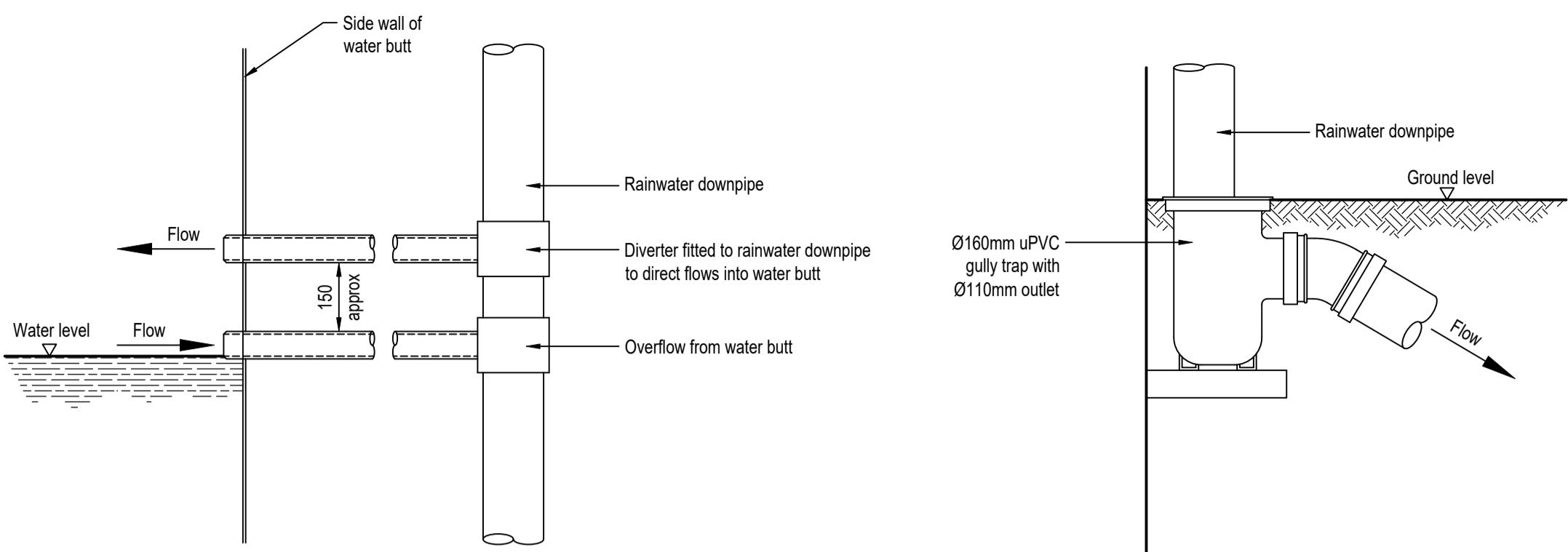


- Take time to read and understand this drawing and familiarise yourself with its content to do in good time before commencing any work, and in the event of any query, refer to HERBERT STUMPP LTD in a timely manner.
- Do not scale from this drawing for construction or fabrication. Work to figured dimensions only.
- This drawing is to be read in conjunction with all other relevant Architect's and Engineer's drawings.
- The contractor's attention is drawn to the drawing status and to note the following:

**PLANNING (P):** The drawing is for planning only  
**TENDER (T):** The drawing is for tendering purposes only  
**PRELIMINARY (P):** The drawing is for preliminary mechanical approval from the relevant approving authority  
**CONSTRUCTION (C):** The drawing is for construction

**THE CONTRACTOR MUST BE AWARE THAT ANY WORKS CARRIED OUT BASED UPON DRAWINGS MARKED TENDER OR PRELIMINARY ARE CARRIED OUT AT THE CONTRACTOR'S OWN RISK**

**5.** The Construction (Design and Management) Regulations 2015 apply to this project. It is the client's responsibility to ensure that the requirements of the Regulations are satisfactorily addressed prior to commencement of any works.



