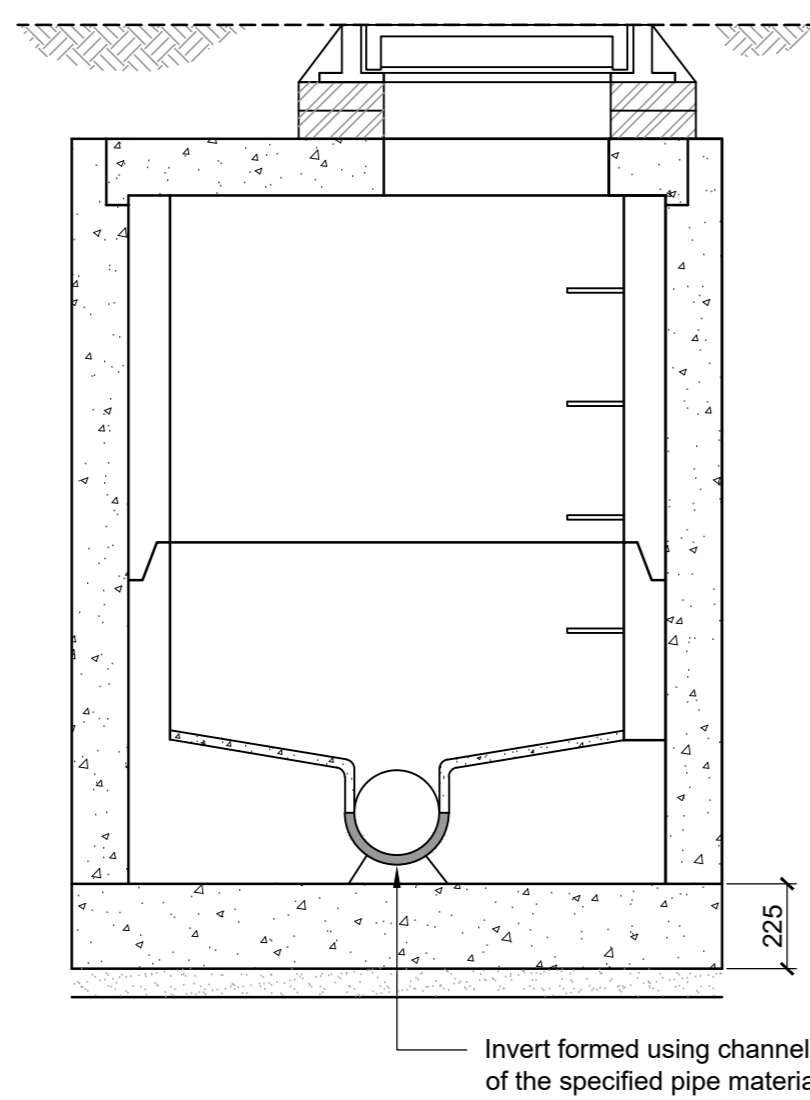
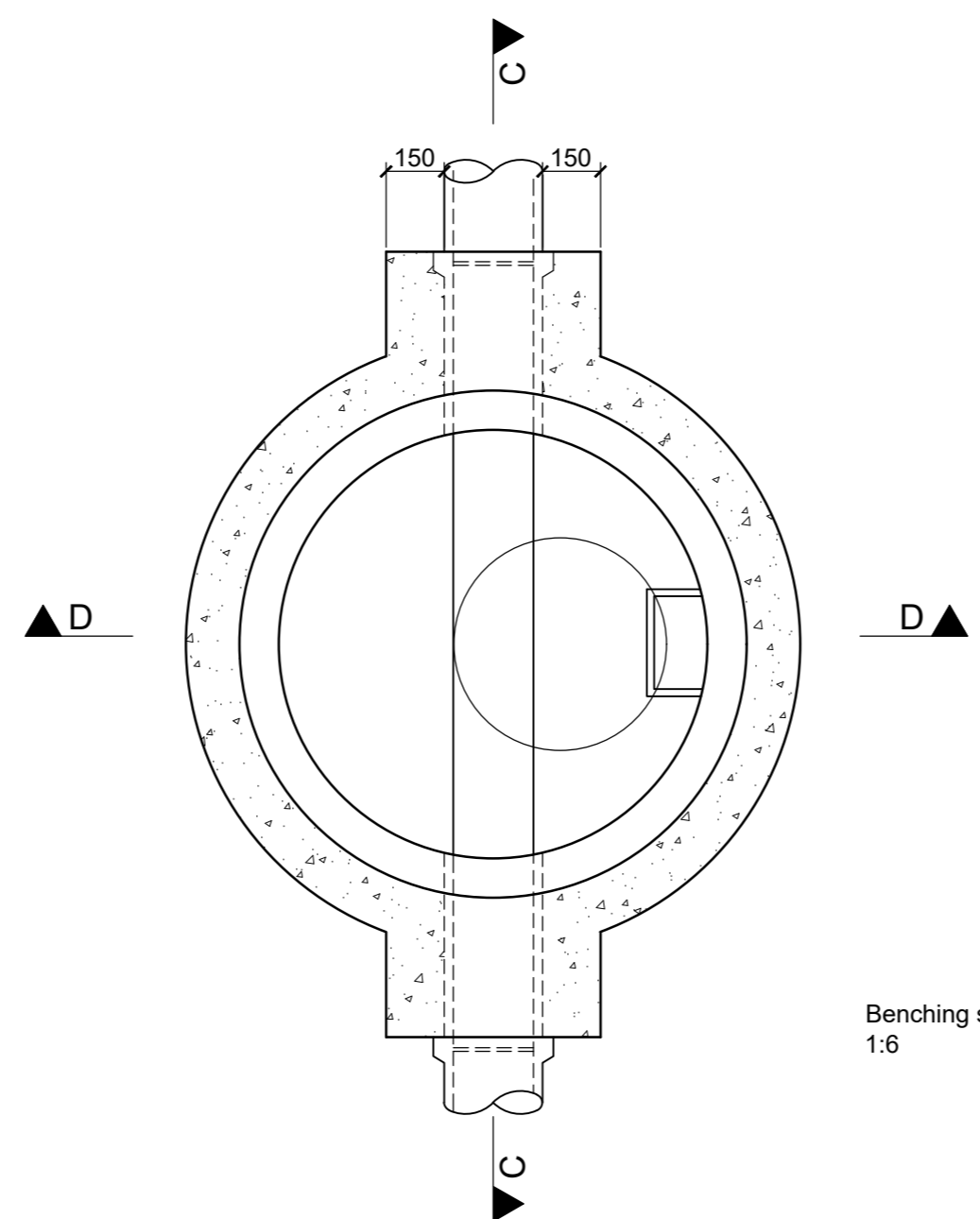


