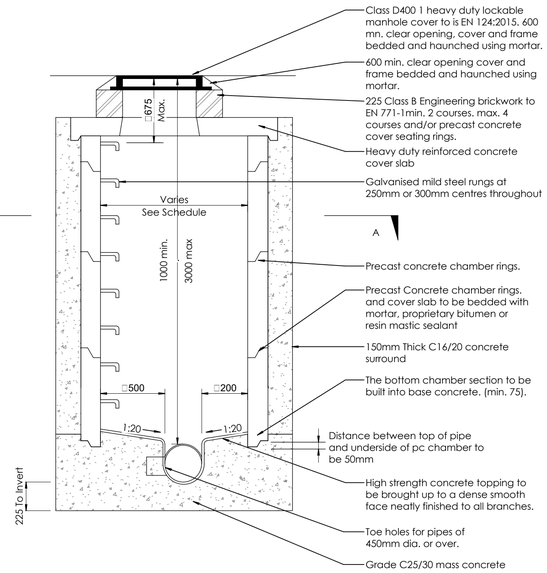
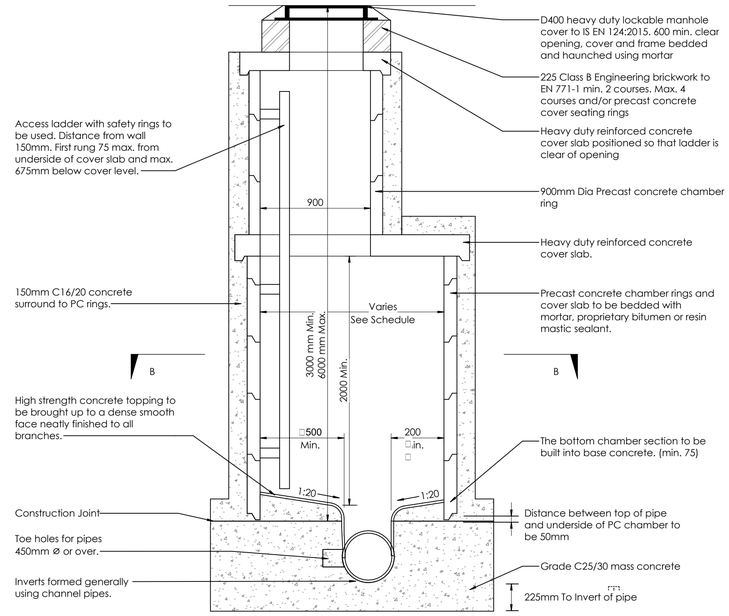


Inlet Dia. (mm)	Drop Dia. (mm)
225	300
300	375
375	375
450	450
525	450
600	450
750	600
900	600

TYPICAL BACKDROP DETAIL



PRECAST CONCRETE RING MANHOLE DETAIL TYPE J (GDSDS)



PRECAST CONCRETE RING MANHOLE DETAIL TYPE K

Notes:

1. Do not scale. Use figured dimensions only.

2. This drawing is to be read in conjunction with all other relevant architectural and engineering drawings.

3. Type a granular fill shall consist of washed PEA gravel. All material shall pass a 19mm B.S. Sieve test and shall be retained by a 4.75 B.S sieve test.

4. Selected fill shall be free from stones greater than 25mm in size, Builders rubble vegetable matter and lumps of clay greater than 75mm in size and shall be compacted in 150mm layers.

5. In open spaces backfill shall consist of suitable selected excavated material. Under paved area backfill shall consist of suitable approved granular fill. General backfill shall be compacted in layers not exceeding 300mm thick.

6. Concrete bed and surround shall be used on all pipes where cover to the soffit of the pipe is less than 12m in roads, footpaths and grass margins and 0.9m in open spaces and feilds.

7.All concrete for pipe bedding, haunching and surrounds shall be grade 20N/20.

8. All manholes shall be watertight to the satisfaction of the engineer.

9. Formwork to reinforced concrete and mass concrete shall be Class F2.

10. Class U2 finish to the top of slabs. Reinforcement to slabs to engineers details.

11. 200mm thick CL. 30/20 mass concrete foundations. 225 thick precast R.C. roof slab in CL 30/20 concrete. Cover to steel to be 40mm.

