

188 Groundcover: 5-10 per m² (right)
Mix of grasses and perennials in a planting density of typically 5 per m², all p9, 1 or 2ltr container-grown, as per Planting Schedule. Planting to be mixed randomly in clumps of 3-9.

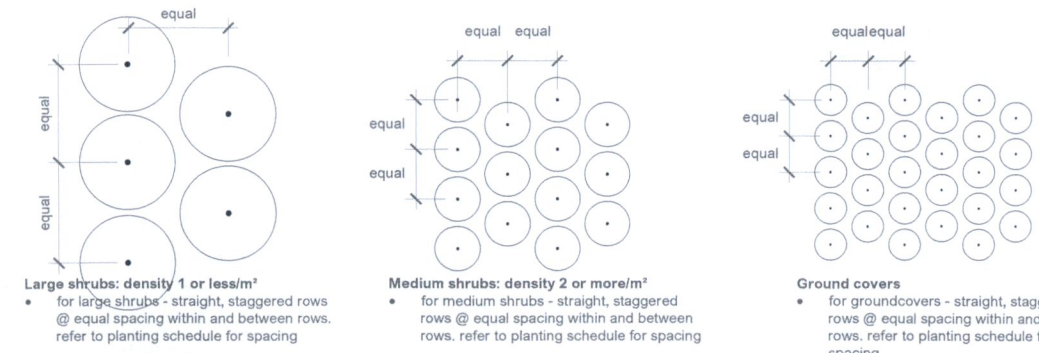
189 Planting Density: 3 per m² (left)
All shrub planting to follow 1.00m grid in straight parallel staggered rows to specified centres as shown.

190 Planting Density: 2 per m² (right)
All shrub planting to follow 1.00m grid in straight parallel staggered rows to specified centres as shown.

191 Planting Density: 4 per m² (left)
All shrub or transplant planting to follow 1.00m grid in straight parallel staggered rows to specified centres.

Bulb Drifts: 10-15 per m² (left)
Bulbs can be planted in naturalistic drifts. Density of bulbs typically 10-15 per m². Bulbs planted as 'Top size'.

192 Planting Density: 1 per m² (left)
All shrub planting to follow 1.00m grid in straight parallel staggered rows to specified centres as shown.



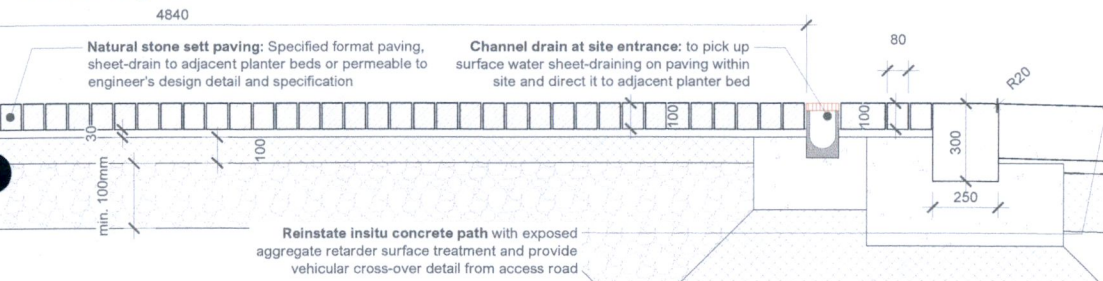
Large shrubs: density 1 or less/m²
• for large shrubs - straight, staggered rows @ equal spacing within and between rows. refer to planting schedule for spacing

Medium shrubs: density 2 or more/m²
• for medium shrubs - straight, staggered rows @ equal spacing within and between rows. refer to planting schedule for spacing

Ground covers
• for groundcovers - straight, staggered rows @ equal spacing within and between rows. refer to planting schedule for spacing