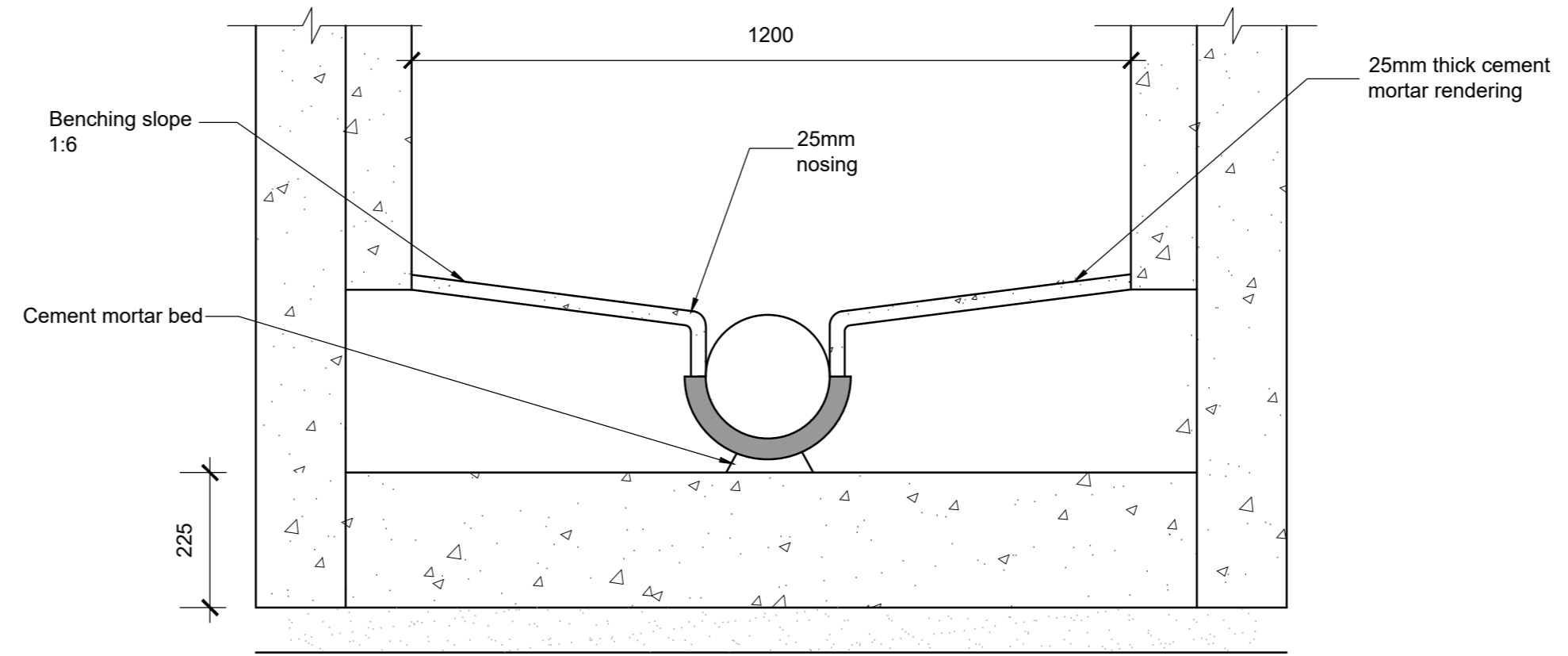
Section C-C



Section D-D



Sectional plan



Benching Detail
1:10

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 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 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 C16/20 CONCRETE WITH THE BASE BEEN CAST MONOLITHICALLY WITH THE MANHOLE BASE. A FURTHER 'ROCKER' PIPE SHALL BE PROVIDED FOR PIPES UP TO 450mm DIA. OF 500mm TO 750mm LENGTH, AND PIPES GREATER THAN 450mm DIA. 750mm TO 1000mm LENGTH.

COVERS
MANHOLE COVERS AND FRAMES TO COMPLY WITH THE REQUIREMENTS OF IS EN 124. COVERS IN ROADWAYS TO BE AN APPROVED MINIMUM GLASS D400 WITH 60mm CLEAR OPENING. COVERS SHALL BE THE EJ COVERS NOROC COVER UNLESS NOTED OTHERWISE.

