

Table 1 construction details of paved areas

		Sub-base	Base (Road base)		Binder course (Base course)	Surface course (wearing course)				Bedding course	Pavers
		Granular sub-base material Type 1 to clause 803 Table 8/2 MCHW1 Series 800 (see note 2)	Dense Bituminous Macadam (100/150) Pen Paving grade bitumen with crushed rock aggregate to BS 4987 (Group 1 Mix)	Concrete designation (BS 8500-2 Table 7)	Dense Bituminous Macadam (100/150 Pen paving grade bitumen) with crushed rock aggregate to BS 4987 (Group two mix)	Dense Bituminous Macadam (100/150 Pen paving grade bitumen) with crushed rock aggregate to BS 4987 (Group three mix)	Hot Rolled asphalt to BS 594-1	Mastic Asphalt to BS 1447	Concrete designation (BS 8500-2 Table 7)	Sharpe sand to BS 7533-3 category II of Annex D	Block pavers to BS 6717 of class markings W2, A2, and S3 (weathering, abrasion and slip/ skid classes) (see note 6)
Shared parking and associated access areas having frequent use by commercial vehicles	Bituminous Macadam	Table 2	80 (0/32mm size to clause 5.2)	100 Grade GEN2 (see note 4)	60 (0/20mm size to clause 6.5)	30 (0/10mm size clause to 7.4)	N/A	N/A	N/A	N/A	N/A
	Block Pavers	Table 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	50	80

Notes

- Names of pavement layers show both the european harmonised names and in brackets the names traditionally used in the UK.
- If a capping layer is specified then sub-base thickness can be reduced. DMRB Volume 7 Section 2 Part 2 HD 25/95 Foundations Chapter3 Capping and Sub-base gives guidance on capping and Sub-base thickness design based on CBR Values and with and without a capping layer.
- Thickness is based on the provision of a geotextile membrane underneath the sub-base. If no geotextile membrane is provided see table 2.
- Bond and tack coat should be provided for bituminous mixtures in accordance with BS 4987-2 or BS 594-2
- Asphalt based materials can be used as partial replacement of full thickness of granular sub-base type 1 material.
- When laid to either 90 or 45 degrees herringbone pattern then the edge perimeter to be laid with one single row of stretcher bond set parallel to the edge restraint. Where block pavers are laid abutting drainage channels, gully grates and the like, the upper surface of the block pavers shall be set between 3 and 6mm above the grating. Manufacturers declared value markings W3 and S4 are acceptable if W3 is 1.0kg/m² or less and S4 is 45 or more based on 'C scale unit' (with regard to abrasion, Class A2, no test result is greater than 23mm; and Class A1 = no performance determined)
- Use 38mm thickness of graded 15/20mm unbound aggregate to BS EN 13242 (gravel) well rolled and compacted.
- N/A = Not Applicable

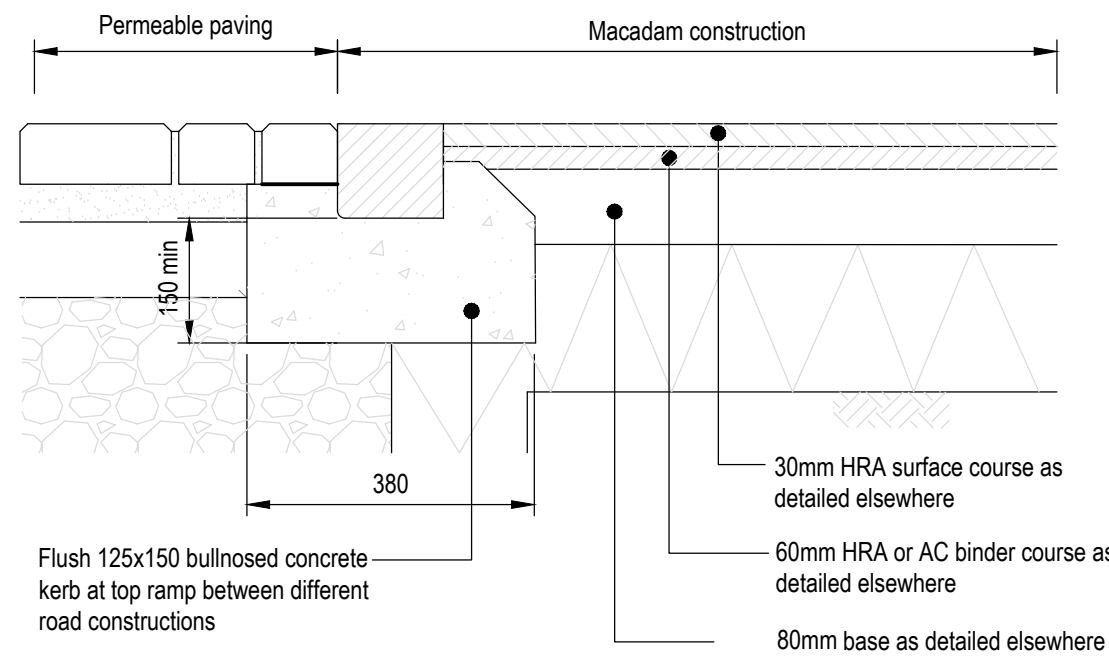
Table 2 minimum sub-base thickness for paved areas:

