

TYPICAL CARRIAGEWAY CROSS SECTION – BITUMINOUS CONSTRUCTION (SECONDARY STREET)

Aggregate Grading  
4/20 Sutton Courtenay Gravel in accordance with BS7533-13 with minimum 30% voids.

Grading Details

Sieve Size	Percentage Passing
40	100
31.5	100
20	91
10	38
4	4
2	1
0.063	0.1

Sub Base Grading Chart

Aggregate Grading  
2/6.3 Sutton Courtenay Gravel in accordance with BS7533-13 with minimum 30% voids.

Grading Details

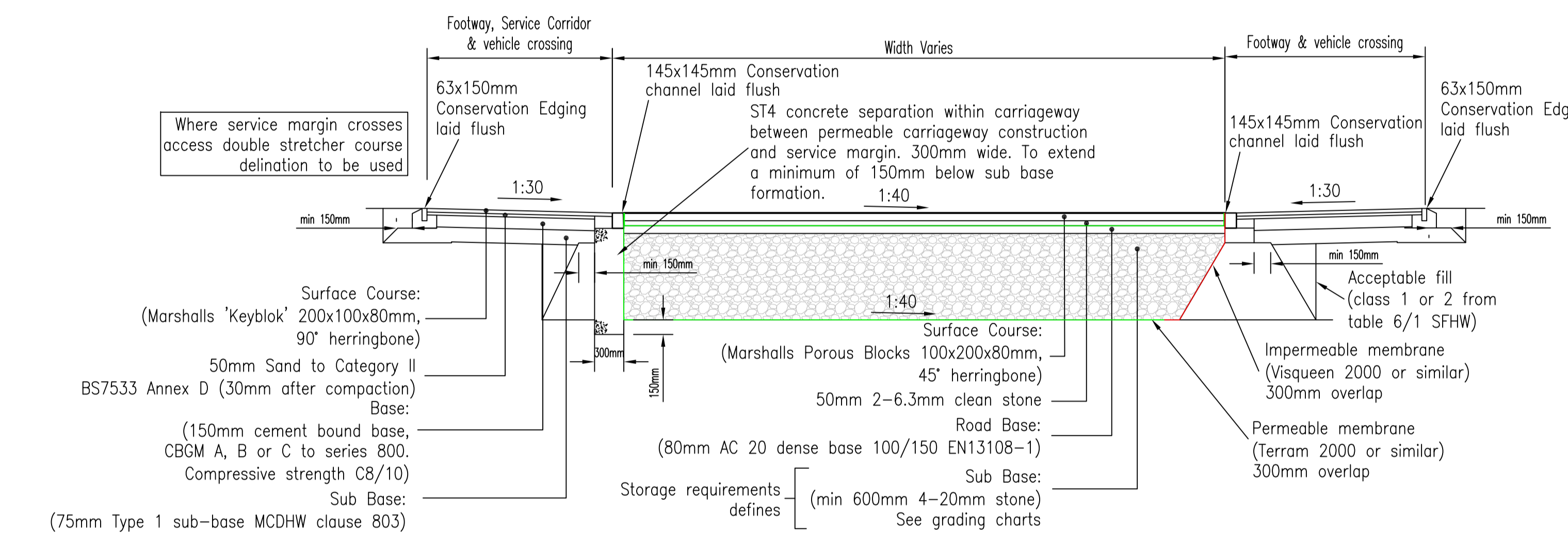
Sieve Size	Percentage Passing
40	100
10	100
6.3	99
2	1
1	0
0.063	0.1

Clean Stone Grading Chart

The flakiness index, shell content and mechanical properties should be as set out in BS EN12620 for coarse graded crushed rock or gravel. The 10% fines value should be 150kN or more, when tested in accordance with BS812: Part 111: Testing Aggregates; with the amount of material passing the 75 micron sieve should not exceeding 4%. Minimum void space of 30%.

\*Sub base & clean stone material to be Sutton Courtenay Gravel or Marchington Stone, to comply with the Marshalls grading chart shown. Marshalls approved the use of these materials on the 5th May 2011. Specific testing charts available on request.

