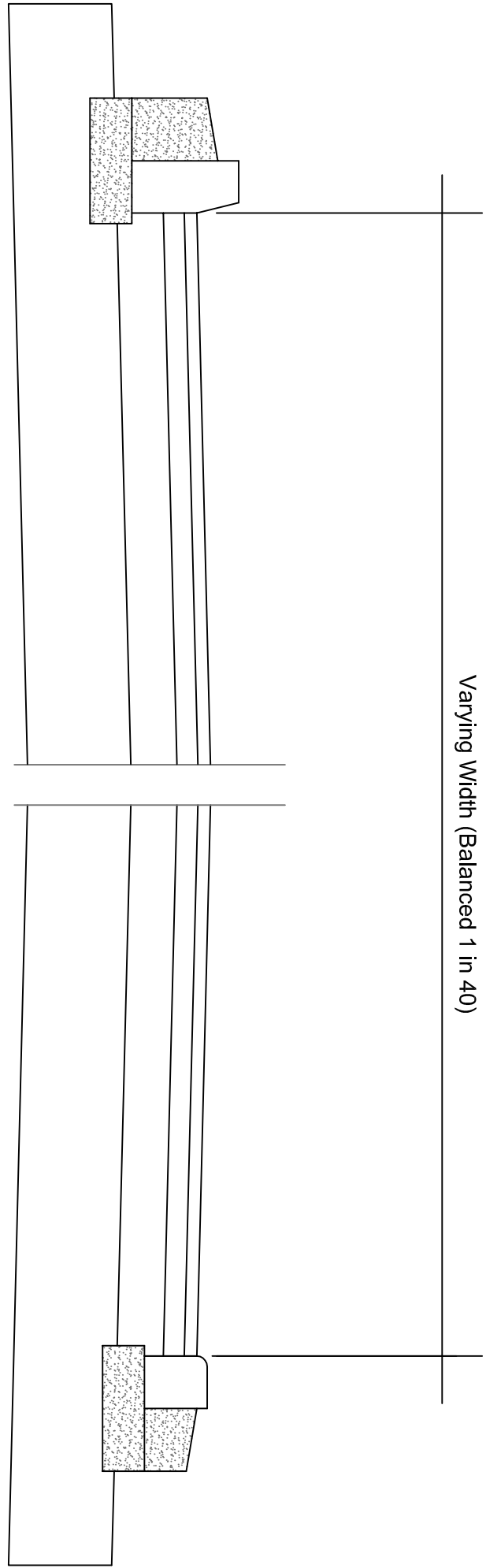
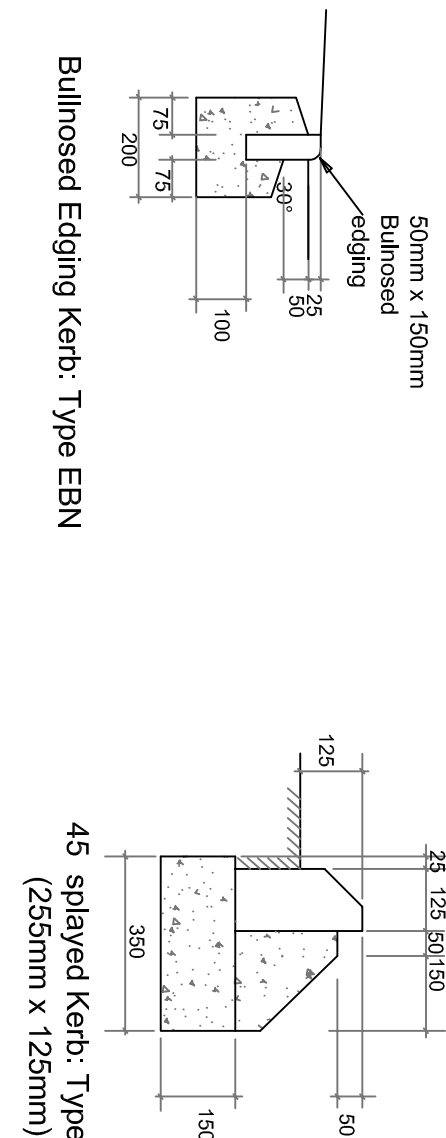
