Kishoge Part 10 Application

Site 5 Proposed Outline Specification

9094-LDA-XX-XX-SP-L-9001

VERSION	DATE	NOTES
/	22.11.24	Issued for planning - draft for team comment
P01	25.02.25	Issued for Part 10 Application

This document has been prepared and checked in accordance with ISO 9001:2015

LDĀDESIGN

Contents

References

To be read in conjunction with the following drawing series and documents:

9094-LDA-00-XX-DR-LA-1000 Series - General Arrangements
9094-LDA-00-XX-DR-LA-2000 Series - Hardworks
9094-LDA-00-XX-DR-LA-3000 Series - Site Furniture & Play
9094-LDA-00-XX-DR-LA-5000 Series - Softworks
9094-LDA-00-XX-DR-LA-7000 Series - Details
9094-LDA-00-XX-DR-LA-8000 Series - Sections
9094-LDA-00-XX-DR-LA-9000 Series - Reports

Caveats

Information provided at this stage to satisfy planning requirements.

Design Coordination

Proposals at this Stage 2A will require further technical development at later stages and coordination with the rest of the design team.

Further Engagement

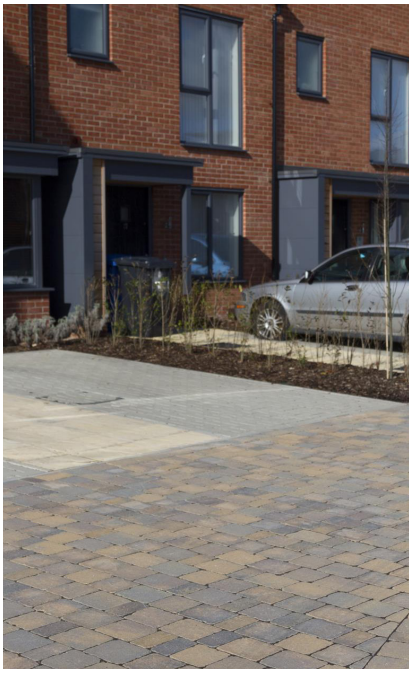
Further engagement will be undertaken with key internal and external stakeholders throughout the future design stages to inform design evolution at a technical level.

1. Hard Landscape

Indicates materials that are either recycled, reclaimed and/or contribute to recycling on site.

Indicates materials that promote active water management on site through water infiltration/ sustainable drainage.

LDĀDESIGN



1.1 Proposed paving

1.1.1 Footways (P1)

* Material: Hot rolled asphalt surface with limestone chips
* Laying: To Engineer's detail and specification

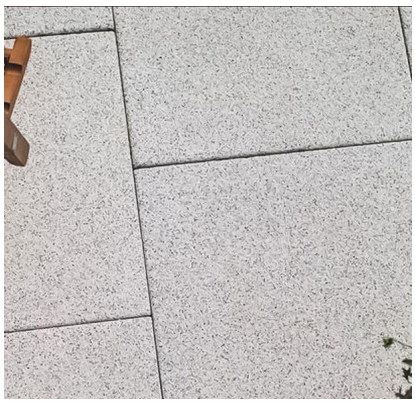
1.1.2 Carriageways (P2)

* Material: Hot rolled asphalt surface
* Laying: To Engineer's detail and specification

1.1.3 Homezone & parking bays (P3)

* Material: Permeable concrete paving blocks (Hydropave Tegula 240)
* Supplier: Tobermore or equal and approved
  Telephone: 0844 800 5736
  Email: l.mcwilliams@tobermore.co.uk
* Surface Finish: Aged
* Colour: Bracken or as approved by SDCC
* Laying : Stretcher or herringbone
* Indicative dimensions: 240mm (W) x 120mm (L) x 80mm (D)*
* *Depth to be confirmed by engineers
* Construction make-up: To Engineers' details and specification

1.1.4 Front paths to gardens & patios (P4)



* Concrete flags with natural stone aggregates
* Finish: Ground
* Colour: TBC
* Laying pattern: Stretcher bond
* Dimensions: 600 x 400 x 40mm
* Construction make-up: Refer to engineers specification.