TYPICAL SECTION THROUGH RAINWATER DIVERTER

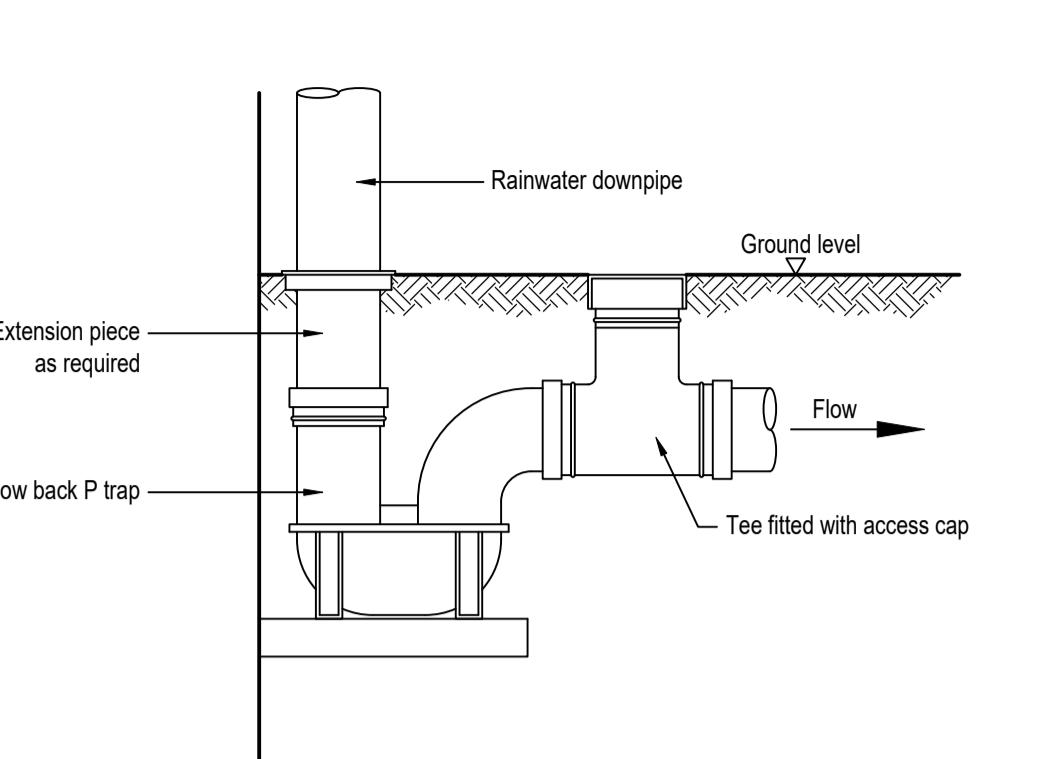
TO BE FITTED TO EACH RAINWATER BUTT

Scale 1:10

TYPICAL DETAIL AT BASE OF RAINWATER DOWNPipes

FOR USE WHERE DOWNPipes DO NOT DISCHARGE INTO WATER BUTTS FIRST