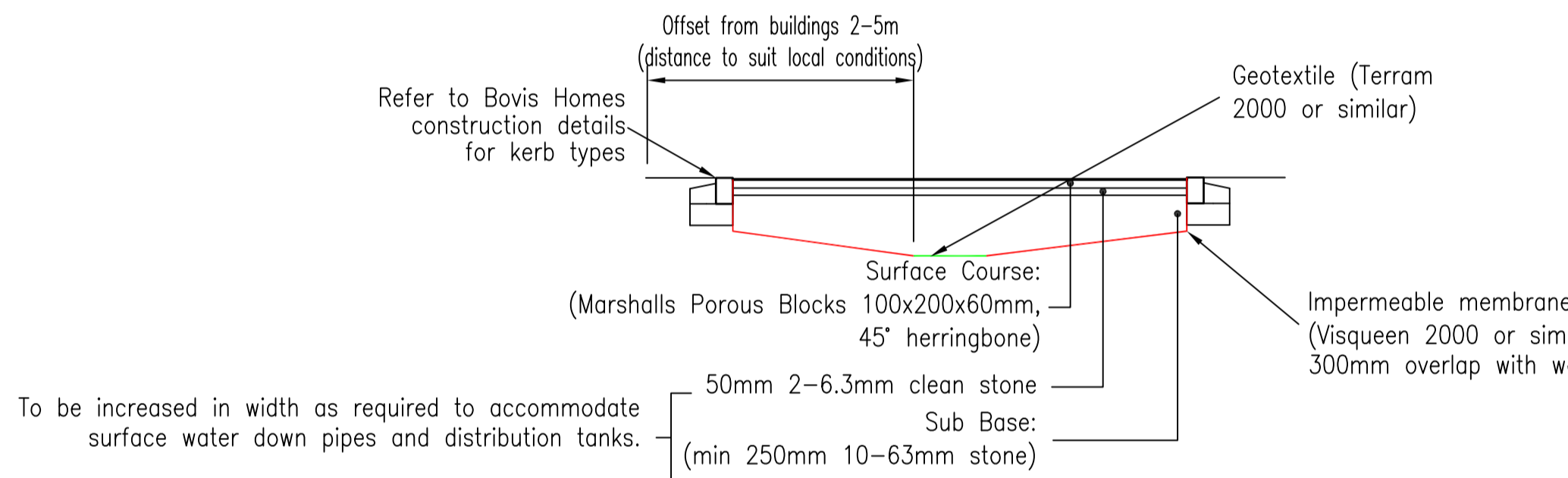
- Notes
- All levels relate to Ordnance Datum.
  - For adaptable roads and sewer details refer to drawings 5\_500 series.
  - All connections to adaptable manholes from private building drainage to be 150mm diameter pipes unless otherwise specified.
  - All house drainage to be 100mm dia unless otherwise stated, and laid in accordance with current Building Regulations and BS8301:1995.
  - All drainage products are to be Polyprop.
  - Pipe bedding material is to be Class B with 150mm minimum thickness surround.
  - Backfill is to be with selected fill free of stones larger than 40mm, lumps of clay over 100mm, timber, frozen material and vegetable matter.
  - Pipe protection of house drainage runs to be required in accordance with the Typical House Drainage Details drawing. The contractor shall satisfy themselves and agree with the Site Management the actual extent of pipe protection required.
  - Pipes entering and leaving manholes/inspection chambers shall include a rocker pipe, 600mm in length.
  - Brickwork to chambers shall be Class B Engineering to BS3921.
  - Rainwater pipes are to be sited on side elevations whenever possible.
- Proposals
- All retaining walls with a height of 600mm or greater are to include 1.2m high post and rail fencing unless located in rear gardens. Similar retaining walls in rear gardens are to include 900mm height picket fence.
  - All flights of steps to primary level access, with more than 2 steps are to be provided with handrails, except where the steps are 900mm or more apart.
  - Brick retaining walls are to be used in preference to gravel boards for frost ground areas.