1.1.5 Public open space paths (P5)

* Material: Hot rolled asphalt with limestone chips
* Loading requirements: generally for pedestrians only but to be able to take occassional small maintenance vehicles
* Laying: To Engineer's detail and specification
* Construction make-up: To Engineers' details and specification
* Edging: pin kerb (see K1)

1.1.6 Cycle path (P6)

* Material: Hot rolled asphalt
* Laying: To Engineer's detail and specification
* Construction make-up: To Engineers' details and specification
* Edging: pin kerb (see K1)
* Tactile paving: as P8

1.1.7 Precast concrete blister tactile paving (P7)

* Material: Concrete
* Colour: tbc
* Dimensions: 400mm (W) x 400mm (L) x 50mm (D)*
  *Depth to be confirmed by engineers
* Construction make-up: To Engineers' details and specification

1.1.8 Precast concrete cycle tactile paving (P8)

* Material: Concrete
* Colour: tbc
* Dimensions: 400mm (W) x 400mm (L) x 50mm (D)*
  *Depth to be confirmed by engineers
* Construction make-up: To Engineers' details and specification

1.1.21 Safety play surface - engineered woodchip play (P9)

- Engineered woodchip (EWF) has excellent impact absorption and is a more sustainable material than wetpour, so will form the majority of the playsurface finishes.
- Woodchip areas to be enclosed by mounding (rather than with boards or other edge methods, where possible, to avoid trip hazards).
- Depth: 75-300mm depending on location and equipment

1.1.19 Safety surface to traverse wall - grit / gravel (P10)

- Safety surface: Pea gravel laid to a depth of 400 mm over a 3 m fall zone to give a critical fall height to 2.5 m. This will then be graded down to 100mm outside of the 3 m fall zone.
- Pea gravel laid over a Geotextile membrane
- Design criteria: System designed in accordance with European Standard for Artifical
- Climbing Structures EN12572
- Compliance: The design and constrruction of the climbing wall must be compliant with the European Playground Standards
- Manufacturer to be a member of Climbing Wall Manufacturers Association

1.2 Kerbs and edges

1.2.1 Pin kerb

- 50mm wide precast concrete flat top pin kerb laid flush to define differing surface treatments and to edge of tarmac surfaces

1.2.2 Timber edge

* 25mm wide timber edge laid flush to define bark & safety surface areas

2. Street Furniture & Play

* *Play equipment and safety surfacing will require to be designed in accordance with BS EN 1176 and testing and inspection documents prepared by a suitably qualified and independent inspector in accordance with BS EN 1176-1.*
* *Inspection documents and recommendations for maintenance to be handed to SDCC at least two weeks prior to Practical Completion.*

Indicates materials that are either recycled, reclaimed and/or contribute to recycling on site.

Indicates materials that promote active water management on site through water infiltration/ sustainable drainage.

LDĀDESIGN









LDĀDESIGN

2.1 Proposed street furniture

2.1.1 Bench

* Seat with back rest and arm rests
* Dimensions: approx 1860x629x819mm
* Material: powder coated mild steel and treated hardwood timber laths
* Construction: ground fixing using bolts

2.1.2 Litter bin

* Steel Litter Bin
* Dimensions: approx 1000x535x535mm (120 litre)
* Material: Zintec steel
* Liner: to include galvanised liner
* Colour: black (or other RAL as agreed)
* Access to liner: front opening door to provide optimum ease of access to empty the bin
* Construction: ground fixing using bolts

2.1.3 Cycle stands

* Visitor cycle stand to public areas
* Finish: Stainless Steel
* Dimensions: 750 mm (width)x 800 mm (high)
* Fixing: Root Fixed

2.1.4 Bollards

* Product: Flat top steel bollard
* Material: galvanised steel
* Dimensions: 120mm overall height. 114mm diameter
* Finish: fine statin finish
* Accessories: reflective band
* Fixing: root fixed into concrete

2.2 Proposed play features

2.2.1 Slide

* Double width slide to landscape slope
* Anchoring: Root fixed to concrete foundation

2.2.2 Totter beam

* Totter Beam to play areas
* Finish/Colour: Core free timber with hot dip galvaised steel springs
* Dimensions: approx 3000x300x450mm
* Anchoring: Ground anchored