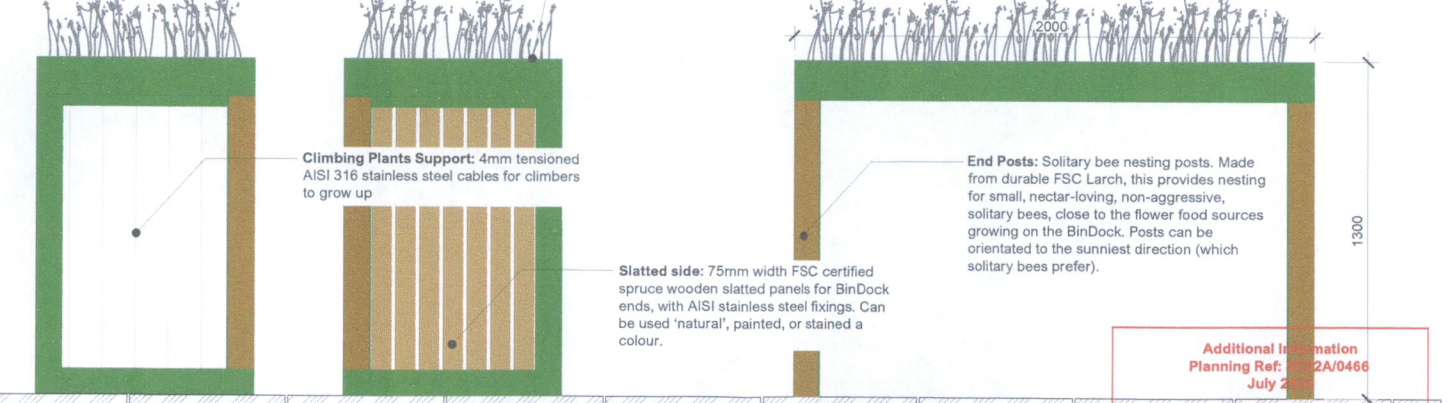
PLANTING LAYOUT
• refer to planting schedule for min. specified height and spread of shrubs & groundcovers
• planting conditions for individual plant species may vary,
• refer to planting schedule, plans and soft landscape specification for details

PLANTING DENSITIES
SCALE 1:50@A2

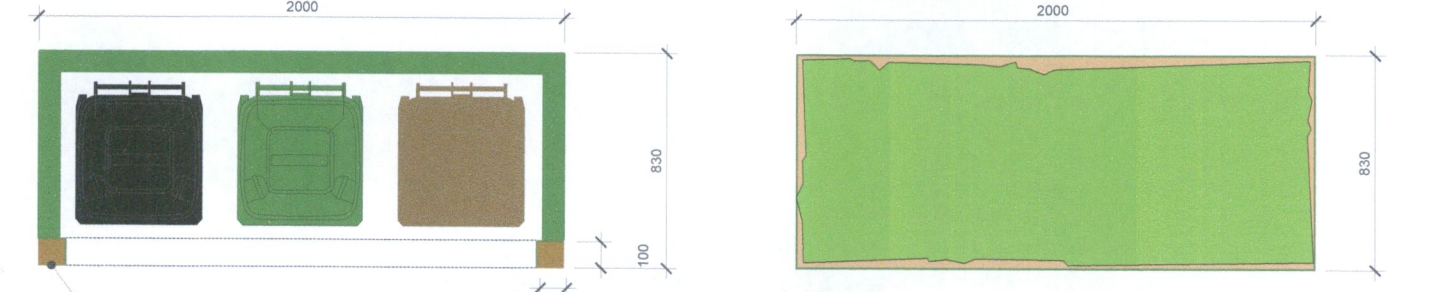


TYPICAL DETAILS FOR PERMEABLE PAVING & GREEN-ROOFED BIN DOCK SHELTER
SCALE 1:20@A2

Paving Edging: 101.6x76mm flexible L-shaped mill finish extruded aluminium asphalt paving edging restraint trim in alloy 6005, T-5 hardness, set on 200x300mm C20P concrete races with 50mm dab and proprietary concrete races to create smooth flowing curves to path edges. 5.33mm thick exposed top lip and proprietary connectors between 2.44m lengths.



TYPICAL SECTION THRO' GREEN BIODIVERSE SEMI-INTENSIVE TYPE ROOF
SCALE 1:20@A2



Accommodates 3 Wheelie bins:
• Fits 3 x 240 litre wheelie bins
• Structural aluminium roof frame and end frames (finished with a 2 no. polyester powder top-coat, Spring Forest Green RAL 130 90 20); rigid aluminium braces; stainless steel cross braces; galvanised roof panel tray; polyethylene roof tray liner; brass rainwater outlets and aluminium rainchains.
• FSC wooden slatted end, tensioned AISI stainless steel cables as climbing plant supports at other
• 2 no. FSC larch posts at either end, drilled for solitary bee nesting habitat and oriented towards sun