12. Toe holes to be provided in benching of sewers greater than 450mm diameter for access to invert. Safety chain on sewers 600mm. Dia. or greater mild steel safety chain shall be 10mm. Nominal size grade M(H) non calibrated chain, type 1, complying with BS4942 part 2.

13. When depth of manholes to invert is greater than 3.5m, ladders shall be used instead of rungs. Fixed ladders should meet the dimensional requirements of BS4211 except that stringers should not be less than 65 x 20mm in section and rungs 25mm in diameter .

14. Ladder stringers should be adequately supported from the manhole wall at intervals of not more than 3.0m stringers should be bolted to cleats to facilitate renewal.

15. All ladders, rungs, handrails, safety chain, etc. shall be hot dipped galvanised to BS729.

16. All works to be carried out in accordance with the requirements of relevant authority.

17. All works to be carried out in accordance with the requirements of the building regulation 2010 section H "Drainage and Waste Water Disposal" and with local authority requirements.

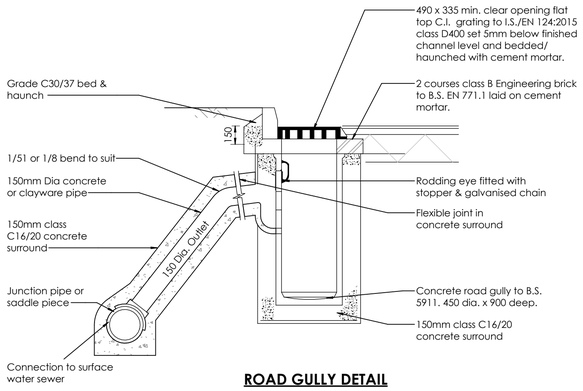
18. Any alternative details proposed by the contractor shall be submitted to the engineer at least 2 weeks prior to the construction of the drain.

19.Minimum spacing of access points to be in accordance with building regulations technical guidance document section 4 table 10.

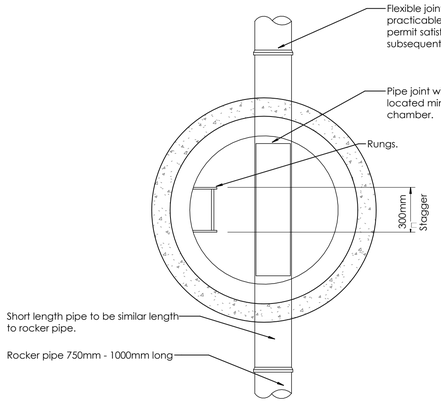
20. Details of materials for construction refer to building regulations technical guidance document section 4 table 11.

21. Backfill of all inspection chambers to be 808 backfill in 200mm layers.

22. Installation of plastic pipes and fittings, gullies, A.J's etc to be strictly in accordance with manufacturers instructions.



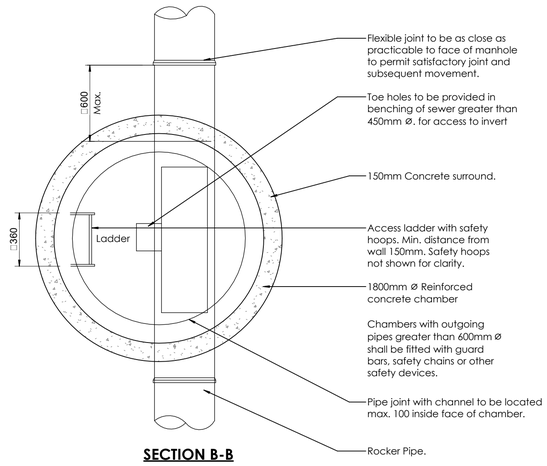
ROAD GULLY DETAIL



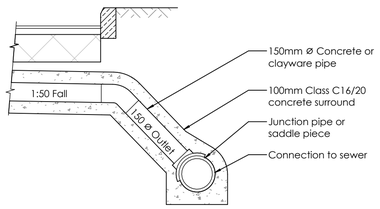
SECTION A-A

Pipe Diameter	Rocker Pipe Length
150 - 450	0.5 - 0.75
451 - 750	0.75 - 1.0
750 >	Seek Guidance