2.2.3 Climbing frame

* Bespoke Climbing frame to play area
* Finish/Colour: timber
* Dimensions: approx 14000mm length x 4000mm
* Anchoring: Set in ground with concrete foundation
* Safety surface: Pea gravel laid to a depth of 400 mm over a 3 m fall zone to give a critical fall height to 2.5 m. This will then be graded down to 100mm outside of the 3m fall zone. Pea gravel (as P11) laid over a geotextile membrane

2.2.4 Wheelchair carousel

* Product: Inclusive Roundabout
* Dimensions: Approx LxWxH: 2050 x 2050x 800mm
* Fall Height (mm): as suppliers guidelines
* Safety Area Width (mm): as suppliers guidelines
* Anchoring: Ground anchored
* Safety surface: as P10

2.2.5 Swings

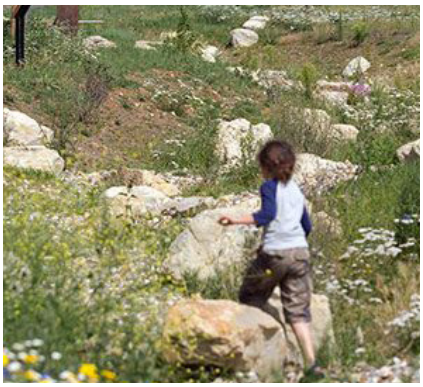
* Product: 2no. multiple swing system to provide different swing types)
* Finish/Colour: timber
* Dimensions: approx 2550(h)x4050(w)x1900 (d)mm
* Fall Height (mm): as suppliers guidelines
* Safety Area Width (mm): as suppliers guidelines
* Anchoring: Set in ground with concrete foundation
* Safety surface: as P10

2.2.6 Traverse wall

* Performance specification to be coordianted with climbing wall specialist & contractor/manufacturer
* Manufacturer: Contractor's choice. -
* Product reference: Submit proposals.
* Age range: 10+.
* Wall type: Predominantly for traversing, however the design will allow climbers to reach the top and climb off the structure. The top of the wall rises 800mm above the finished ground level. The top of the wall will undulate to give a more natural look. The upstand will act as a natural barrier when approaching from the top of the bank.
* Material: 130mm sprayed concrete to give a nominal carved depth of 50-100mm.
* Colour: Natural concrete with base coat and hi-lights
* Size: -
  Height: Max. 3000 cm central section, sides tappering to 400 mm at ends.
  Width: 200 cm. Length: 66 m. Surface Area: 100 m2
* Finish: Sprayed concrete climbing surface, profiled and hand carved to simulate a natural rock outcrop and provide detailed climbing holds and features, built around a Fire retardant EPS Polystyrene core.
* Fixing: The traverse wall is supported by a reinforced concrete retaining wall approx. 3000 cm high x 200 mm wide inc. 200 cm wide x 300 mm deep base.
* Accessories: The sprayed concrete traversing wall is built around a Fire retardant EPS Polystyrene core
* Safety surface: Pea gravel laid to a depth of 400 mm over a 3 m fall zone to give a critical fall height to 2.5 m. This will then be graded down to 100mm outside of the 3m fall zone. Pea gravel (as P11) laid over a Geotextile membrane
* Design criteria & compliance: System designed in accordance with European Standard for Artifical Climbing Structures EN12572. The design and construction of the climbing wall must be compliant with the European Playground Standards. Manufacturer to be a member of Climbing Wall Manufacturers Association.

2.2.7 Play boulders

* Supplier: Contractors Choice
* Dimensions: Mixed sizes - a selection of boulders of variying sizes and heights to create as series of stepping stones and routes.
* Boulders to be rounded glacial type - ranging in approximate length from 500mm to 1200mm and in width from 350mm to 900mm



2.2.8 Play logs

* Min 300mm diameter varying lengths logs.
* Suitable logs to be salvaged from trees felled as part of the proposed development

2.2.9 Stepping logs

* Timber Log Trunk Stepping Stones
* Heights: Varying heights above ground between 100 - 500mm x varying diameter. Min diameter 300mm
* Specials: Planed top and splinter free
* Colours: Natural
* Fixing: Core on underside and held in place by steel rod driven into ground.

2.2.10 Timber sleeper steps

* Timber sleeper steps
* Sizes: Various
* Colours: Natural
* Specials: Planed top and splinter free
* Fixing: Core on underside and held in place by steel rod driven into ground.