Green Roof tray to triple bin dock: allows a soil depth of 100-150mm.
• Growing roof that can weigh 280kg when saturated after rainfall - so much richer for planting herbs, flowers, nectar-rich plants for wildlife... and more than a thin layer of sedums.
• Planting must include a range from low-maintenance, drought-tolerant plants to species requiring regular watering and attention.
• Plants must have nectar-rich flowers, both native and some non-native (to extend the food season) to support butterflies, solitary bees and other invertebrate wildlife.
• When a low-nutrient substrate or soil is used (mimicking chalk meadow downland) it suits native plants that are often quite drought tolerant once established.
• Although it is a small roof area, it contributes to sustainable urban drainage (SUDS) - slowing the pace of rainfall into our drainage systems with plants and roofs that hold back rainwater.

NATURAL STONE SETT PAVING - LIGHT VEHICULAR

- A sett refers to a stone element having a rectangular or square plan area less than 0.09m², with a depth of 100mm or greater, regardless of the width to length ratio and includes elements more commonly referred to as blocks.
- A reference sample is required before commencement of work, of sufficient size to indicate the appearance of the stone, with the surface treated. The sample must indicate the name and address of the producer/supplier, as well as identification of the material indicating the trade name, petrographic description, country of origin and extraction area.
- Natural stone shall be supplied to the colours, textures, surface finishes and sizes specified. The use of setts with chamfered edges is not permitted.
- Setts shall be flame-finished or bush-hammered, with an Unpolished Slip Resistance Value (USRV) not less than 45.
- Polished Stone Value (PSV) of the stone shall not be less than 50.
- Provide edge restraint along the perimeter of the paved area.
- The pattern of pavers and details at edges, manholes, gullies and other openings shall be agreed with the local authority, prior to construction.
- Setts shall be laid to the lines, levels and patterns as agreed with the local authority.
- Edge with adjacent carriageway to be formed of 300x250mm CE-marked golden-coloured granite kerb, bull-nosed with 20mm radiused corner to exposed edge. Medium bush-hammered finish. Finish top of kerb min. 100mm above finished level of car parking space.

Bedding:

- A high performance permeable bonding and priming mortar to be used, suitable for natural stone and pre-cast concrete paving slab and setts laid in all traffic conditions.
- Permeable bedding layer and sub-base layer to engineer's design detail and specification, to be agreed with local authority
- Bedding mortar that remains between the joints shall be removed, such that the full depth of the sett is free of bedding material
- Setts shall be laid on a permeable bedding layer or a 3:1 sand:cement mortar or high strength mortar bed of depth agreed with the local authority, complying with Table 3 BS 7533-12:2006, min. 30mm depth.

Jointing:

- Jointing shall be uniform for the full depth of the setts to a width agreed with

Tolerances:

- The surface level of setts shall not differ from the design level by more than ± 6mm.
- The difference in level between adjacent setts shall not exceed 3mm.

Trimming:

- Setts shall be neatly cut and trimmed to accommodate chamber covers, poles or other items of street furniture, such that the maximum gap between the flagstones/setts and the item is not more than 25mm.
- The gap shall be thoroughly filled for the full depth of the flagstone, with concrete 30/10.
- Careful selection of material or pigment may be necessary to achieve adequate colour match. Proper curing of the concrete is essential.

Standards:

- Proof of compliance with DOP/CE marking required for all natural stone paving elements
- Natural stone setts shall comply with the requirements of EN 1342:2000 'Setts of Natural Stone for External Paving'.
- The plan dimensions, diagonal dimensions, deviations on face irregularity and thickness dimensions of setts shall comply with Table 1, 2 and 3 in EN 1341:2012 as relevant.
- Flatness deviation along arrises shall conform to Table 4 of EN 1341:2021.
- The bulk specific gravity of the stone shall not be less than 2.55.
- The contractor to supply evidence of test results for flexural strength, tested strength shall not be less than 8.6 N/mm²
- The contractor to supply evidence of test results for water absorption, the tested water absorption shall not be greater than 0.30%.
- Natural stone kerbs laid to meet requirements of BS 7533-6:1999. Manufactured to EN 1343.