California Bearing Ratio (CBR) Values	Minimum thickness (mm) of sub-base (consolidated in accordance with MCHW Volume 1 Clause 801, table 8/1)	
	Without Geotextile underneath	With Geotextile underneath
Less than 2%	N/A	300
2% - 3%	325	225
3% - 5%	250	150
5% - 7%	150	
7% - 20%	100	

Notes

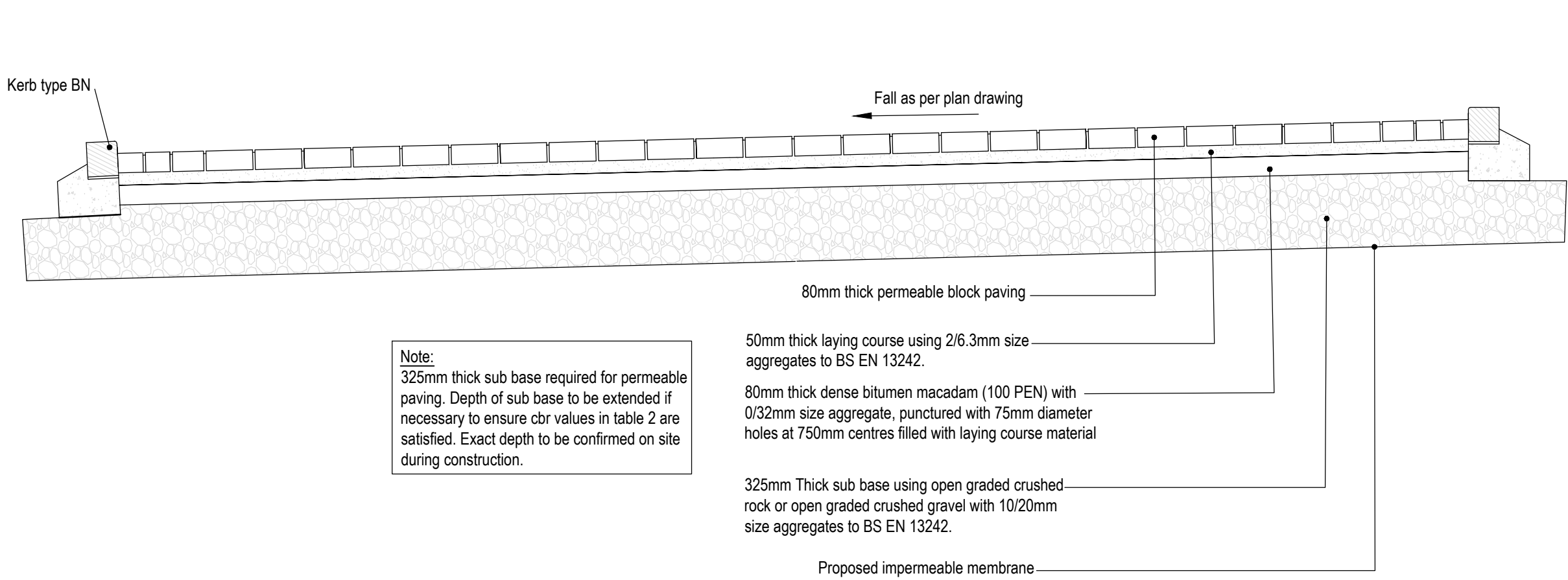
The thickness of any required capping layer and the sub-base should be determined after investigations and on-site tests have been carried out relating to the California bearing ratio (CBR) value and frost susceptibility of the sub-grade see table 2.