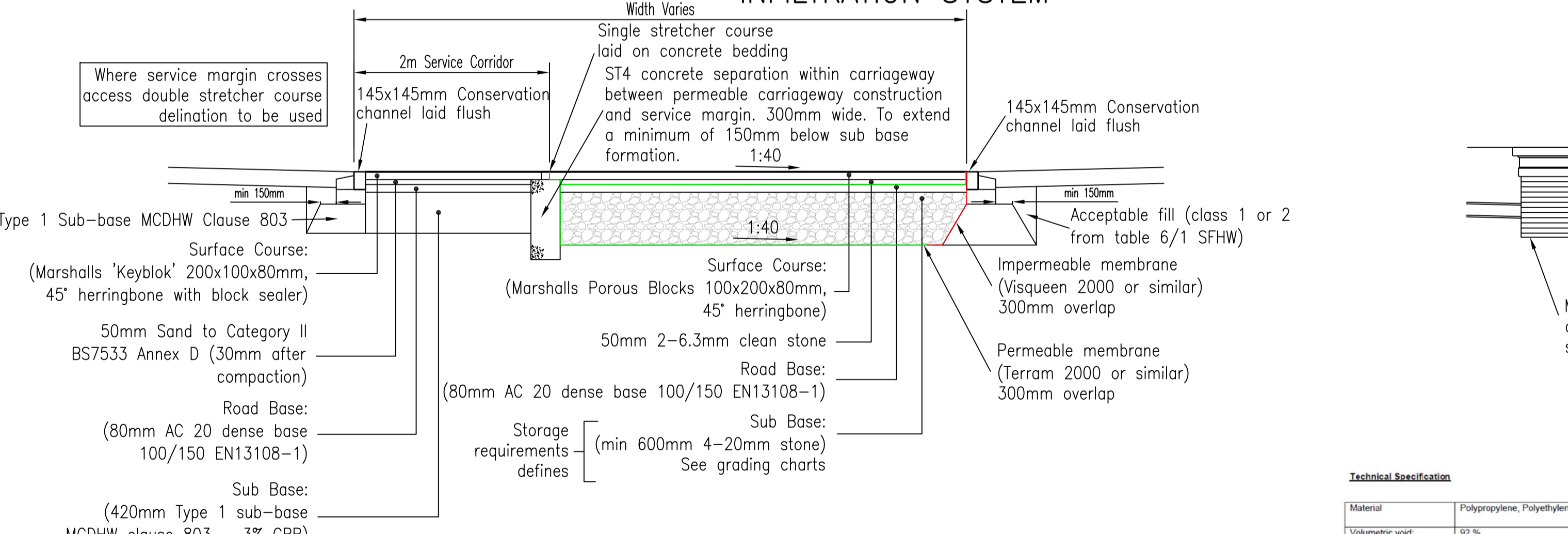
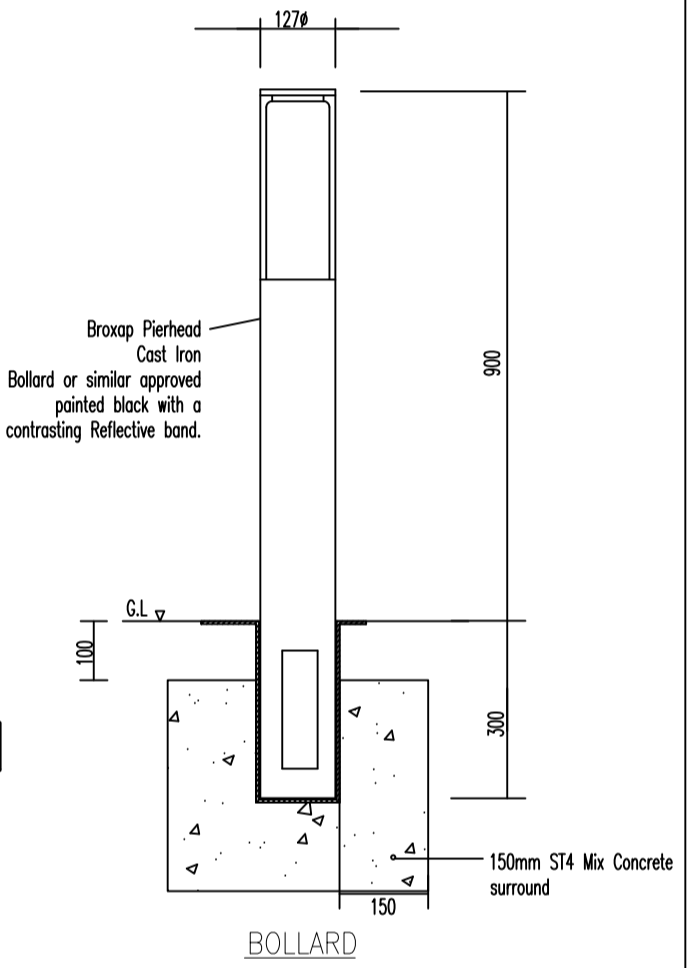
TYPICAL CARRIAGEWAY CROSS SECTION – POROUS PAVING CONSTRUCTION (SIDE STREETS) INFILTRATION SYSTEM