2.3 Ecology

2.3.1 Bird and bat boxes

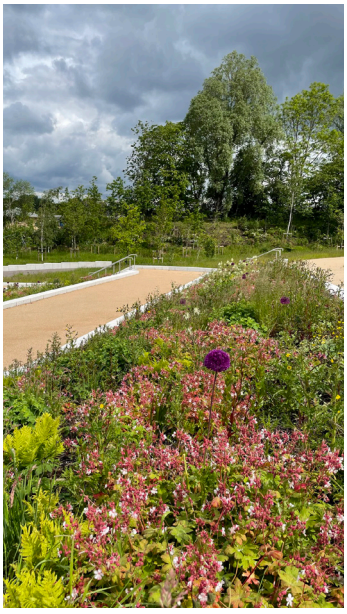
* Bird boxes to woodland areas (allow for 5no of varying sizes)
* Manufacturer: TBC
* Material: Recycled Timber
* Dimensions: TBC
* Locations: TBC

2.3.2 Insect hotels / log piles

* Insect hotel or habitat piles to trees and woodland edges
* Manufacturer: TBC
* Material: Recycled Timber
* Dimensions: TBC
* Locations: To be agreed

3. Soft landscape








3.1 Soft Landscape

3.1.1 Planting principles

The landscape proposals support the development masterplan by creating a high-quality setting to the residential neighbourhood with considered streetscape design and locally accessible open spaces with high levels of legibility and ease of movement within and through the development and also connections to neighbouring developments. The high level of visibility through the site and from passive surveillance ensures good orientation and provides a safe environment for all users.

The planting proposals have also been carefully considered to denote and distinguish public and private areas, ensure privacy zones, deter loitering, clearly denote the extent of the development, minimise anti-social behaviour, reduce visual and noise impacts from Thomas Omer Way and the R136. The create of a variety and attractive play areas, including opportunities for natural and imaginative play and ensure that the developments.

In accordance with the SDZ and advice from SDCC Parks, the planting will be selected to be proportionate to the width of the street with the street trees augmented by planting and associated with SuDs.

The soft landscape elements will be a mix of native species and ornamental species to ensure appropriate character for the area and provide rich and diverse habitats and biodiversity. These species will be used in the public realm and play areas and around the SuDS features. .2e streetscape and provide year-round coolour and interest.

All planting will be selected to minimise the maintenance requirements.

3.1.2 Best principles

Follow the recommendations set out in BS 4428:1989 Code of practice for General Landscape Operations (excluding hard surfaces) unless otherwise stated in this specification. Ensure top soiled areas are kept free from weeds by spraying with an approved translocated non-residual herbicide.

3.2 Planting types

3.2.1 Trees

Tree species & sizes : refer to plant schedule.

* Trees generally to have 2m crown spread. 2m clear stem. Wire rootballed.
* Other requirements: single straight leader. Well-balanced crown. No damage to bark. No wounds.
* Supplier: local provenance where applicable.
* All specimen trees in soft landscape to be planted in tree pits with the following specification:
  Tree pit base to be thoroughly broken to ensure free draining soil structure.
  150mm clean stone aggregate drainage layer to base wrapped in geotextile with 100mm dia. perforated drainage pipe connected to positive drainage connection.
  Tree pit to be filled with topsoil to a max depth of 450mm enriched with sanitized and stabilized composted material certified to PAS 100 and mycorrhizal inoculant, over 200mm deep approved subsoil.
  Compost to be applied at rate of 25kg/m^3.
  Planting compost shall be a peat free tree planting compost.
  Seaweed based granular soil improver is to be incorporated in the backfill material at the rate of 1.5kg/m3 and slow release fertiliser at the rate of 40g/cm girth worked into the last 300mm during backfilling.
* On completion of backfilling and levelling - all pits to be watered to field capacity.
* Irrigation / Aeration system to be included.
* Secured by two timber stakes, cross bar and adjustable tie.

* Note: Where trees are in close proximity to underground services/hard surfaces tree pit edges are to be lined with root barrier director.

* All trees within/adjacent to hard surface areas are to be in SuDS tree pits. Detail to be developed with the Engineer to suit drainage and flow requirements.

* Care should be taken to avoid damage to trees during planting operations. Any damage to bark is to be treated with fungicide, any damaged branches to be carefully pruned. If damage is excessive the Landscape Architect may instruct replacement of the tree.