PRECAST CONCRETE BLOCK PAVING FOOTPATH & LIGHT VEHICULAR, GREEN-ROOFED BIN DOCK SHELTER

- The structural design of pavements constructed with concrete block pavers should comply with the requirements of BS 7533.
- Concrete Paving Blocks, all blocks to comply with Table 7 and production standard EN 1338:2003 'Concrete Paving Blocks'. Laid in accordance with BS 6717: Part 3
- Bedding sand to conform to 7533-4:2006 Clause 5.4.6.2.
- Concrete block pavers shall be laid by hand to an approved pattern with joint widths of 2-5mm. Jointing sand to conform to BS 7533-4:2006 Clause 5.4.6.4, and the grading of jointing sand shall comply with Table D3 of BS 7533: Part 3:1997.
- Provide edge restraint along the perimeter of the paved area.
- The pattern of pavers and details at edges, manholes, gullies and other openings shall be agreed with the local authority, prior to construction.
- Permeable bedding layer and sub-base to engineer's design detail and specification.
- Proof of compliance with DOP/CE marking required for all paving materials
- 'Pembroke' permeable paving pre-cast concrete blocks by Kilsaran in square-edge shot-blast finish, 'Silver Granite' colour, or equivalent approved. Soldier course of pre-cast concrete

Permeable pre-cast concrete paving:

- 'Pembroke' by Kilsaran in 5 size mix 80mm depth, laid in random stretcher bond in 'Silver Granite' colour
- 'Silver Granite' by Kilsaran jointing material, no-fines self-locking aggregate either 4-1mm or 5-6mm hard clean crushed stone.
- Paving unit is suited to pedestrian and light traffic driveway use with appropriate permeable bedding and sub-base layers in place, to engineer's design detail and specification. Bedding layer 2-6mm clean hard crushed stone (angular, no-fines). Depth 30-50mm. Sub-base: no-fines coarse graded aggregate (CGA) clean crushed stone 4-20mm or 4-40mm aka Type 3 material (30% voids) Depth 180-300mm
- Textured granite finish with square-edge to paving units.
- Lay with 10mm SuDSFLOW spacers available from Resigap Ltd at www.sudsflow.com or equivalent approved. The spacers shall have the following dimensions as specified: Cross - 60 x 60 x 20mm, Tee - 60 x 35 x 20mm

Spacers:

- Proof of compliance with DOP/CE marking required for all paving materials
- The spacers used to create a permeable paved surface shall be 10mm SuDSFLOW spacers available from Resigap Ltd at

www.sudsflow.com or equivalent approved.

- The spacers shall have the following dimensions as specified: Cross - 60 x 60 x 20mm, Tee - 60 x 35 x 20mm
- The spacers shall have the following jointing properties - Immediately useable with any form of jointing aggregate, detailed by the specifier.
- Does not adversely affect the free flow of storm/flood water and can sustain the minimum water flow required
- Demonstrate to be highly resistant to oils, diesel, petrol, and de-icing fluids
- Must be designed to be completely hidden by the jointing aggregate, so the aesthetics of the paving specified by the architect is not adversely affected
- The compressive strength of the spacers must equal to or greater than that of a concrete paver/nib
- Manufactured from recycled polypropylene
- Withstand potential erosion caused by jet washing
- Capacity to contact vertically at least 20mm of the paving* unit sides.
- The spacers shall have a proven safety and performance record of use on similar pavements to that used on this project.
- Estimation of number required - Stacked Bond/Chequer Board - 1 Spacer per paving unit. Offset/Stretcher Bond - 2 Spacers per paving unit.
- Lateral Support. A minimum 30% of paving unit height to be supported. Spacers are designed to be stacked where required.

Additional Information
Planning Ref: 22A/0466
July 2022

landscape design services
LANDSCAPE ARCHITECTS & CONSULTANTS

PROJECT	PROPOSED DEVELOPMENT AT TEMPLEVILLE DRIVE, TEMPLECOCK, DUBLIN 15M, CO. DUBLIN	PROJECT ARCHITECTS	COLIN MACKAY MIRA
CLIENT	SARBY & SUJANNE COLLIAM	PLANNING PERMISSION REF	8020A066
DRAWING NO.	21_235	SCALE	1:20 @ A2
DRAWING NO.	21_235-PDF-05	DATE	2023-07-25
DRAWN BY	J COUGHLAN	CHECKED	COLIN MACKAY
STATUS	IN PROGRESS	REVISION	

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