PERMEABLE SUB BASE GRADING CHART AND REQUIREMENTS

AFTER MAIN CONSTRUCTION WORK IS COMPLETE, ON AREAS OF POROUS PAVING: 100mm DIA CORES ARE TO BE DRILLED INTO THE ROAD BASE AT 750mm CENTRES AND FILLED WITH LAYING COURSE MATERIAL. ROAD BASE TO BE MACHINE CLEANED PRIOR TO CORE DRILLING – EXCEPT WITHIN SERVICE MARGINS

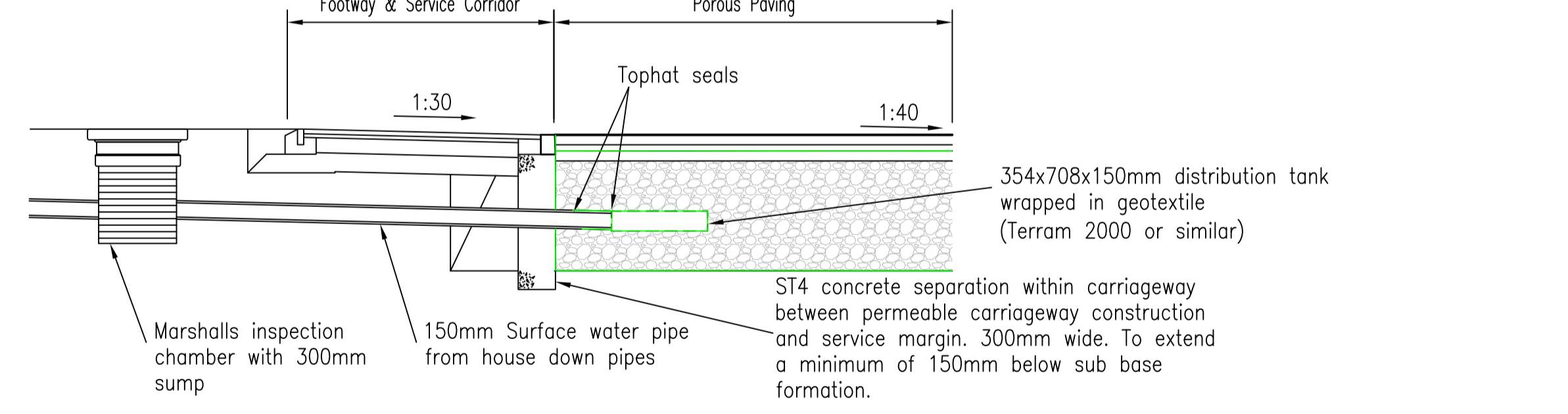


INFILTRATION POROUS PAVING SYSTEM – TO BE UNDERLAIN WITH A PERMEABLE MEMBRANE (TERRAM 1000 OR SIMILAR APPROVED)