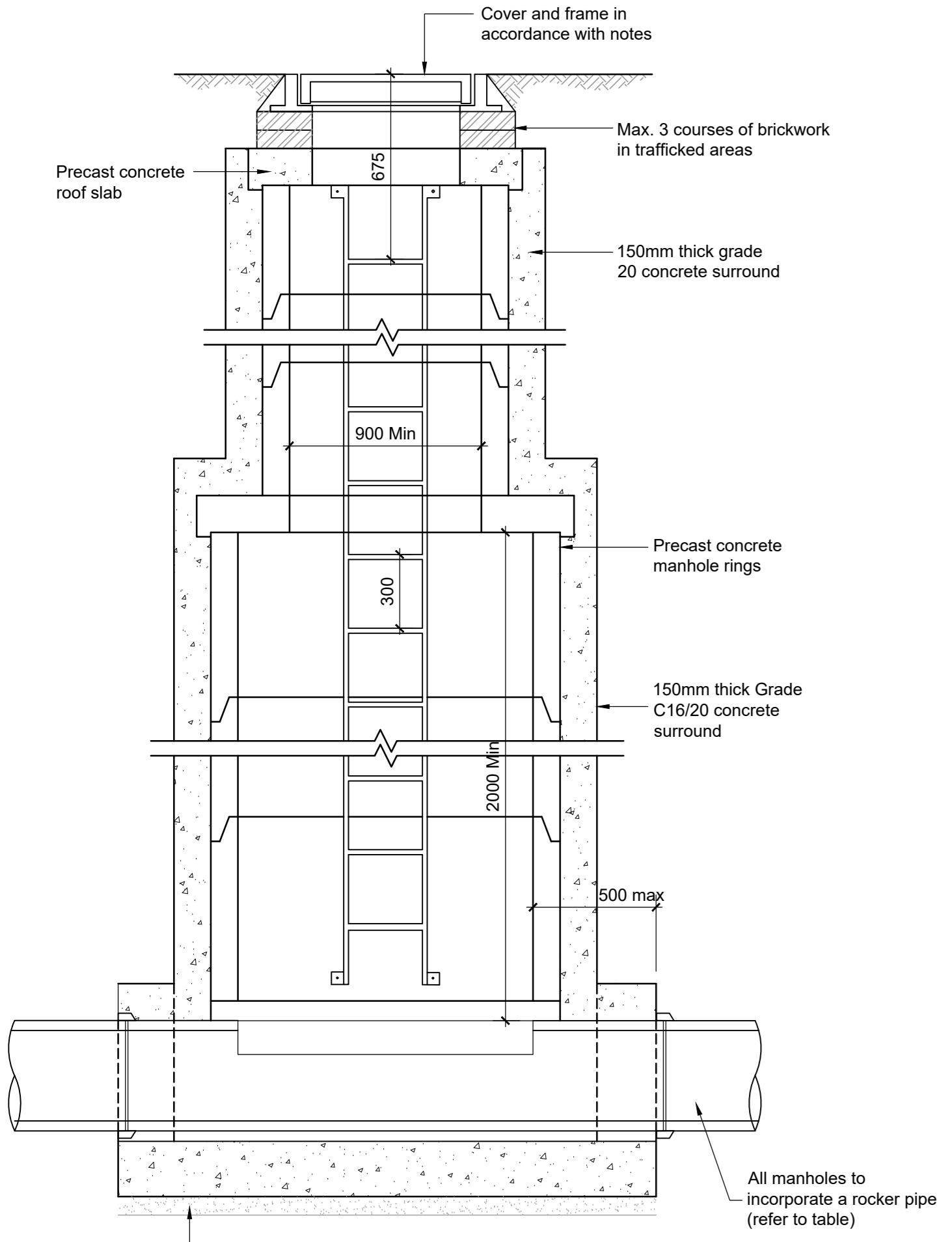
LADDER RUNGS
LADDER RUNGS SHALL BE 20mm DIAMETER MILD STEEL HEAVILY GALVANISED AFTER MANUFACTURE AS SHOWN ON THE DRAWING AND FITTED AT 300mm CENTRES. LENGTH EMBEDDED IN WALL 125mm.

ACCESS LADDERS
ACCESS LADDERS TO BE MANUFACTURED FROM MILD STEEL WITH 65mm x 12mm STRINGERS 300mm APART WITH 20mm DIAMETER RINGS 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.

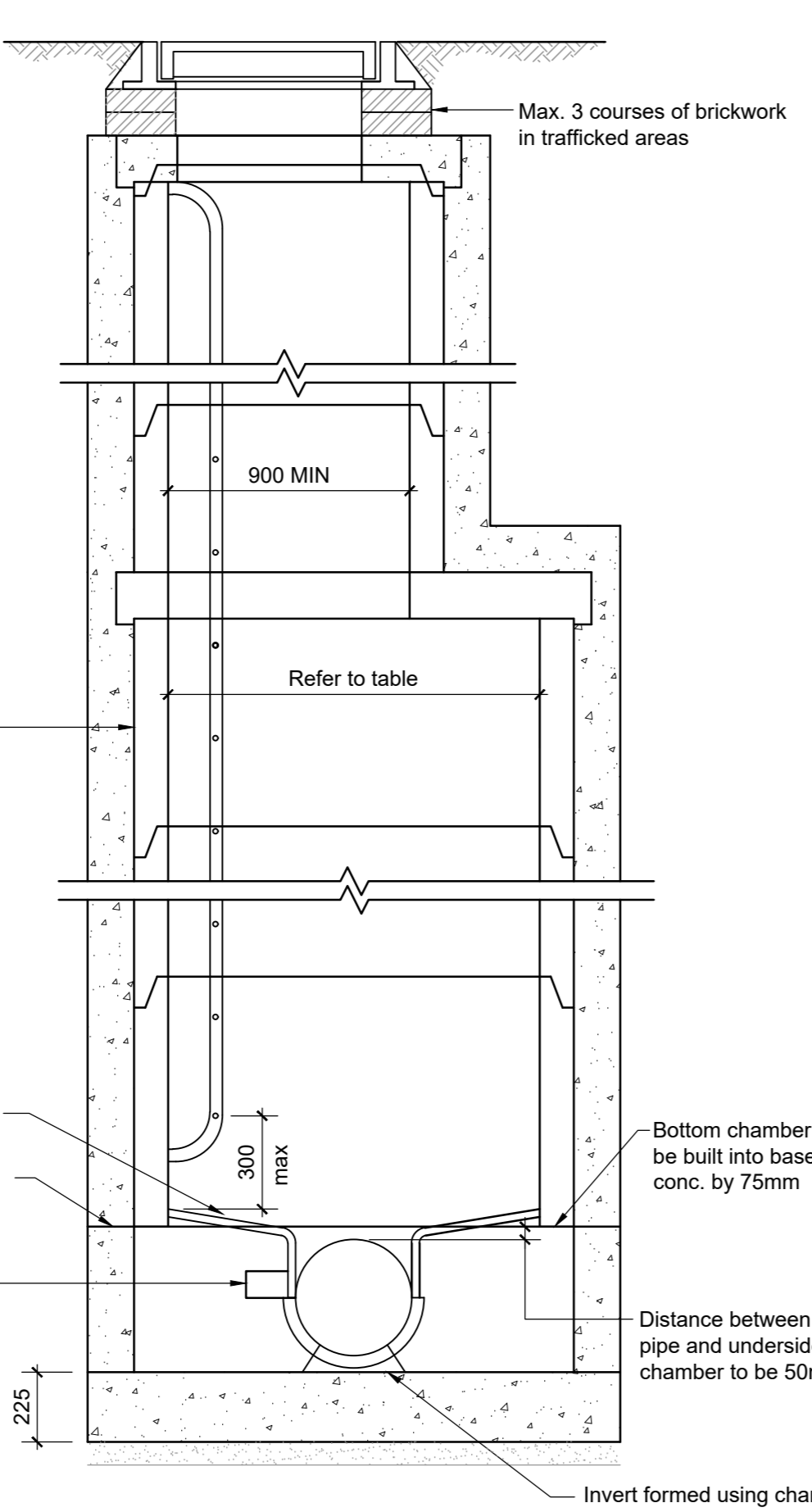
BENCHING
BENCHING IS TO BE FORMED IN C25/30 CONCRETE AND SHOULD RISE VERTICALLY FROM THE TOP EDGE OF THE CHANNEL TO A HEIGHT NOT LESS THAN THAT OF THE SOFFIT OF THE OUTLET AND SLOPE UPWARDS TO MEET THE WALL OF THE MANHOLE AT A GRADIENT OF 1:6 (MIN. RISE 25mm). IT SHOULD BE FLOATED WITH A STEEL FLOAT TO A SMOOTH SURFACE WITH A 25mm THICK COAT OF 1:1 CEMENT MORTAR LAID WHILE THE BENCHING CONCRETE IS STILL GREEN.