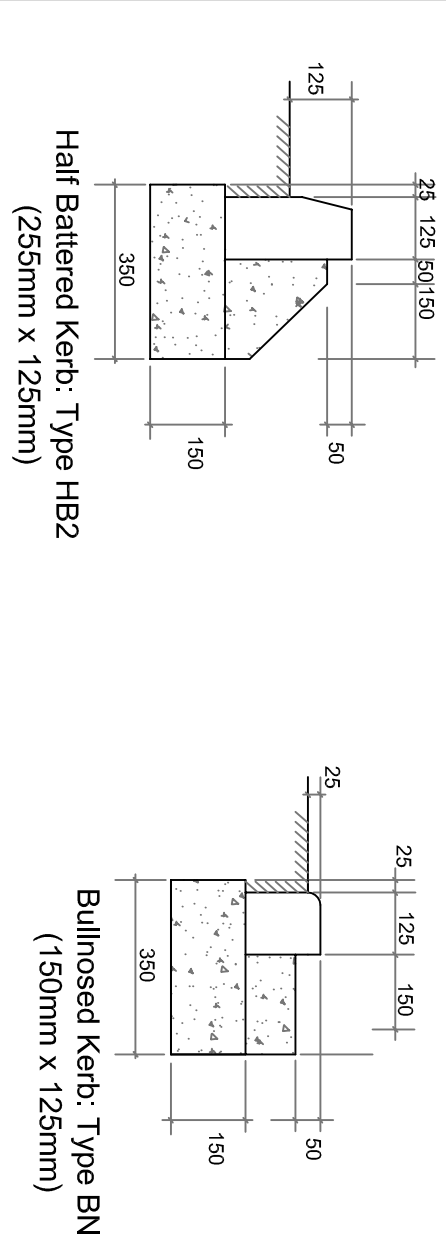
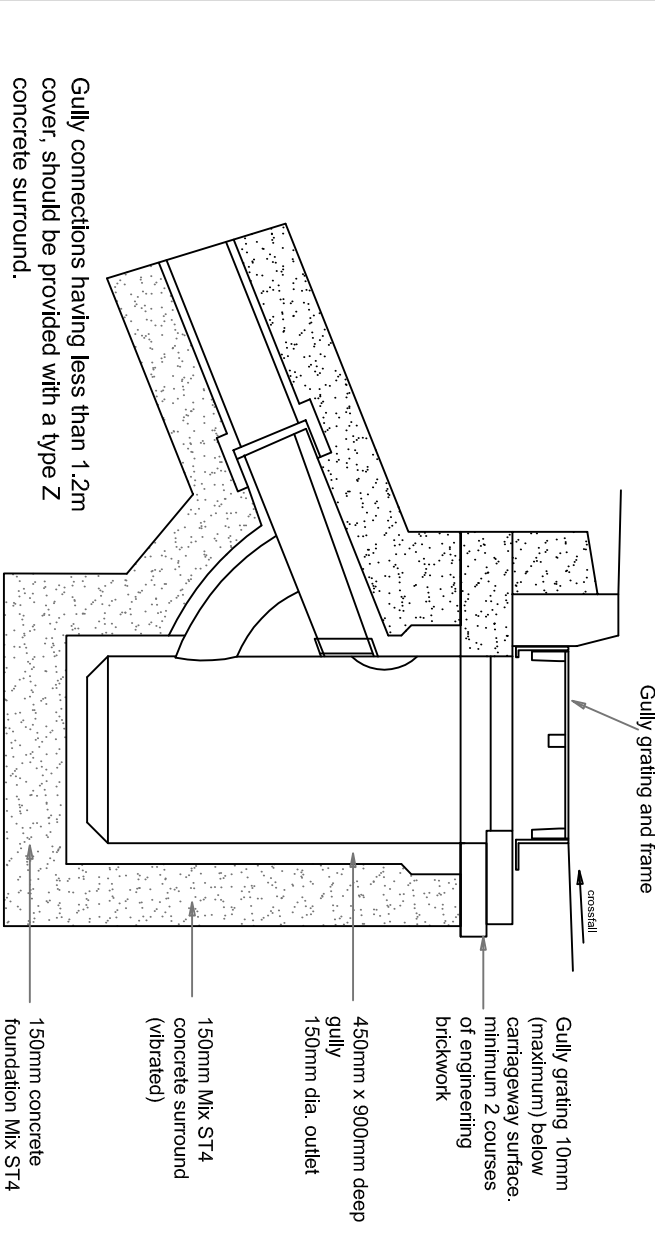