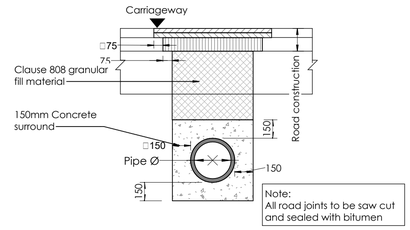
Diameter of Largest Pipe in Manhole	Precast Concrete Ring Size
Less than 375mm	1200 Dia
375mm to 450mm	1350 Dia
500mm to 700mm	1500 Dia
750mm to 900mm	1800 Dia
950mm to 1200mm	2100 Dia
1250mm to above	2400 Dia



SECTION B-B



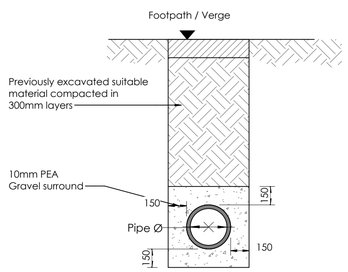
TYPICAL SADDLE DETAIL



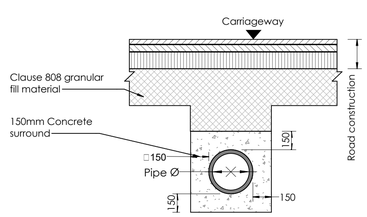
TYPICAL PIPE BEDDING AND REINSTATEMENT DETAILS TRAFFICKED AREAS (ROADWAY) LESS THAN 1200MM TO PIPE CROWN

Normal Internal Diameter	Minimum Trench Width mm	Maximum Trench Width mm
100	450	650
150	500	700
225	600	800
300	700	900
375	950	1150
450	1050	1250
525	1150	1350
600	1250	1450
675	1350	1550
750	1400	1600
825	1500	1700
900	1950	2150
1050	2100	2300
1200	2300	2500
Above 1200	Pipe diameter plus 800mm	Outside diameter plus 1000mm

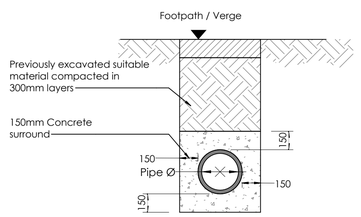
MAXIMUM AND MINIMUM TRENCH WIDTHS



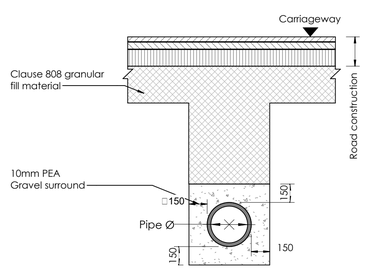
TYPICAL PIPE BEDDING DETAILS NON TRAFFICKED AREAS GREATER THAN 900MM TO PIPE CROWN



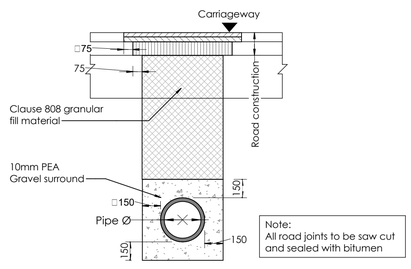
TYPICAL PIPE BEDDING DETAILS TRAFFICKED AREAS LESS THAN 1200MM TO PIPE CROWN



TYPICAL PIPE BEDDING DETAILS NON TRAFFICKED AREAS LESS THAN 900MM TO PIPE CROWN



TYPICAL PIPE BEDDING DETAILS TRAFFICKED AREAS GREATER THAN 1200MM TO PIPE CROWN



TYPICAL PIPE BEDDING AND REINSTATEMENT DETAILS TRAFFICKED AREAS (ROADWAY) GREATER THAN 1200MM TO PIPE CROWN

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REV.	DRAWN	DATE	DETAILS
A	D.O'S.	27.04.'26	Issued for Planning

CLIENT: Dipharma Unlimited Company.

PROJECT: Development at Countess Road, Killarney, Co. Kerry

DRAWING TITLE: Surface Water Drainage Details (Sheet 1 of 2)

SHEET	SCALE	DRAWN	CHECKED	APPROVED	PROJECT NO.	DRAWING NO.	STATUS/ISSUE
A1	1 : 25	D.O'S.	S.O'G.	L.O'T	7334	0027	A