3.2.2 Private amenity lawn (S1)

* Apply a suitable non-residual herbicide for suppressing perennial weeds. Clean seed bed as
* turf supplier's recommendations.
* Soil ameliorant / conditioner / fertiliser: Fully incorporate into topsoil to depth of 200mm.
* Reduce soil to a fine tilth of 150mm suitable for blade grading.
* Stone pick to remove all detritus greater than 50mm diameter.
* Turves laid in stretcher bond pattern.
* A dressing of finely sifted topsoil complying with BS 3882 should be applied to the laid turf and
* brushed well into the joints
* Type: e.g. hard-wearing, amenity lawn turf (see also plant schedule)

3.2.3 Informal public realm amenity lawn (S2)

* Apply a suitable non-residual herbicide for suppressing perennial weeds. Clean seed bed as
* seed supplier's recommendations.
* Soil ameliorant / conditioner / fertiliser: Fully incorporate into topsoil to depth of 200mm.
* Reduce soil to a fine tilth of 150mm suitable for blade grading.
* Stone pick to remove all detritus greater than 50mm diameter.
* Type: Eco-species grass mix (see also plant schedule)
* Application rate: 20g/m^2.

3.2.4 Road verge planting (S3)

* Apply a suitable non-residual herbicide for suppressing perennial weeds. Clean seed bed as
* seed supplier's recommendations.
* Soil ameliorant / conditioner / fertiliser: Fully incorporate into topsoil to depth of 200mm.
* Reduce soil to a fine tilth of 150mm suitable for blade grading.
* Stone pick to remove all detritus greater than 50mm diameter.
* Type: Wildflower & grass seed mix (see also plant schedule)
* Application rate: 20g/m^2.

3.2.5 Wetland/SUDS planting mix (S4)

* Apply a suitable non-residual herbicide for suppressing perennial weeds. Clean seed bed as seed supplier's recommendations.
* Soil ameliorant / conditioner / fertiliser: Fully incorporate into topsoil to depth of 200mm.
* Reduce soil to a fine tilth of 150mm suitable for blade grading.
* Stone pick to remove all detritus greater than 50mm diameter.
* Type: The wetland area will be seeded with a species rich seed mix suitable for wetlands, SuDS features and damp low lying sites.(see also plant schedule)
* Application rate: An 80:20 mix of grasses and native wildflowers, sown at a rate of 10gms per m2. It will provide habitats, all year round, for insects, invertebrates, birds and mammals with flowers appearing between April and September.

3.2.6 Shrub planting, including perennials for rain gardens (S5)

Shrub sizes: Refer to plant schedule

* Plant bed base to be thoroughly broken to ensure free draining soil structure.
* Backfill with mixed topsoil. Backfill material to be well-mixed 70% topsoil to BS 3882 'premium grade', 20% compost and 10% sand. Incorporate slow release fertiliser into backfill material.
* Planting compost shall be a peat free tree planting compost.
* Seaweed based granular soil improver is to be incorporated in the backfill material at the rate of 1.5kg/m3 and slow release fertiliser at the rate of 40g/cm girth worked into the last 300mm during backfilling.
* On completion of backfilling and levelling - all beds to be watered to field capacity.

* Care should be taken to avoid damage to shrubs during planting operations. Any damaged branches or foliage to be carefully pruned. If damage is excessive the Landscape Architect may instruct replacement of the shrubs in question.

3.2.7 Roof terrace planting (S6)

- Loam-based compost mix, John Innes No.3 (PU1, PU2, PU4, PU5, PU6, PU7)
- Loam-based ericaceous compost mix, John Innes (PU3)

Drainage membrane to rooftop planters
MultiTrack 1000 / 100GSM White Non Woven Geotextile Membrane
Supplier: Geotextile Membranes or similar

3.2.8 Hedge Planting (H)

* Hedges to be planted in a continuous trench dug 600mm wide x 700mm deep.
* Trench base to be thoroughly broken to a depth of 150mm to ensure a free draining soil structure.
* Hedges plants to be planted in double staggered rows.
* Species and for further specification information - see plant schedule.