Where the tests indicate that the sub-grade is frost susceptible a suitable capping layer should be included below the sub-base, to a depth that will ensure that the construction will not be affected by frost heave.



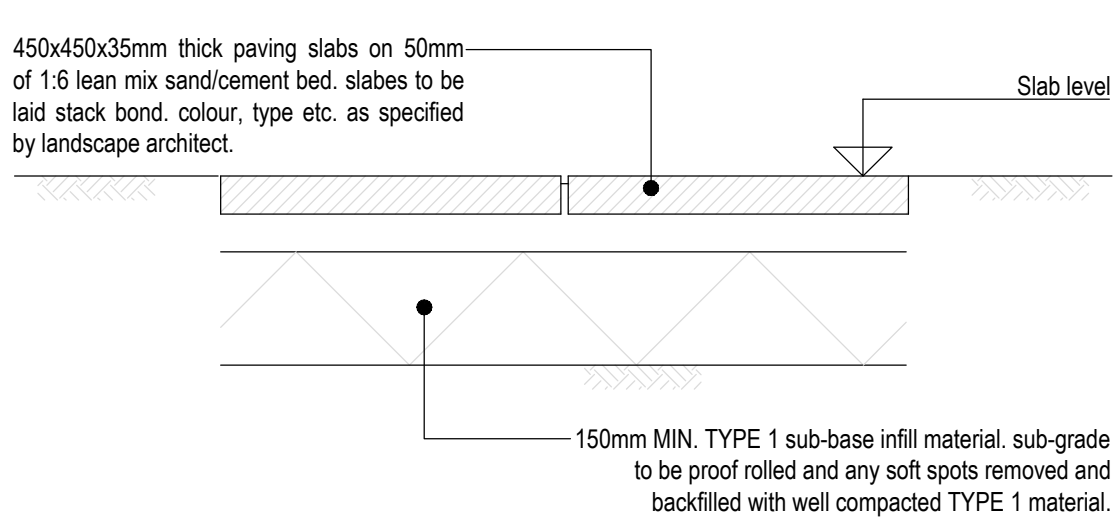
Transition from Permeable Paving to Asphalt

Scale 1:10



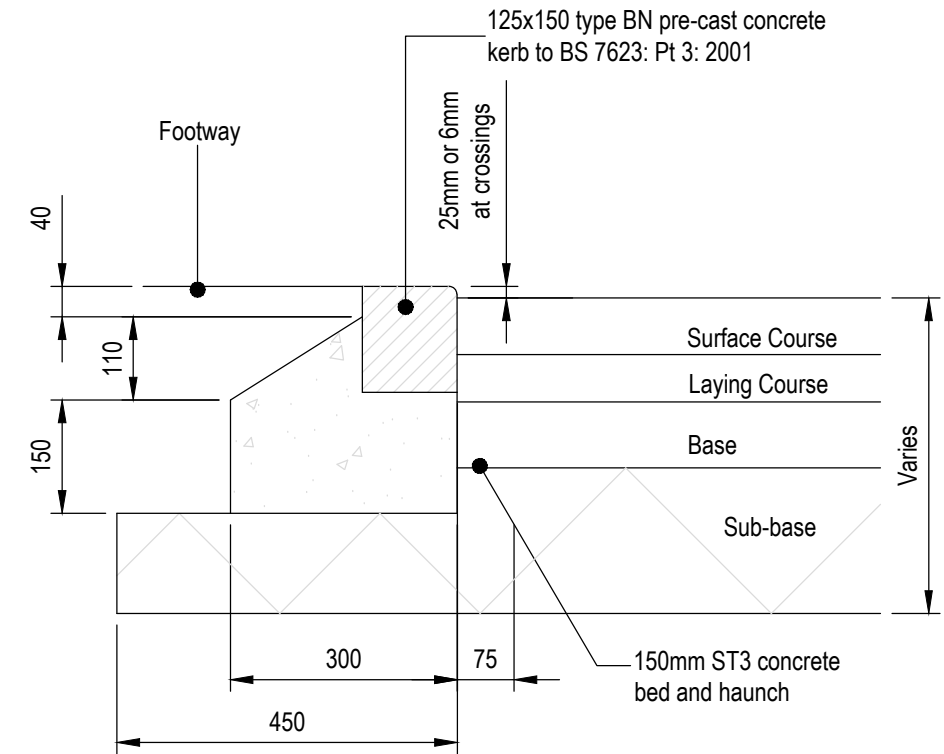
Typical Section through Permeable Paving Road