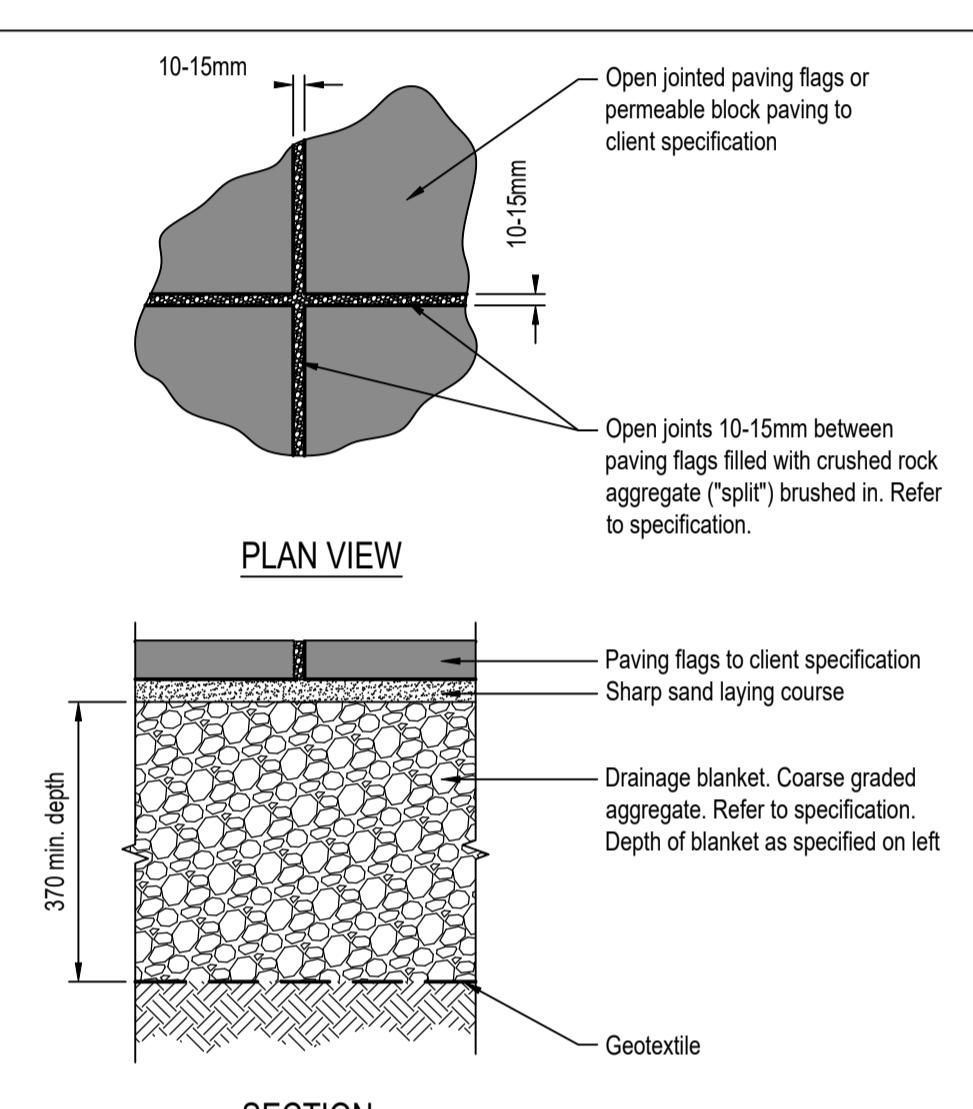
Scale 1:10



TYPICAL DETAIL AT BASE OF RAINWATER DOWNPipes

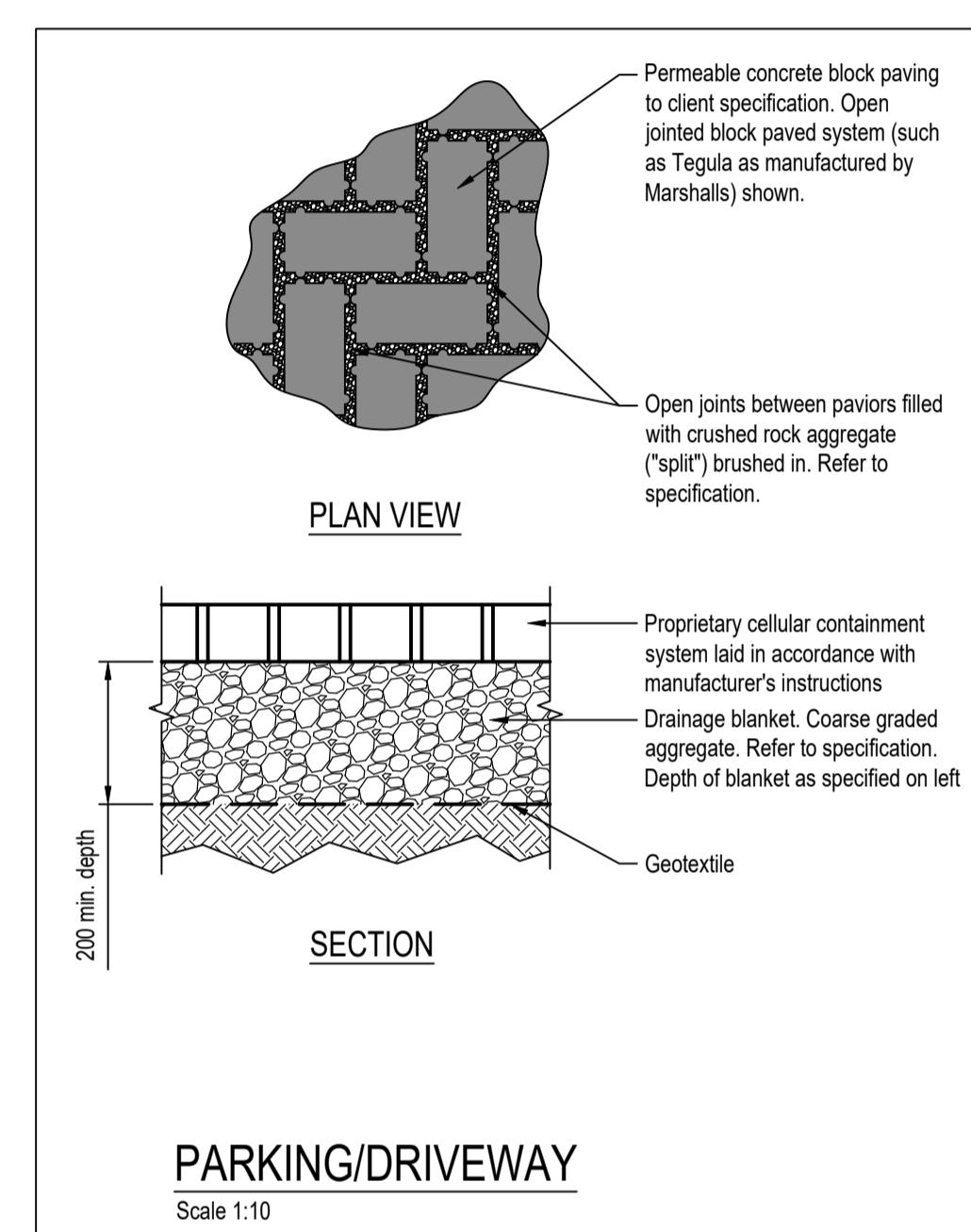
FOR USE WHERE DOWNPipes DO NOT DISCHARGE INTO WATER BUTTS FIRST