Kerbing



Gully Detail

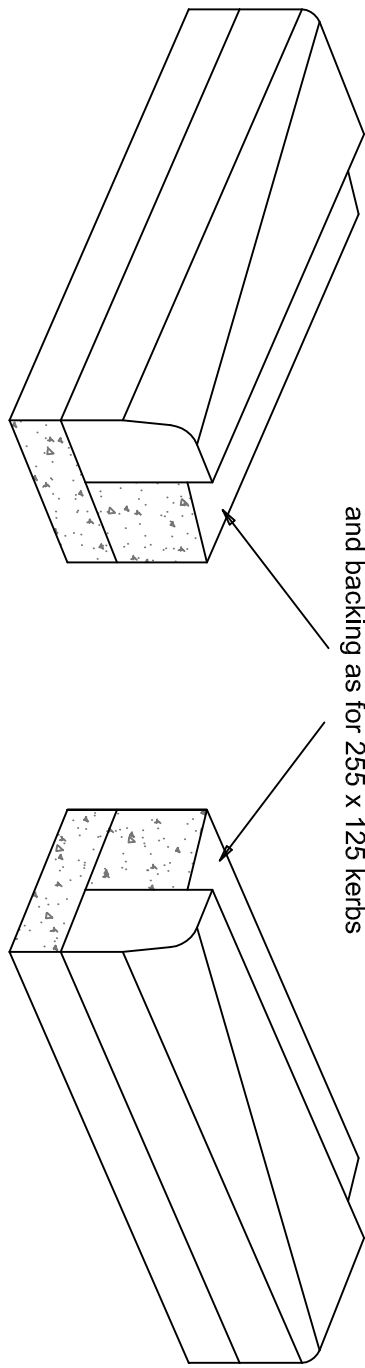


- Notes:
- Method of Construction:
 - Gully pot placed in position with temporary cover
 - All pavement courses laid except surface (wearing course)
 - Pavement excavated no more than 200mm beyond sides of gully grating and frame fixed.
 - Excavation backfilled with ST4 concrete to underside of wearing course.
 - Gully connected to F1
 - Gully & frame to BS EN 124:1994 as amended by BS7903
 - Class B400 450mm nominal width with bedding width of frame 75mm.
 - Lower order roads - single place, hinged, non-rock.
 - Brickwork beneath frame.
 - Class B Engineering bricks to BS3921, mortar to BS6628: part 3, Table 15 designation (i).
 - Gully: Precast concrete gully to BS5911, or gully may be cast in situ using plastic gully as permanent integral shutter with minimum 150mm concrete surround.