3.2.9 Climbers (C)

* Climbers to be planted in a continuous trench dug 400mm wide x 300mm deep.
* Trench base to be thoroughly broken to a depth of 150mm to ensure a free draining soil structure.
* Climbers to be carefully attached to supports.
* Species and for further specification information - see plant schedule.

3.3 Topsoil, top dressing / mulch

All imported topsoil shall be good quality, sand loam to medium fibrous loam, clean and free from weed, seeds and coarse grass roots, rubbish, subsoil, large stones and extraneous matter and shall be in accordance with BS 3882 ‘premium grade’

Type:
Medium loamy soil- sand max 75% / min 20% to shrub and herbaceous planting mixes

Stone Content:
2mm-50mm 35% max by dry weight
2mm-5mm must not exceed 20% by dry wt.
Max Stone Size: 50mm.
Electrical Conductivity: 100-1500 microns/cm
on a 1:2.5 (w/v) soil-water extract
Ext. Nitrogen: >0.2%
Ext. Phosphorus: >45ppm
Ext. Potassium: >240ppm
Ext. Magnesium: >80ppm

3.3.1 Topsoil specification

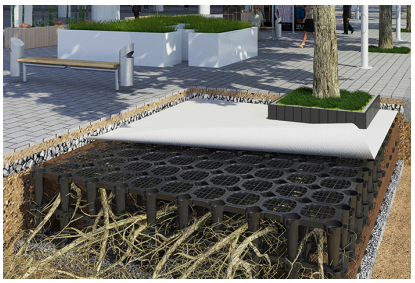
Organic matter: Not less than 5%
General condition:
Free of weed seeds and all pernicious weeds and roots. It shall also be free from subsoil, building material, foreign matter and chemical contamination.
Phytotoxic elements:
Total copper 130mg/kg max
Total nickel 70mg/kg max
Total zinc 300mg/kg max
Water soluble boron 3mg/kg max
Zootoxic elements:
Arsenic 40mg/kg max
Cadmium 15mg/kg max
Chromium 1,000mg/kg max
Lead 2,000mg/kg max
Mercury 20mg/kg max

3.3.2 Proposed top dressing

All planted areas to be given a top dress of composted bark, screened 0-8mm.