Scale 1:10



DRAINAGE BLANKET BENEATH PATIO

Scale 1:10



PARKING/DRIVeway

Scale 1:10

**SPECIFICATION FOR PERMEABLE SURFACING**

1. Permeable paving: minimum thickness 50mm in pedestrian only areas and 65mm in driveway and vehicle crossover
2. Laying course and jointing aggregate: 2.6-3mm granite grit to BS EN 13242 lightly compacted. Re-grit 3 months after 3-4 months and upon final completion to allow for settlement.
3. Coarse graded aggregate: 4-20mm to BS EN 13242 lightly compacted in 150mm layers
4. Geotextile: Needle punched polypropylene across base and taken up sides of excavation
5. Soft spots in formation to be removed and backfilled with SHW Clause 805 Type 3 material to BS EN 13242

**GRANULAR BEDDING REQUIREMENTS - RIGID PIPES:**

**PIPE INTERNAL DIAMETER:**  
 UP TO 100mm: 6 or 10 single size or 10 to 5 graded  
 100mm to 150mm: 10 or 14 nominal single size or 14 to 5 graded  
 225mm to 525mm: 10, 14 or 20 nominal single size or 14 to 5 graded or 20 to 5 graded  
 600mm and above: 10, 14, 20 or 40 nominal single sized crushed rock or  
 14 to 5 graded or  
 20 to 5 graded or  
 40 to 5 graded

**GRANULAR BEDDING REQUIREMENTS - FLEXIBLE PIPES:**

Either 6mm single size granular material or graded granular material 5mm minimum 10mm maximum size

**PIPE STRENGTH AND BEDDING COMBINATIONS:**

For concrete pipes with 0.9m to 1.2m cover to crown of pipe use Concrete Class M or Class H with Class A bedding  
 For concrete pipes with 1.2m to 2.5m cover to crown of pipe use Concrete Class M or Class H with Class B bedding  
 For clay pipes with 0.9m to 1.2m cover to crown of pipe use ESCV with Class A bedding  
 For clay pipes with 1.2m to 2.5m cover to crown of pipe use ESCV with Class B bedding

**PIPE BEDDING NOTES:**

Bc = Outside diameter of pipe  
 DN = Internal diameter of pipe

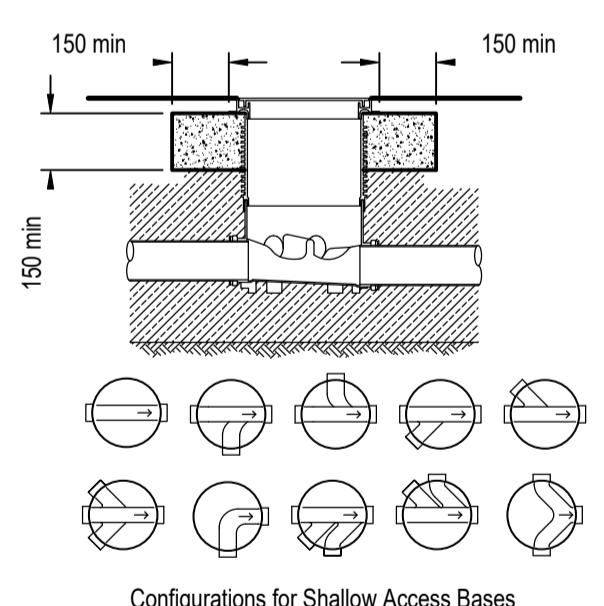
DIMENSION Y: EITHER 1/6 of external pipe diameter OR 100mm under barrels and 50mm under sockets, whichever is greater. Maximum 400mm