Notes:

- All Precast concrete kerbs and edgings to BS7263:3:2001
- Concrete bed and haunching ST1 Mix to BS EN 206-1:2002 and BS8500 in accordance with SHMW Clause 2602
- Kerbs and edgings may be laid directly on a fresh concrete bed within two hours of mixing, then haunching applied. Alternatively, when concrete bed has hardened, kerbs may be laid on a mortar bed.
- Mortar to Clause 2404 designation (i), mortar to be 10 to 40mm thickness.
- Concrete bed to kerbs and edgings to rest on or within sub-base layer.
- Upstand for vehicular access and pedestrian crossings to be 20mm.
- Where necessary for drainage purposes this figure shall be increased to 35mm. If tactile paving is provided for use by disabled persons the upstand shall be 0 - 6mm.

* All details to be provided in accordance with WCBC Specification

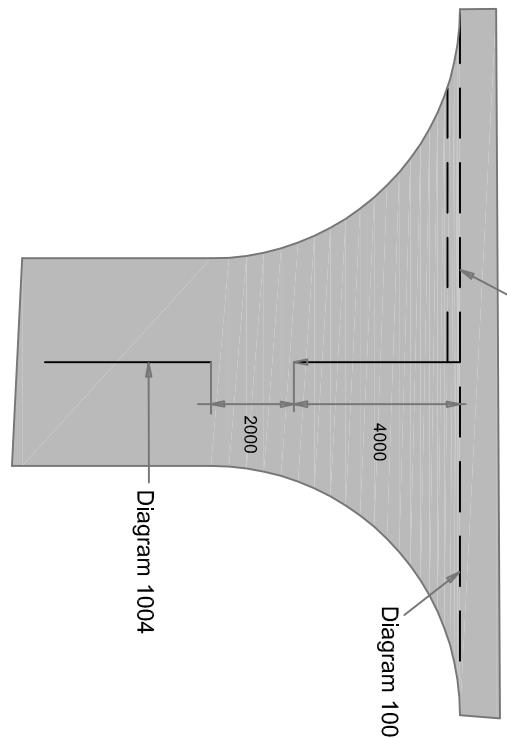


Dropped (Transition) Kerb Type:

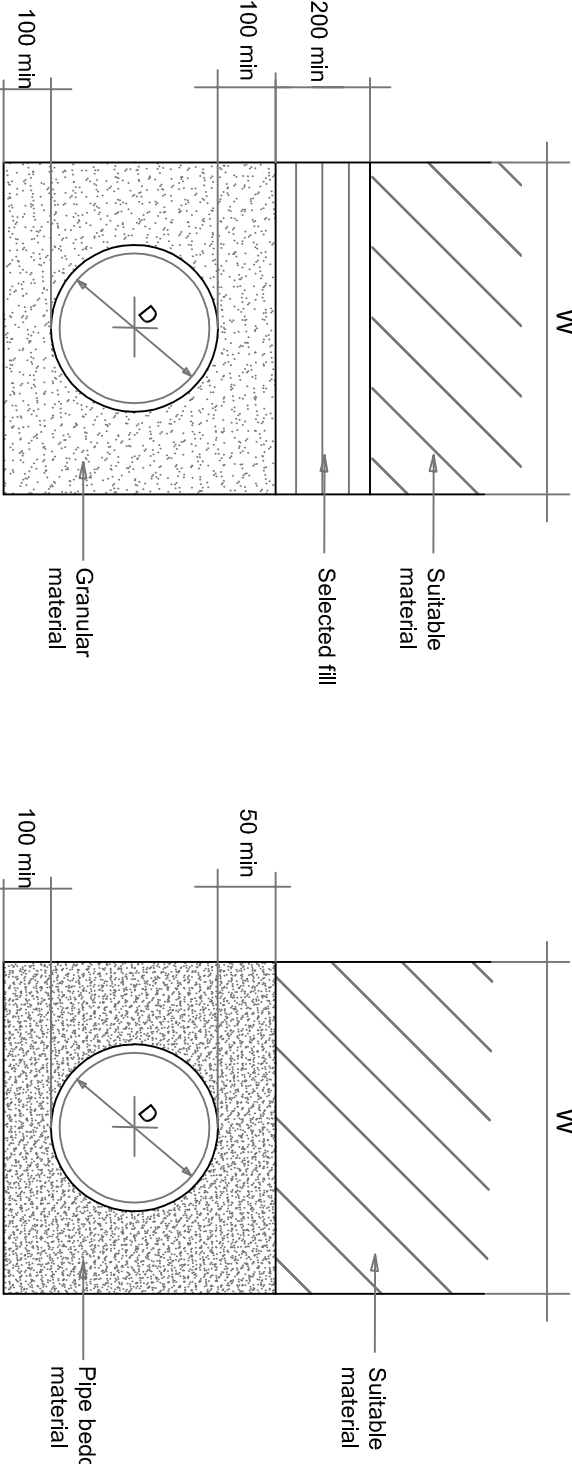
- DR1 and DL1 (HB - BN)
- DR2 and DL2 (SP - BN)

