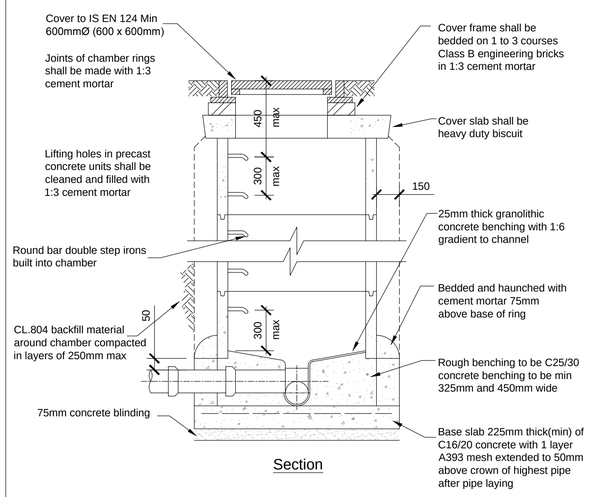
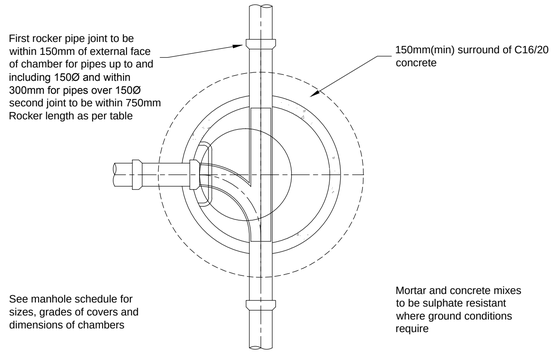


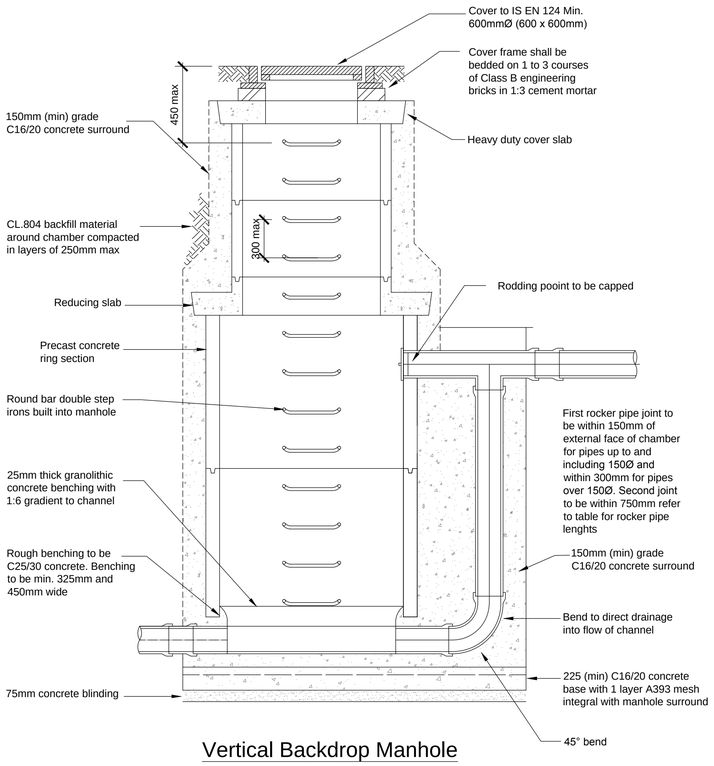
Section



Plan

Precast Manhole With Open Channel (Max. to 3m Deep)

Scale: 1:20



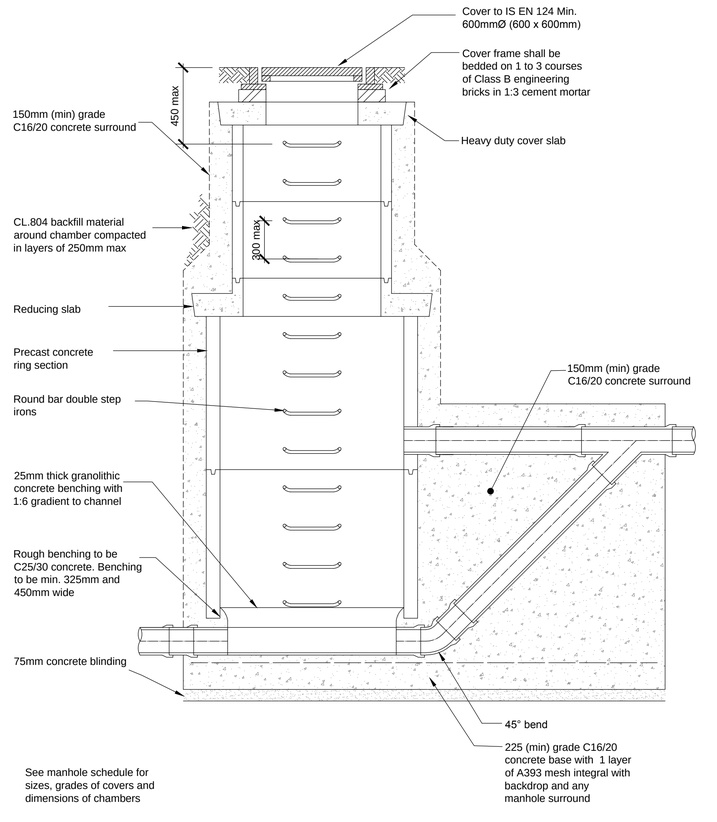
Vertical Backdrop Manhole

Scale: 1:20

Corner Manhole Sizes	
Pipe Ø mm	Manhole size Ø
100 - 300	1.2m Ø
375 - 525	1.5m Ø
600 - 900	1.8m Ø