Where a concrete surround is specified, Flexcell or equivalent compressible material is to be provided in the concrete surround at each pipe joint. Minimum thickness of compressible material 25mm

Selected as dug fill material or granular material free from stones larger than 40mm nominal size, lumps of clay over 100mm timber, frozen material and vegetable matter

Granular bed (refer to granular bedding requirements)

Concrete Grade ST4

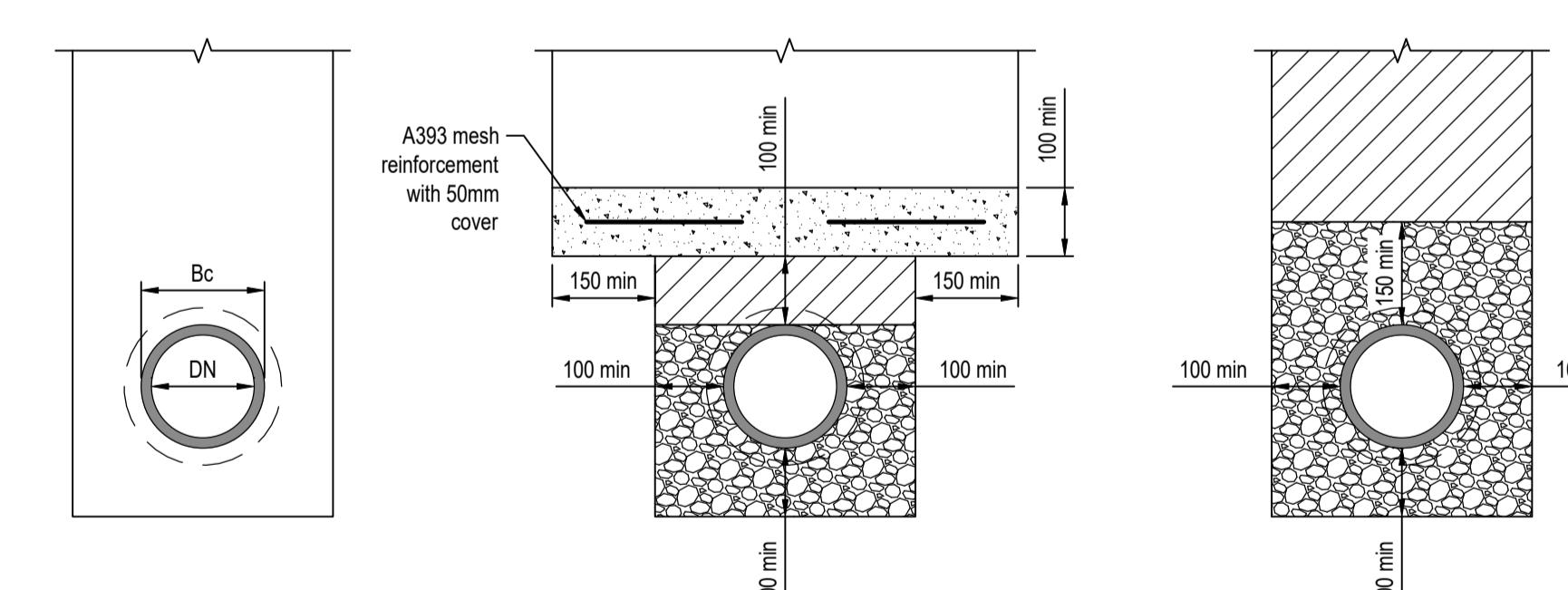


SHALLOW ACCESS FITTING (SAF)

MAXIMUM DEPTH TO INVERT 600mm  
(Scale 1:20)