- Notes:
- All Precast concrete kerbs and edgings to BS7263:3:2001
 - Concrete bed and haunching ST1 Mix to BS EN 206-1:2002 and BS8500 in accordance with SHMW Clause 2602
 - Kerbs and edgings may be laid directly on a fresh concrete bed within two hours of mixing, then haunching applied. Alternatively, when concrete bed has hardened, kerbs may be laid on a mortar bed.
 - Mortar to Clause 2404 designation (i), mortar to be 10 to 40mm thickness.
 - Concrete bed to kerbs and edgings to rest on or within sub-base layer.
 - Upstand for vehicular access and pedestrian crossings to be 20mm.
 - Where necessary for drainage purposes this figure shall be increased to 35mm. If tactile paving is provided for use by disabled persons the upstand shall be 0 - 6mm.

White Line Junction Markings



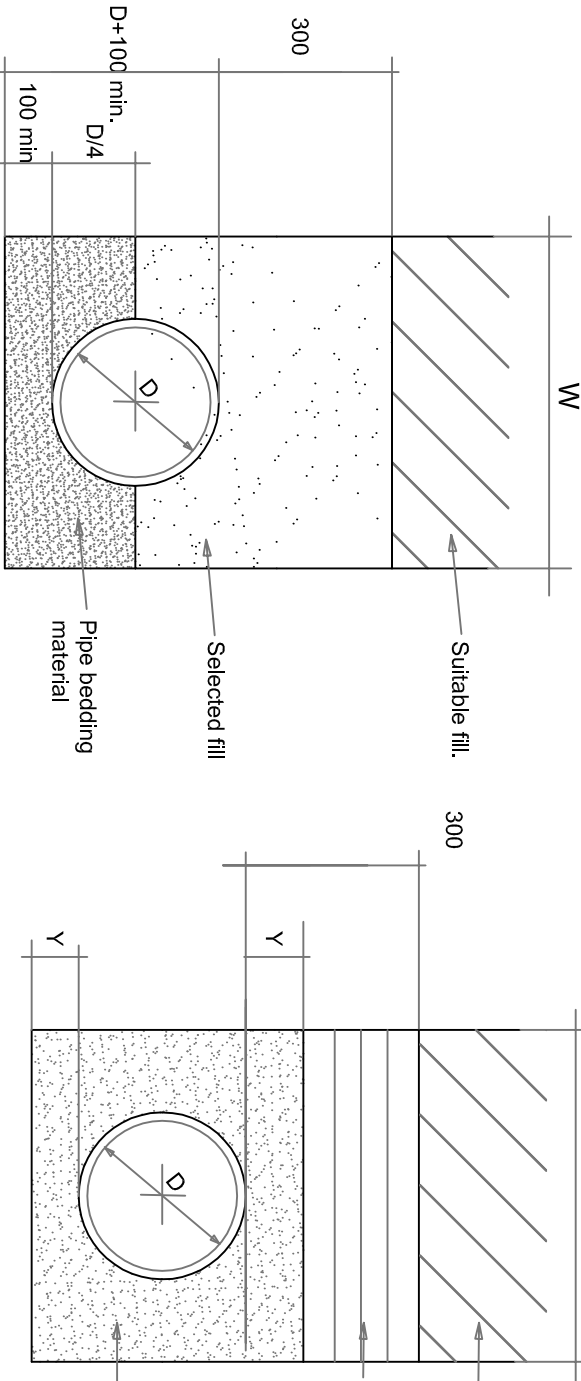
- Notes:
- All markings to comply with Traffic Signs Manual Chapter 5 - Road Markings 2003
 - The prescribed marking (diagram 1003) consist of two broken lines, each comprising 600mm marks and 500mm gaps. The lines are 200mm wide and spaced 300mm apart.
 - The prescribed marking (diagram 1009) consist of a broken line comprising 600mm marks and 500 gaps. The lines are 100mm wide.
 - The prescribed marking (diagram 1004) consist of a line 4000mm long. The lines are 100mm wide.