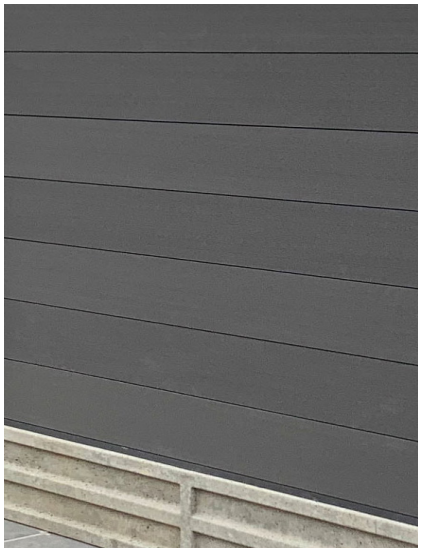
3.4 Landscape products

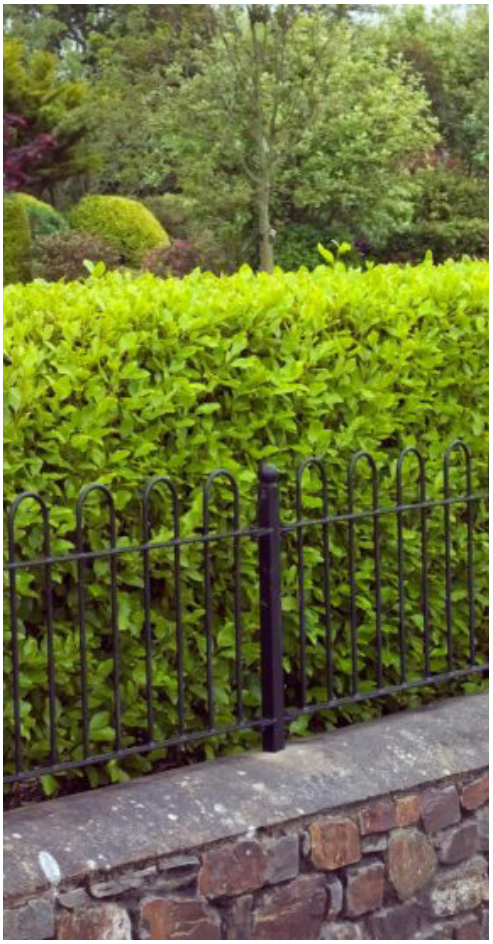
3.4.1 Tree cell system

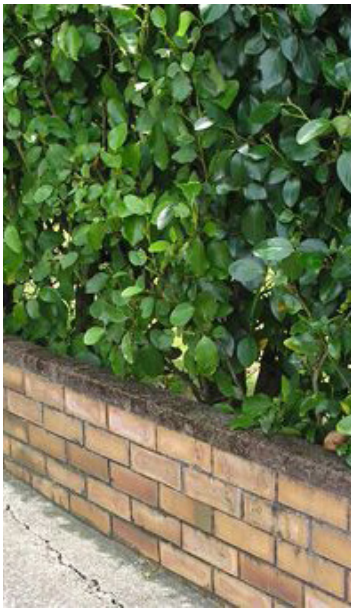


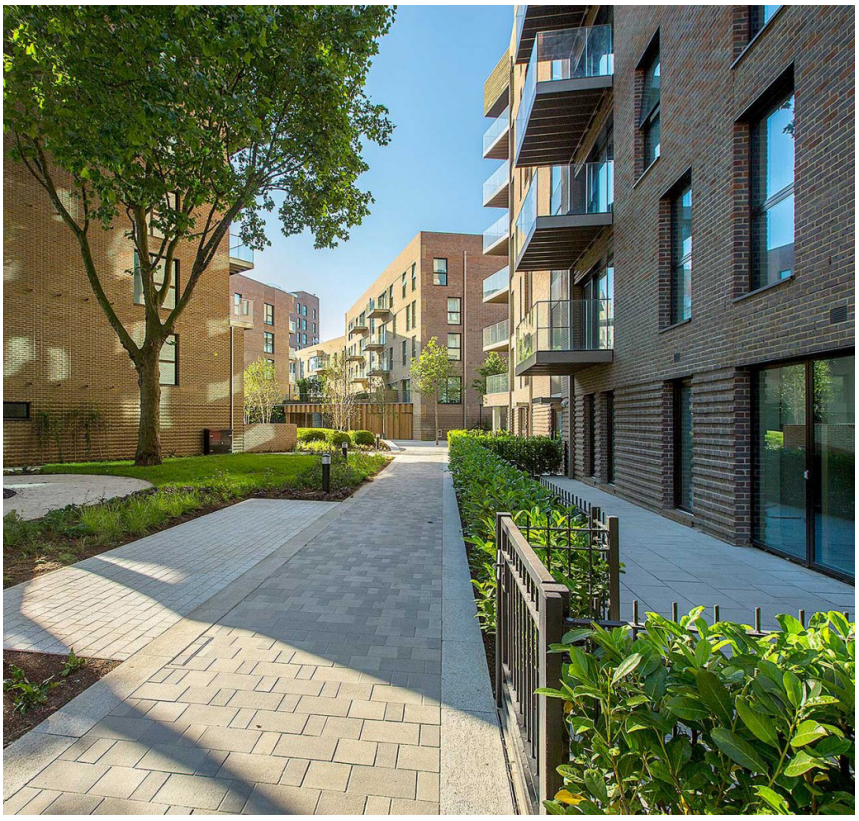
* Location: all trees as part of road suds system / rain gardens
* Pavement support system made from 100% recycled material
* System: RootSpace (RootSpace Upright unit, RootSpace Airflow Lid, and RootSpace Infill)
* Supplier e.g.: GreenBlue Urban
  Telephone: 0800 018 7797
* Dimensions: Product GBURAC600A unit size is 600mm height, 500mm wide and 90mm breadth with drainage layer (10-20mm depth clean stone), twinwall geonet with 20mm black geogrid, RootSoil 20, and ArborVent aeration system. Overall unit count per tree to be coordinated at the next stage with Engineers.
* Accessories: Allow for integrated irrigation

