
3. Prepared existing and new bound bases (roadbases): Sound, clean, free from rutting or major cracking. Remove sharp stones, projections and debris.
4. Sub-base/ Roadbase level tolerances: To BS 7533-7, Annex A.
5. Levels and falls: Accurate and within the specified tolerances.
6. Drainage outlets: Within 0-10 mm of the required finished level.
7. Features in unbound paving (including mortar bedded restraints and drainage ironwork): Complete to required levels; adequately bed and haunch in mortar.
8. Sub-bases containing cement/ hydraulic binder: Cure for minimum times specified in BS 7533-4.

Completion

930 Slip resistance testing

1. Surfaces to be tested: P4, P4a, P5 & P5a
   1.1. Surface condition: Dry and wet
2. Timing: Two weeks prior to handover, but after initial cleaning
3. Period of notice (minimum): 3 working days.
4. Test standard: To BS 7976-2
   4.1. Testing authority: An approved 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 7976

Ω End of Section

Q50
Site/street furniture/equipment

Clauses

2 To be read with preliminaries/ general conditions.

Gates, barriers and parking controls

190A HVM Sliding Bollards

1. Description: F03a - HVM Sliding Bollards
2. Manufacturer: HEALD
   info@heald.uk.com
   tel:+4401964535858

   2.1. Product reference: HEALD Matador 4
3. Security Rating: PAS 68: PAS 68: 2013, or IWA 14-1:2013
4. Sleeve Material: Stainless steel

   4.1. Finish as delivered: Stainless steel
5. Height above ground: 1100mm
6. Height below ground: To manufacturers recommendation (150mm)
7. Sectional size: 220mm

   7.1. Top: Flat

   7.2. Additional Requirements: 1No. 50mm recessed contrasting coloured strips (Colour to be black)
8. Method of fixing: As Manufacturers Recommendations to achieve Security Rating.
9. Operation: Electro-Mechanical - Intercoms on the access and egress areas from site are required to allow visitors and those not in possession of a valid credential to communicate with the Mayfield SCR to request entry.
10. Other: Please refer to Security Consultant's information

190B Retractable Bollards

1. Description: F03b - Retractable Bollards
2. Manufacturer: HEALD
   info@heald.uk.com
   tel:+4401964535858

   2.1. Product reference: HEALD Evo Bollard
3. Security Rating: : IWA14-1:2013 Bollard V/7200[N2A]/64/90:1.3
4. Sleeve Material: Stainless steel

   4.1. Finish as delivered: Stainless steel
5. Height above ground: 1000mm
6. Height below ground: To manufacturers specification
7. Sectional size: 306mm

   7.1. Top: Flat

   7.2. Additional Requirements: 1No. 50mm recessed contrasting coloured strips (Colour to be black)

8. Method of fixing: As Manufacturers Recommendations to achieve Security Rating.
9. Operation: Electro-Mechanical - Intercoms on the access and egress areas from site are required to allow visitors and those not in possession of a valid credential to communicate with the Mayfield SCR to request entry.
10. Other: Please refer to Security Consultant's information

190C HVM Static Bollards

1. Description: F03c - HVM Static Bollards
2. Manufacturer: HEALD
   info@heald.uk.com
   tel:+4401964535858

   2.1. Product reference: HEALD Fixed Matador
3. Security Rating: PAS 68: PAS 68: 2013, or IWA 14-1:2013
4. Sleeve Material: Stainless steel
   4.1. Finish as delivered: Stainless steel
5. Height above ground: 1100mm
6. Height below ground: To manufacturers specification
7. Sectional size: 220mm
   7.1. Top: Flat
   7.2. Additional Requirements: 1No. 50mm recessed contrasting coloured strips (Colour to be black)
8. Method of fixing: As Manufacturers Recommendations to achieve Security Rating.
9. Operation: Static
10. Other: Please refer to Security Consultant's information

Site and street furniture

205A Large Planter

1. Description: F02a - Large Planter
2. Manufacturer: Urbis
   2.1. Website: www.urbisdesign.co.uk
   2.2. Product reference: Grand Globe
3. Material: Glass Reinforced Concrete
   3.1. Finish: Rusty
4. Accessories: Tree Anchoring & outlet at base of planter
5. Size: 166cm diameter x 110cm height
   1300 Ltr Volume
   85cm base diameter
   236kg
6. Method of fixing: As Manufacturers Recommendations

205B Medium Planter

1. Description: F02b - Medium Planter
2. Manufacturer: Urbis
   2.1. Website: www.urbisdesign.co.uk

2.2. Product reference: Large Globe
3. Material: Glass Reinforced Concrete
   3.1. Finish: Rusty
4. Accessories: Tree Anchoring & outlet at base of planter
5. Size: 152cm diameter x 83cm height
   1000 Ltr Volume
   84cm base diameter
   145kg
6. Method of fixing: As Manufacturers Recommendations

205C Small Planter

1. Description: F02c - Small Planter
2. Manufacturer: Urbis
   2.1. Website: www.urbisdesign.co.uk
   2.2. Product reference: Globe
3. Material: Glass Reinforced Concrete
   3.1. Finish: Rusty
4. Accessories: Tree Anchoring & outlet at base of planter
5. Size: 115cm diameter x 79cm height
   500 Ltr Volume
   53cm base diameter
   98kg
6. Method of fixing: As Manufacturers Recommendations

210A Cycle stands

1. Description: F01 - Proposed Cycle stand. To match Mayfield Park.
2. Manufacturer: STREETLIFE BV.
   2.1. Product reference: CorTen Bicycle Racks
3. Rack Material: Untreated weathered steel
   3.1. Finish: As manufactured
   3.2. Colour: 'Corten' effect.
4. Accessories:
   4.1. Plastic Anti-damage strip
5. Method of fixing: As Manufacturers Recommendations

221A Benches

1. Description: F04 - Solid bench
2. Manufacturer: STREETLIFE BV.
   2.1. Product reference: Solid 8 bench
3. Material Seat: FSC Hardwood II - Virgin
   3.1. Finish: As manufactured
4. Material Metal Fixing:
   4.1. Finish: Galvanised
5. Material Base: Corten
6. [As manufactured]

7. Size: Bespoke depth to achieve 500mm seating depth with backrest. Length as per plan (2400mm)
8. Accessories/ Special requirements:
   8.1. Double Quatro 1800mm Backrest to match Solid 12 benches in Mayfield Park
   8.2. Armrest : Finish To match Mayfield park.
9. Method of fixing: Foundation and fixings to manufacturers detail.

Installation

510 Concrete foundations generally

1. Standard: To BS 8500-2.
2. Concrete: 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.

515 Setting components in concrete

1. Holes: 250 x 250 x minimum 300 mm deep
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.

Ω End of Section