- Notes:
- Do not scale this drawing, if in doubt ask the Engineer.
 - Drawings to be read with all relevant drawings.
 - All products and materials must carry the CE mark confirms product specification.
 - All details to be in line with Irish Water Standard Details and Code of Practice (where related to foul water drainage).

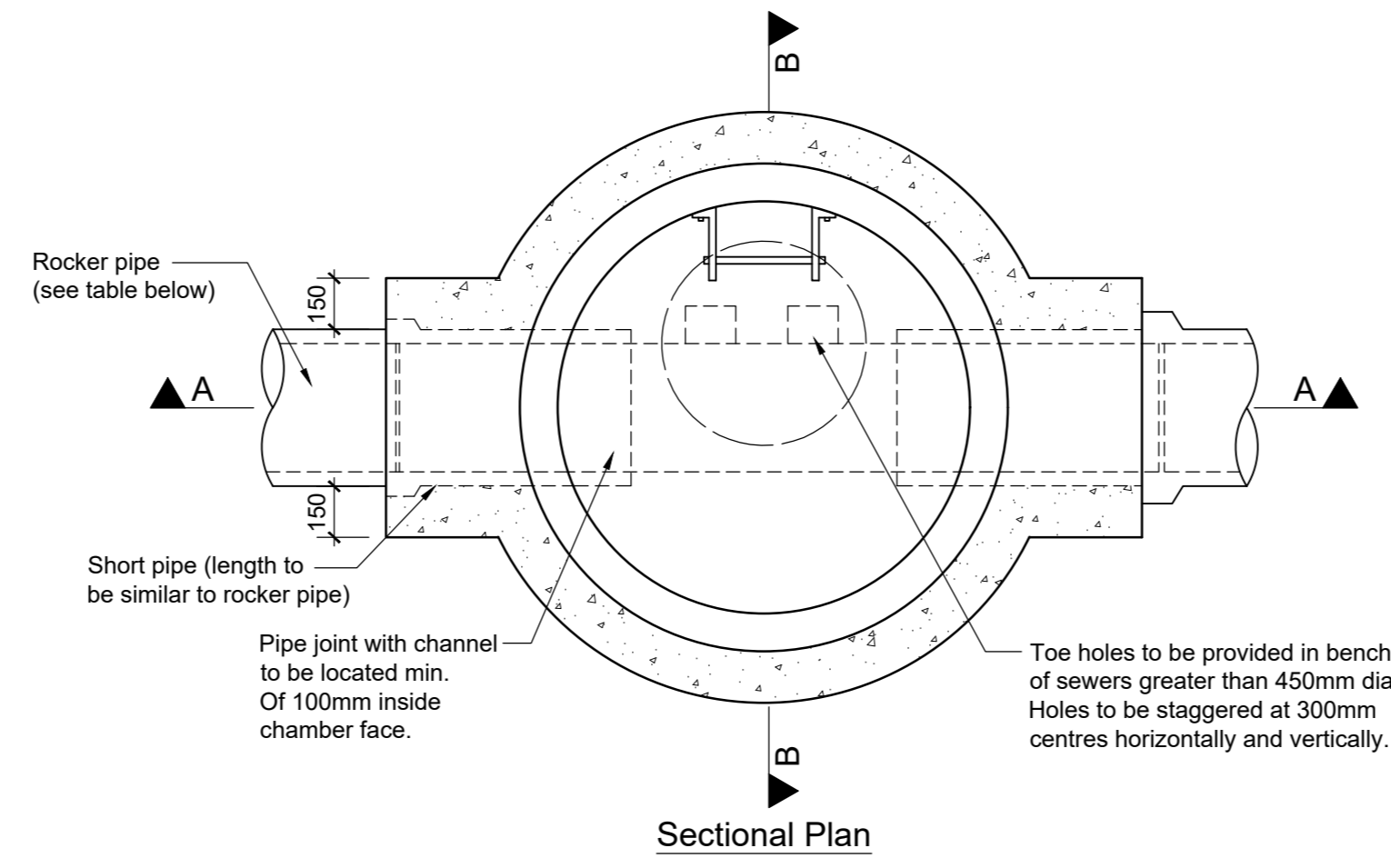