Granular bed and haunch

FLEXIBLE PIPE BEDDING - CLASS S

FLEXIBLE PIPE BEDDING - CLASS B



RIGID PIPE BEDDING - CLASS B

RIGID PIPE BEDDING - CLASS S

PIPE BEDDING NOTES - RIGID PIPES

Bc = External pipe diameter
W = Trench width (Bc + 300mm min, Bc + 600 max)
Y = dimension - For pipes upto 600 mm diameter, Y = 100mm over and under pipe increases to 7/8 Bc or 100mm under bannes & 50mm min, under sockets whichever is greater (400mm max.)
In rock etc use 1/4 Bc & 150mm min, under sockets, (400mm Max.)
Bedding and sidefill material shall be placed and compacted in layers not exceeding 150mm before compaction, to a finished thickness of 300mm above the crown of the pipe.
Subsequent backfilling shall be deposited in layers not exceeding 225mm and fully compacted.
Selected fill should be readily compactable, and should not contain stones larger than 40mm, lumps of clay over 75mm, timber, frozen material, vegetable matter or foreign matter.

Refer to table for specification for granular material.

BEDDING AND SIDEFILL MATERIAL FOR RIGID PIPES

Nominal Size of Pipe (mm)	Nominal Max Particle Size (mm)	Class of Bedding	Maximum CF Value	Materials Specified in British Standard
Over 300 to 500	20	S B F	0.15 0.30 0.15	14 - 20mm nominal single-size or 14 - 5mm graded
Over 500	40	S B F	0.15 0.30 0.15	14, 20, or 40mm nominal single-size crushed rock or 14 - 5mm or 20 - 5mm graded or 10 - 5mm graded

The Table (A1 from MS 4409-02) shows specification for processed granular material. Maximum particle size and compaction fraction must also apply to as-dig material.

Processed granular material may include aggregates to BS 882, air-cooled blast furnace slag to BS 1047 and sifted pulverised fuel ash to BS 3797

As-dig material is excavated material which is suitable for use as bedding and sidefill without processing. It shall not be contaminated with domestic, building or industrial waste and shall be free of organic matter or combustible material.

PIPE BEDDING NOTES - FLEXIBLE PIPES

Bc = External pipe diameter
W = Trench width (Bc + 300mm min, Bc + 600 max)
Bedding and sidefill material shall be placed and compacted in layers not exceeding 100mm. Hand tamp the material fully at the sides of the pipe while tamping lightly over the crown.
Continue hand tamping until a finished layer of 300mm has been placed over the pipe.
Subsequent backfilling shall be deposited in layers not exceeding 225mm and fully compacted.
Selected fill should be readily compactable, and should not contain stones larger than 40mm, lumps of clay over 75mm, timber, frozen material, vegetable matter or foreign matter.

Refer to table for specification for granular material.