4. Boundary treatments







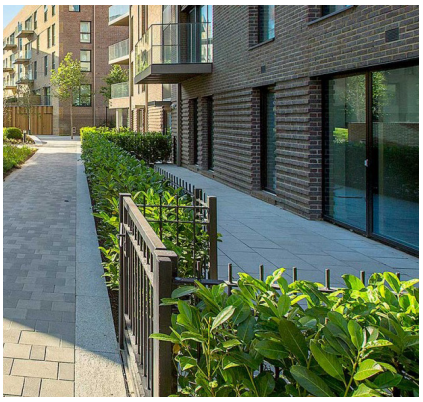


4.1 Boundary fences

4.1.1 Timber post & wire whilst hedging establishes

* Galvanised steel weldmesh fence
* Supplier: Contractors choice
* Dimensions: 1.2m overall height
  75mm square softwood timber
  No preservative treatment required
* Centres of posts- 2.4m
* Wires - 19swg weldmesh stapled to posts
* Drive posts 750mm into the ground

4.1.2 Garden railings



* 1200mm high railings
* Standard: to BS 1722-9
* Galvanised steel, prepared, primed and painted black
* Main posts: 100 x 100mm with flat top at approx. 2.5m centres
* Intermediate verticals: 12mm square with blunt top at approx 90mm centres
* Horizontal bars - 3no. flat rectangular section
  1no. to create base to the verticals
  2no. approx 200mm and 300mm from top of verticals

4.1.3 Boundary fence

* Concrete post and composite plank fence to gardens
* Standard: to BS 1722-5
* Height: 1.8m
* Durability: to provide minimum 20 year service life
* Horizontals: composite planks
* Bottom rail - concrete
* Posts: Concrete posts at 2.4m centres set in concrete foundations
* Finish - woodlike finish, colour anthracite grey
* Compostion - panels approximately 75% recycled materials

5. Roof terrace

5.1 Proposed paving

5.1.1 Paving Flags

* Natural Aggregate Concrete Paving Flag
* Finish: Textured Natural Aggregate
* Colour: Silver
* Laying: Stacked Bond
* Dimensions: 50mm depth, 600x400mm
* Construction make-up: To Engineers' details and specification

1.4.1 Natural Aggregate Block

* Natural Aggregate Concrete Block Paving
* Finish: Textured Natural Aggregate
* Colour: Silver
* Laying: Stretcher bond
* Dimensions: 60mm depth, 300x200mm
* Construction make-up: To Engineers' details and specification

5.2 Proposed furniture

5.2.1 Planter Top Seat

* Integrated Seating to steel planter
* Material: Powder Coated Steel, Class 1 tropical timber
* Colour: RAL to be decided
* Length: 1980mm
* Accessories: Backrest and armrests
* Fixing: Fixed to steel planter edge to manufacturers specification

5.2.2 Steel Planter

* Raised Planter Edging
* Material Finish: Powder Coated RAL Steel
* Colour: RAL to be decided
* Height: 400mm
* Type: Straight
* Fixing Detail: To engineers detail and specification
* Accessories: Integrated lighting, top seats in various locations

5.2.3 Trellis

* Trellis, affixed to Steel Planter
* Product: Steel frame with wire trellis system
* Material Finish: Powder Coated RAL Steel
* Colour: RAL to be decided
* Height: Trellis panels 1370mm, posts 1500mm
* Fixing Detail: To engineers detail and specification

London
New Fetter Place
8-10 New Fetter Lane
London EC4A 1AZ
United Kingdom
+44 (0) 20 7467 1470

Bristol
Studio 4B
36 King Street
Bristol BS1 4DZ
United Kingdom
+44 (0) 117 203 3628

Cambridge
17A Sturton Street
Cambridge CB1 2SN
United Kingdom
+44 (0) 1223 949054

Exeter
Kings Wharf, The Quay
Exeter EX2 4AN
United Kingdom
+44 (0) 1392 260 430

Glasgow
Sovereign House
158 West Regent Street
Glasgow G2 4RL
United Kingdom
+44 (0) 1412 229 780

Manchester
Beehive Lofts
Beehive Mill
Jersey Street
Manchester M4 6JG
United Kingdom
+44 (0) 161 359 5684

Oxford
Worton Rectory Park
Oxford OX29 4SX
United Kingdom
+44 (0) 1865 887050

Peterborough
17 Minster Precincts
Peterborough PE1 1XX
United Kingdom
+44 (0) 1733 310 471

www.lda-design.co.uk

LDA Design Consulting Ltd
Registered No: 09312403
17 Minster Precincts, Peterborough PE1 1XX