Shallow Precast Concrete Manhole
1:20



Section A-A



Section B-B

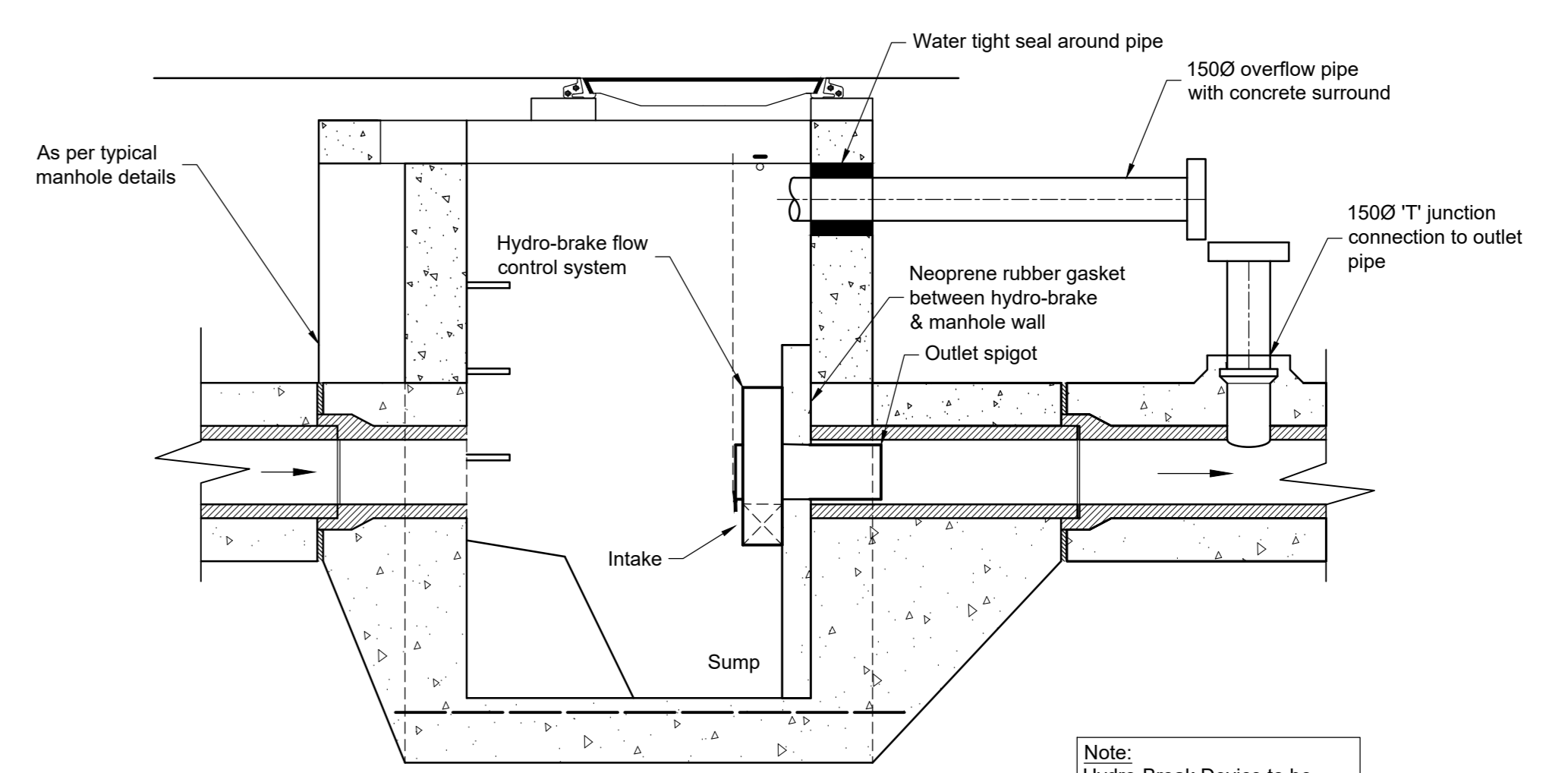


Sectional Plan

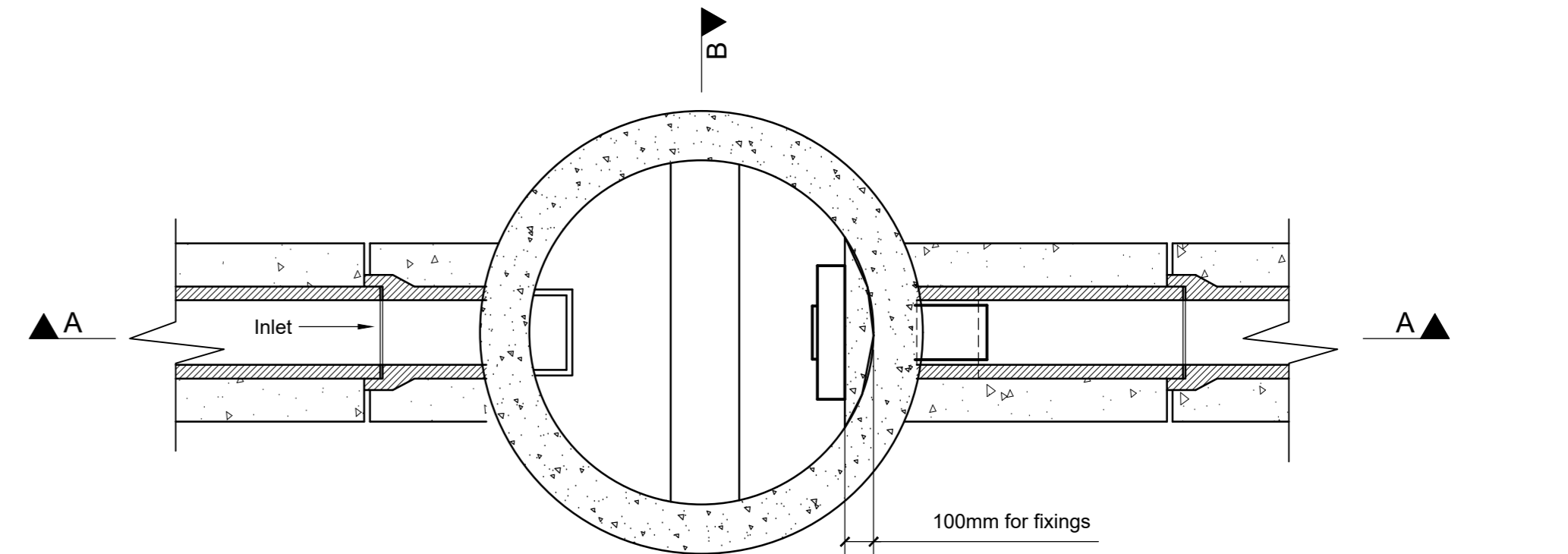
Manhole sizes	
Pipe dia. mm	Manhole size dia.
100 - 450	1.2m Ø
525 - 750	1.5m Ø
750 - 900	1.8m Ø

Rocker pipe requirements	
Pipe dia. mm	Rocker pipe length
150 - 450	0.5 - 0.75m
525 - 750	0.75 - 1.0m