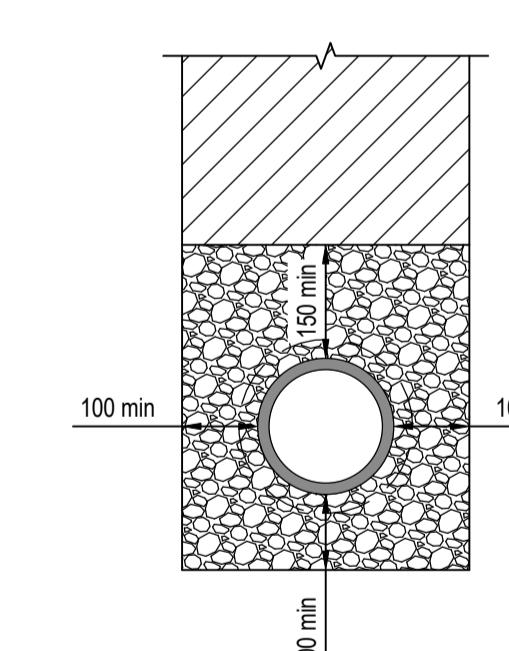
**NOTES FOR POLYPROPYLENE INSPECTION CHAMBERS AND SHALLOW ACCESS FITTINGS:**

1. Provide a 100mm thick bed of selected as-dug or granular material if ground is soft. If ground is hard, provide a 150mm thick bed of either ST4 or CEM4 designated in the concrete, placing the pre-formed polypropylene base of the chamber in position whilst the concrete is still wet so that it may stop the shape of the base of the chamber
2. Polypropylene inspection chamber shaft sections are to provide set inverts using standard height shaft sections or to provide invert as specified by site cutting shaft sections to required height
3. 150mm minimum thickness of selected as-dug or granular material shall be placed and rammed firmly around pipes and fittings until adequate support is achieved
4. A 150mm minimum thickness grade ST4 concrete collar shall be provided around the top of the shaft to provide seating for cover and frame where the chamber is located in non-adapted hard landscaped areas or in soft landscaped areas where there is access by construction traffic
5. A minimum 100mm thick grade ST4 concrete bed and surround is required where chambers are located in soft landscaped areas subject to construction traffic
6. Proprietary inlet adaptors are to be used to connect 100mm diameter pipes to 150mm diameter inlets
7. Unused inlets are to be sealed off using proprietary blanking-off plugs or plates



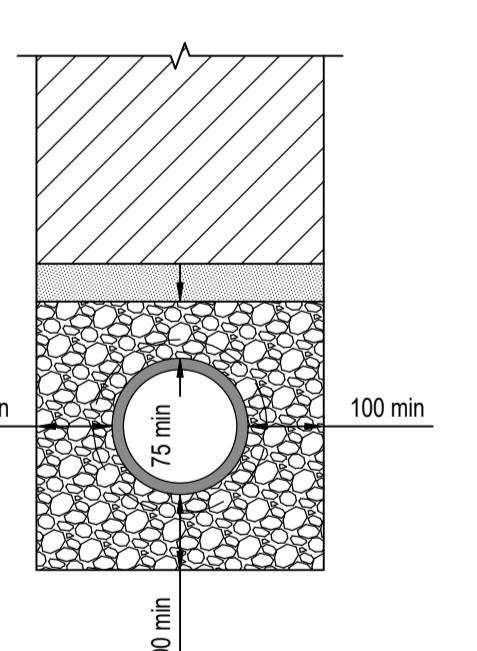
PIPE BEDDING FOR FLEXIBLE PIPES WITH LESS THAN 0.9m COVER BENEATH DRIVEWAYS AND VEHICULAR ACCESSES

(Scale 1:10)