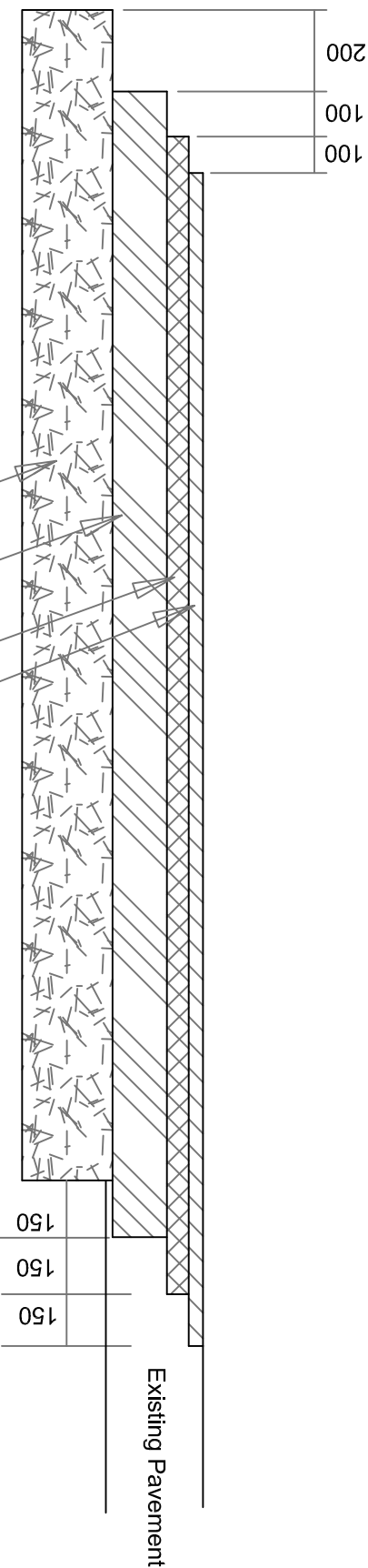
BEDDING AND SIDEFILL MATERIAL FOR FLEXIBLE PIPES

Nominal Size of Pipe (mm)	Nominal Max Particle Size (mm)	Maximum CF Value	Materials Specified in British Standard
100	10	0.15	10mm nominal single-size
Over 100 to 150	15	0.15	10 or 14mm nominal single size or 14 - 5mm grade
Over 150 to 300	20	0.15	10, 14 or 20mm nominal single-size or 20-5mm graded.

The Table (A2 from MS 4409-02) shows specification for processed granular material. Processed granular materials may be included aggregates to BS982, air-cooled blast furnace slag to BS 1047 and lightweight aggregates to BS3797.

- * All details to be provided in accordance with WCBC Specification
- A terrain or similar geotextile shall be provided where a CBR of 3% or less is achieved.

Proposed Carriageway Widening/Passing Area Construction



40mm SMA Surface Course with 50 pen binder to BS EN 13108-5:2006 (DTP Specification Clause 942).

60mm Dense Binder Asphalt Concrete (Recipe Mix) Course to BS EN 13108 -1- AC20 dense bin 40/60. (DTP Specification Clause 905).

100mm Dense Base Asphalt Concrete (Recipe Mix) Road-base to BS EN 13108 -1- AC32 dense bin 40/60. (DTP Specification Clause 905).

200mm MOT Type 1 Sub-base Material to DTP Specification Clause 803.

Woodsyde Developments Limited
(Incorporating Andrew Gough Development Consultant)

Rev B: Details amended to LHA comments
Rev A: Details amended to LHA comments

AG
13.07.16

Project:
Proposed Development on Land at Plas Fron,
Portgwan, Cross Lanes, Wrexham

Client:
A, O & H Owen

Drawing Title:
Road and Drainage Construction Details

Scale:
NTS @ A1
Date:
November 2015

Drawing No:
PF-RC-502: Rev B

The Poppies, Lower Road, Harmer Hill, Shropshire, SY4 3QX
Tel: 01939 290483 Mob: 07527 352084
email: andrew@awgough.co.uk