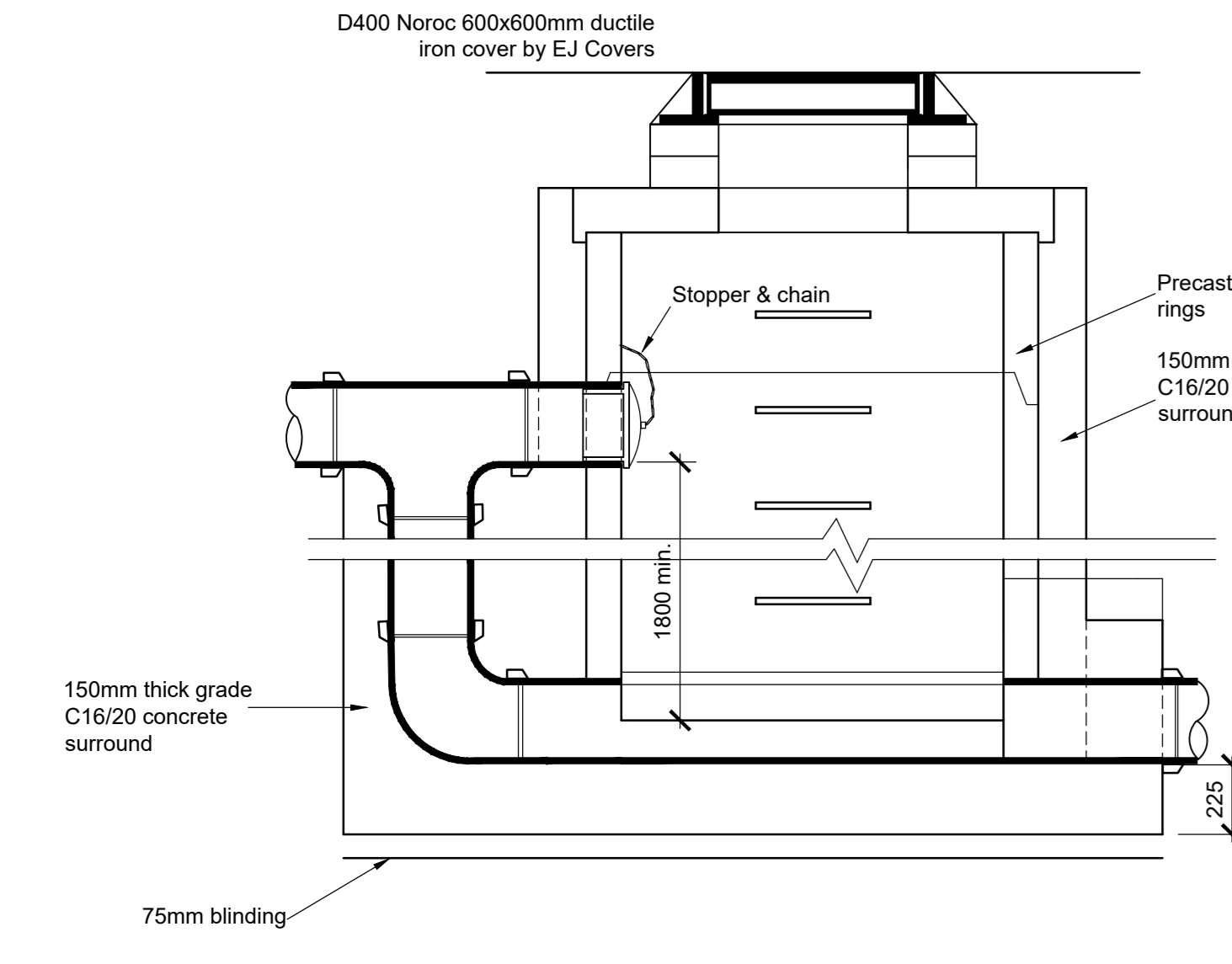
Deep Precast Concrete Manhole
1:20



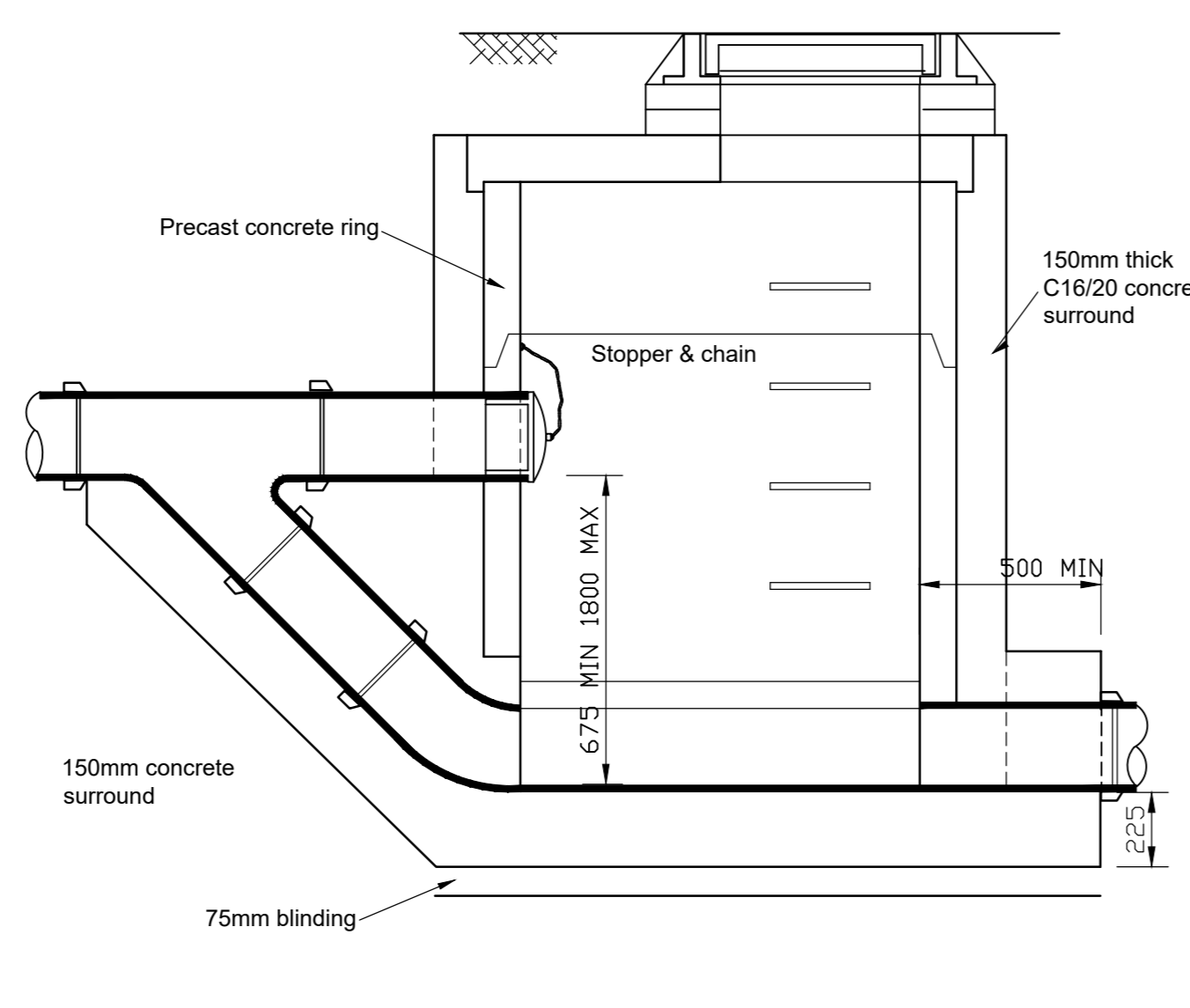
Section A-A



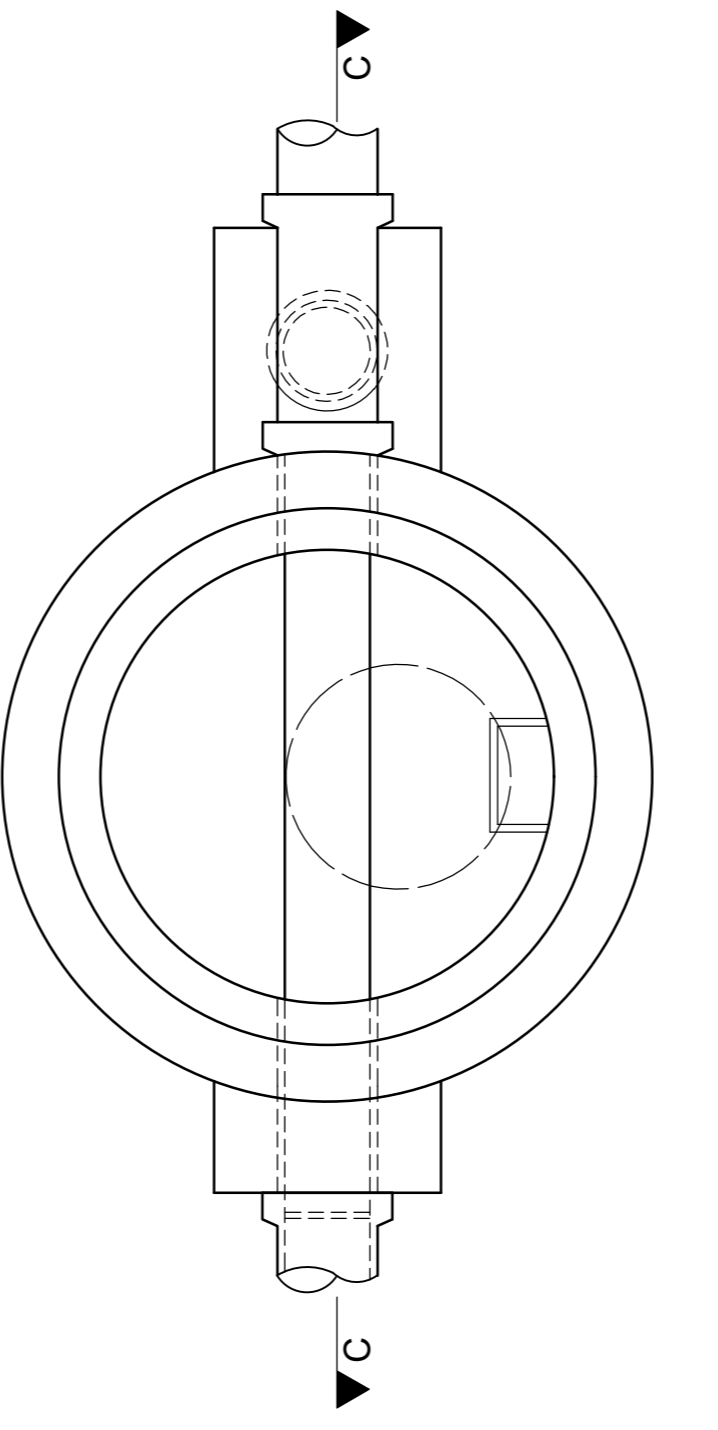
Sectional plan



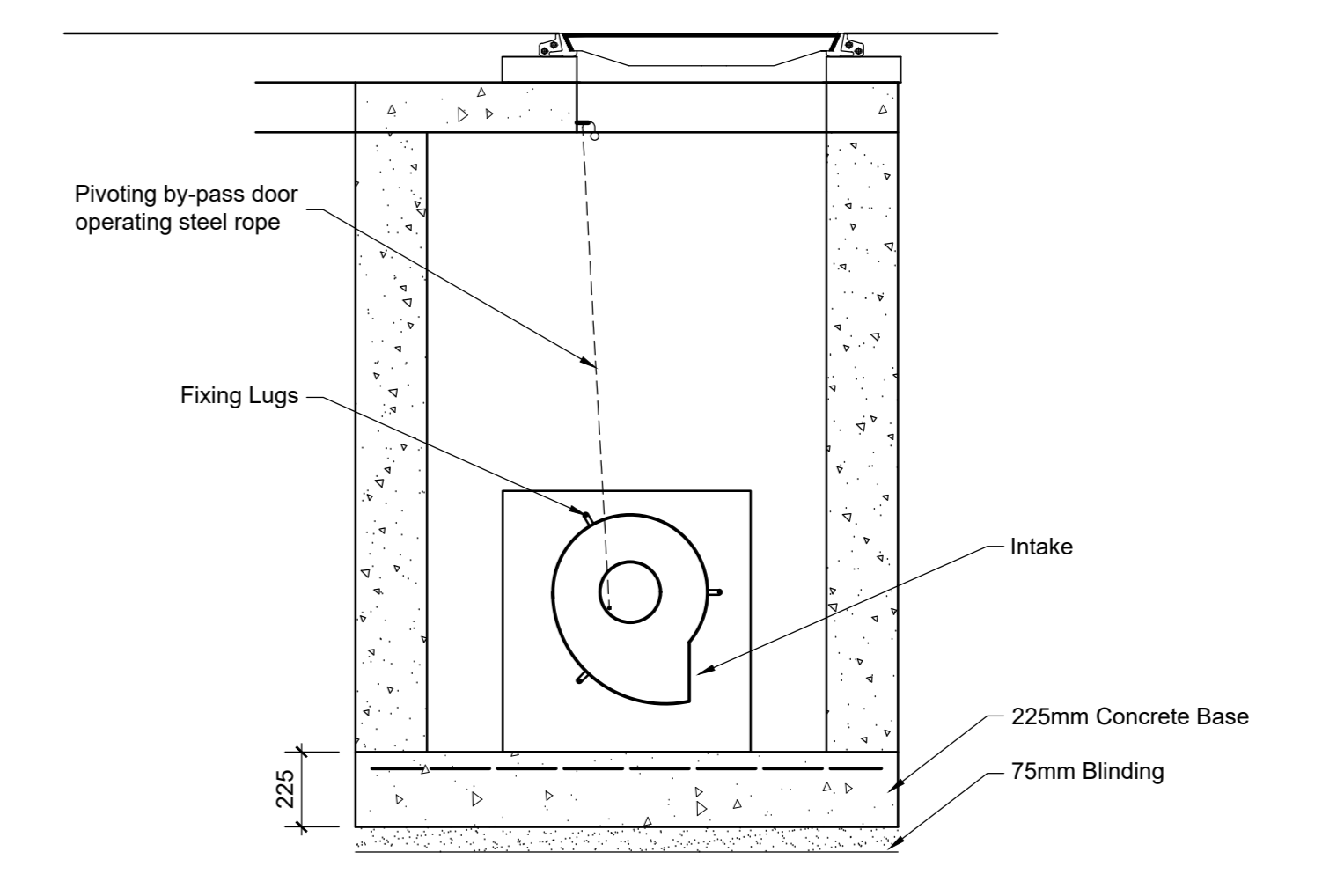
Vertical Backdrop Manhole
Section C-C
Scale 1:20



Ramped Backdrop Manhole
Section C-C
(Scale 1:20)



Vertical Backdrop Manhole
Scale 1:20



Section B-B

Hydro-Brake Flow Control Chamber
1:20

P01	13/11/20	D.K.	R.M.	J.MacC.
Issued for Planning				
Rev	Date	By	Check	App'd

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Client
Marina Quarter Ltd.

Project Title
Former Ford Distribution Site

Drawing Title
Proposed Drainage Details
Sheet 1 of 2

Scale of A0	As Shown
Site	Site Infrastructure
Subsidiary	S2-Suitable for Information
Arup Job No	268196-00
Rev	P01
Name	0550-ARUP-ZZ-LO-DR-C-00020