TYPICAL CARRIAGEWAY CROSS SECTION – POROUS PAVING CONSTRUCTION (MEWS) INFILTRATION SYSTEM

TYPICAL PRIVATE DRIVE CROSS SECTION – POROUS PAVING CONSTRUCTION INFILTRATION SYSTEM



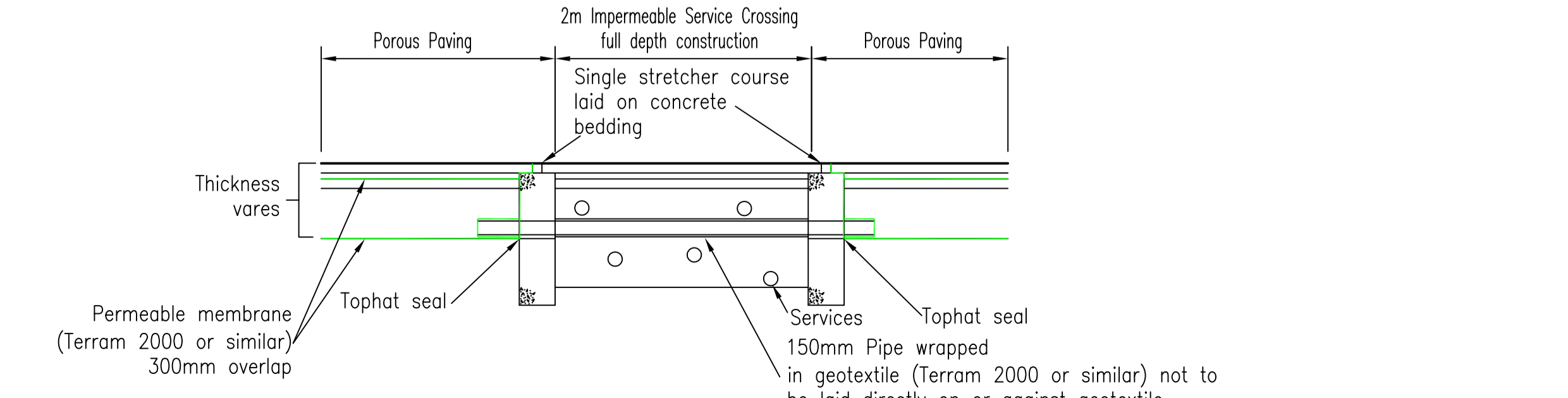
TYPICAL SECTION SURFACE WATER OUTFALL FROM HOUSE DRAINAGE

Technical Specification

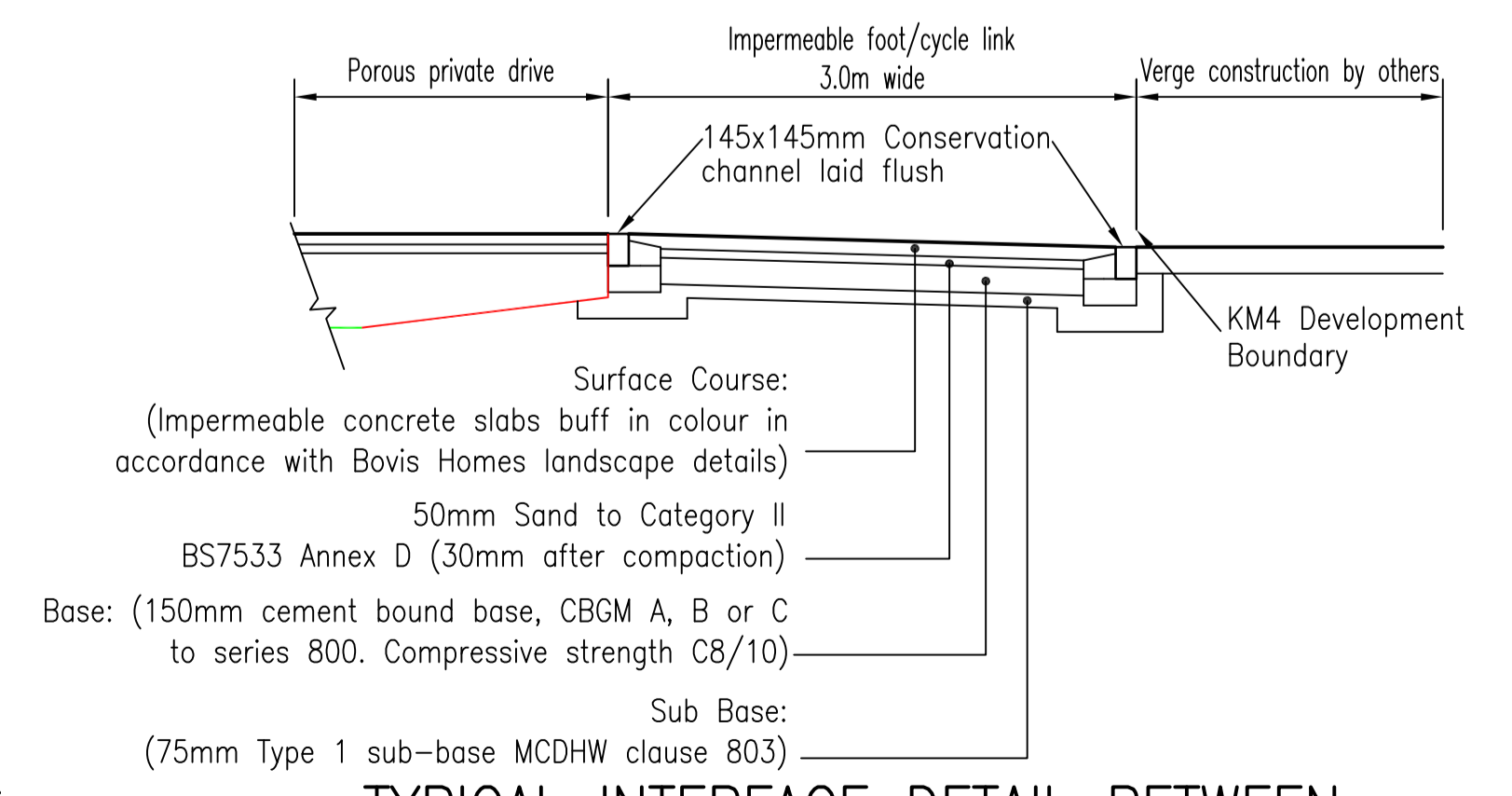
Material	Polypropylene, Polyethylene, PVC (connector)
Volumetric void	92 %
Effective perforated surface area	59 %
Compressive strength (1)	715 kN/m <sup>2</sup> (unconfined)
Compressive strength (2)	1650 kN/m <sup>2</sup> (confined in typical pavement, 130mm cover)
Nominal size: LxWx D	Single 354 x 708 x 150mm Double 708 x 708 x 150mm Triple 1062 x 708 x 150mm
Nominal volume	0.0375 m <sup>3</sup> 0.075m <sup>3</sup> 0.1125m <sup>3</sup>
Weight	3kg 6kg 9kg



POROUS PAVING DISTRIBUTION TANKS



TYPICAL LINK PIPE DETAIL FOR IMPERMEABLE SERVICE CROSSINGS



TYPICAL INTERFACE DETAIL BETWEEN PRIVATE DRIVE & CYCLE/FOOTWAY

Rev	Date	Details	By
B	29.08.2014	Section added through shared cycle/footway facility.	RM
A	20.06.2014	Porous paving details updated.	RM

Drainage Authority Approval Date

Highway Authority Approval Date

Do not scale from this drawing. Use written dimensions only. When shown relationships between slab levels and ground levels are to be checked on site. Any discrepancy or suggested modification to be reported to Design and Engineering Director.  
Note 1: This drawing is the copyright of Bovis Homes Ltd.

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DRAWING TITLE: TYPICAL HIGHWAY CROSS SECTIONS

DRAWN BY	DATE	DRAWING NO.	REV
SD	12.11.12	10109-HL-012	B

SCALE: NTS CHECKED/DATE RM