Scale 1:20



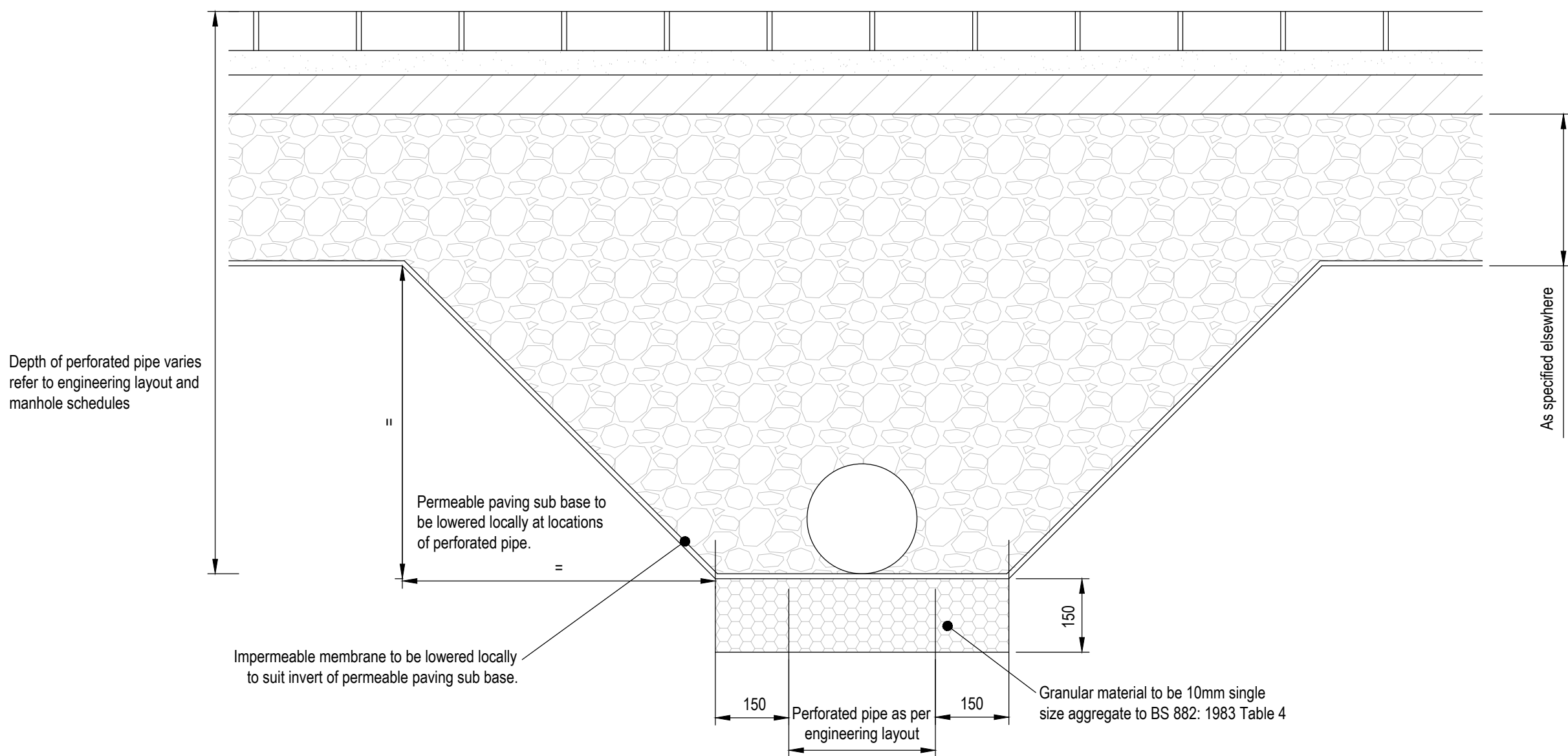
Private Footpath & Patio Details

Scale 1:10



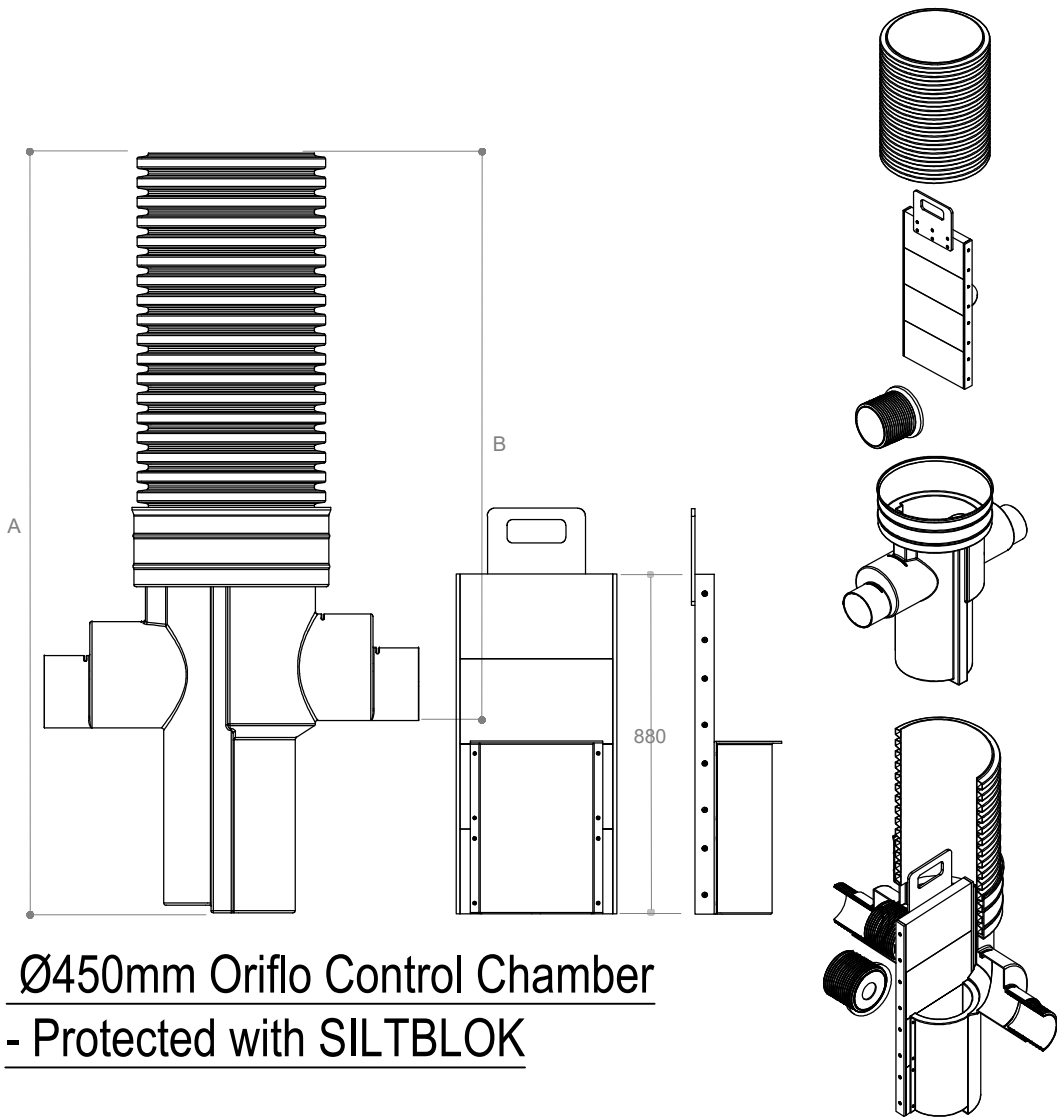
125x150 BN Kerb

Scale 1:10



Perforated Pipe Bedding

Scale 1:10



Ø450mm Oriflo Control Chamber

- Protected with SILTBLOK

Scale
As Shown

P1 Preliminary Issue		PG	BP	02.03.2023
Issue	Notes	Drawn	Approved	Date
 jmsTM Group  Engineering That Brings Design To Life.				
Issuing Office: JMS Midlands (Nuneaton): Victoria Court, 25 Tennant Street Nuneaton, Warwickshire, United Kingdom, CV11 4LZ, Tel: 02476 350505				
Project Kennel Lane, Witherley Atherstone, CV9 3LJ				
Drawing Title Private Pavement Construction Details				
Project No. CO22/293/07		Drawing No. 211		Issue P1
PRELIMINARY				