Rocker Pipes	
Pipe Ø mm	Rocker Pipe Length
150 - 600	0.6m
600 - 750	1.0m
Over 750	1.25m

Manhole Sizes	
Pipe Ø mm	Manhole Size Ø
100 - 375	1.2m Ø
450 - 750	1.5m Ø
900 <	1.8m Ø



See manhole schedule for sizes, grades of covers and dimensions of chambers

Typical Detail Oblique Backdrop Manhole

Scale: 1:20

Notes :

Manhole Construction

Concrete manholes shall be constructed of precast units complying with I.S.420 and shall be of the dimensions as shown on the drawing. the base, and benching shall be formed in situ of Grade C16/20 concrete. The base shall be 225mm thick and the channel be purpose made half round channels. the precast rings shall be surrounded in 150mm thick Grade C16/20 concrete.
A flexible joint shall be provided to each pipe within 500mm of the inner face of the manhole wall. projecting pipes shall be surrounded with Grade C16/20 concrete with the base been cast monolithically with the manhole base. a further "rocker" pipe shall be provided as per rocker pipe table.

Covers

Manhole covers and frames to comply with the requirements of IS/EN 124:1994. covers in roadways to be an approved minimum Class D400 with 600mmØ (600x600mm) clear opening. covers shall be the EJ covers Noroc cover unless noted otherwise.

Ladder Rungs

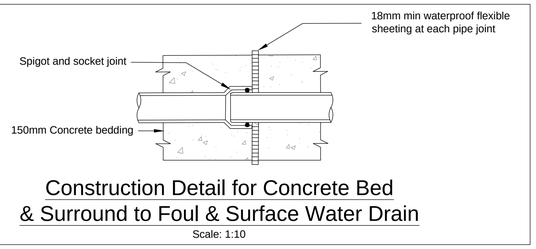
Ladder rungs shall be 20mm diameter mild steel heavily galvanised after manufacture as shown on the drawing and fitted at 300mm centres. length embedded in wall 125mm.

Access Ladders

Access ladders to be manufactured from mild steel with 65mm x 12mm stringers 300mm apart with 20mm diameter rungs at 300mm c/c. Mild steel stays 65mm x 12mm to be provided at intervals not exceeding 2.4m. Ladder and stays to be heavily galvanised to bs 729 after manufacture. The ladder is to be fixed with 18mm diameter stainless steel bolts.

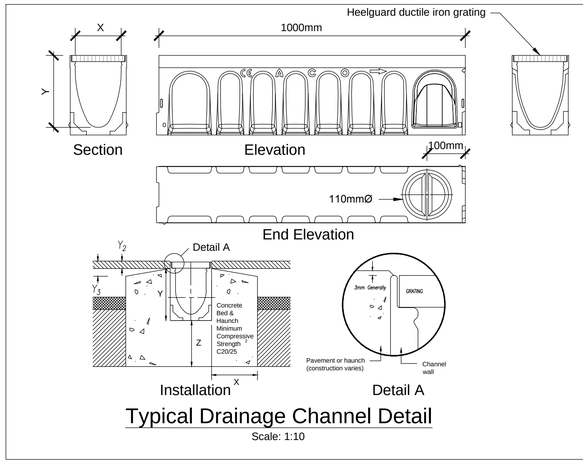
Benching

Benching is to be formed in Grade C25/30 concrete and should rise vertically from the top edge of the channel to a height not less than that of the soffit of the outlet and slope upwards to meet the wall of the manhole at a gradient of 1:6 (min. rise 25mm). It should be floated with a steel float to a smooth hard surface with a 25mm thick coat of 1:1 cement mortar laid while the benching concrete is still green.



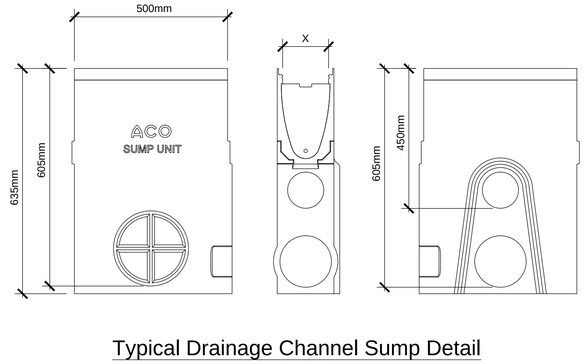
Construction Detail for Concrete Bed & Surround to Foul & Surface Water Drain

Scale: 1:10



Typical Drainage Channel Detail

Scale: 1:10



Typical Drainage Channel Sump Detail

Scale: 1:10

Rev	Date	By	Chkd	Appd
PL1	11/12/15	J.B.	J.B.	JMacC
Issued for Planning				

ARUP
15 Oliver Plunkett Street
Cork, Ireland
Tel +353 (0)21 427 7670 Fax +353 (0)21 427 2345
www.arup.com

Client: INDAVER

Project Title: Ringaskiddy Resource Recovery Centre

Drawing Title: Typical Drainage Details Sheet 1 of 2

Scale at A1: As Shown
Role: Site Infrastructure
Suitability: Planning
Arup Job No: 238129-00
Rev: PL1
Name: C-000-080

Do not scale