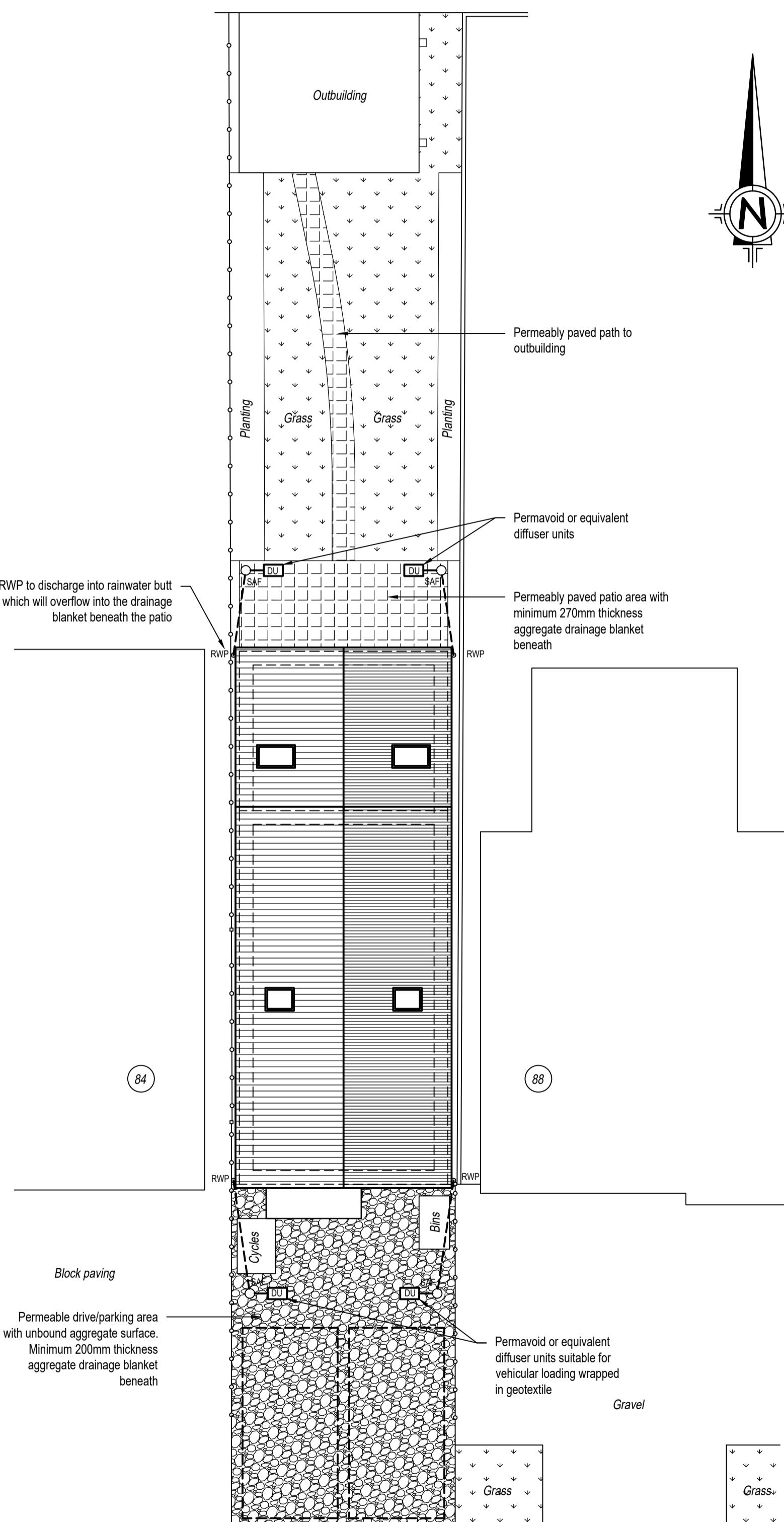
PIPE BEDDING FOR FLEXIBLE PIPES WITH MORE THAN 0.9m COVER BENEATH DRIVEWAYS AND VEHICULAR ACCESSES

(Scale 1:10)



PIPE BEDDING FOR FLEXIBLE PIPES WITH LESS THAN 0.6m COVER BENEATH AREAS WITHOUT VEHICULAR ACCESS

(Scale 1:10)



PROPOSED SURFACE WATER DRAINAGE

Scale 1:100

SCALE BAR 1:1250 SCALE DETAILS

0m 50 100 150 200 250m

SCALE BAR 1:100 SCALE DETAILS

0m 1 2 3 4 5 10 20m

ARUN DISTRICT COUNCIL M22/25PL

Revisions:  
PL-1  
PL 19/02/2025Draft issue  
Issued for planning

Project

86 ANCTON WAY, BOGNOR REGIS, WEST SUSSEX PO22 6JP

PROPOSED SURFACE WATER DRAINAGE

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HERBERT STUMPP LIMITED

Civil & Structural Engineers  
Party Wall Surveyors

ORIGINAL DRAWING SIZE: A1

Drawing status  
PLANNINGDrawn by  
PPScale  
As shownRevision  
PL 2Date  
January 2025Date  
As shownRevision  
PL 2