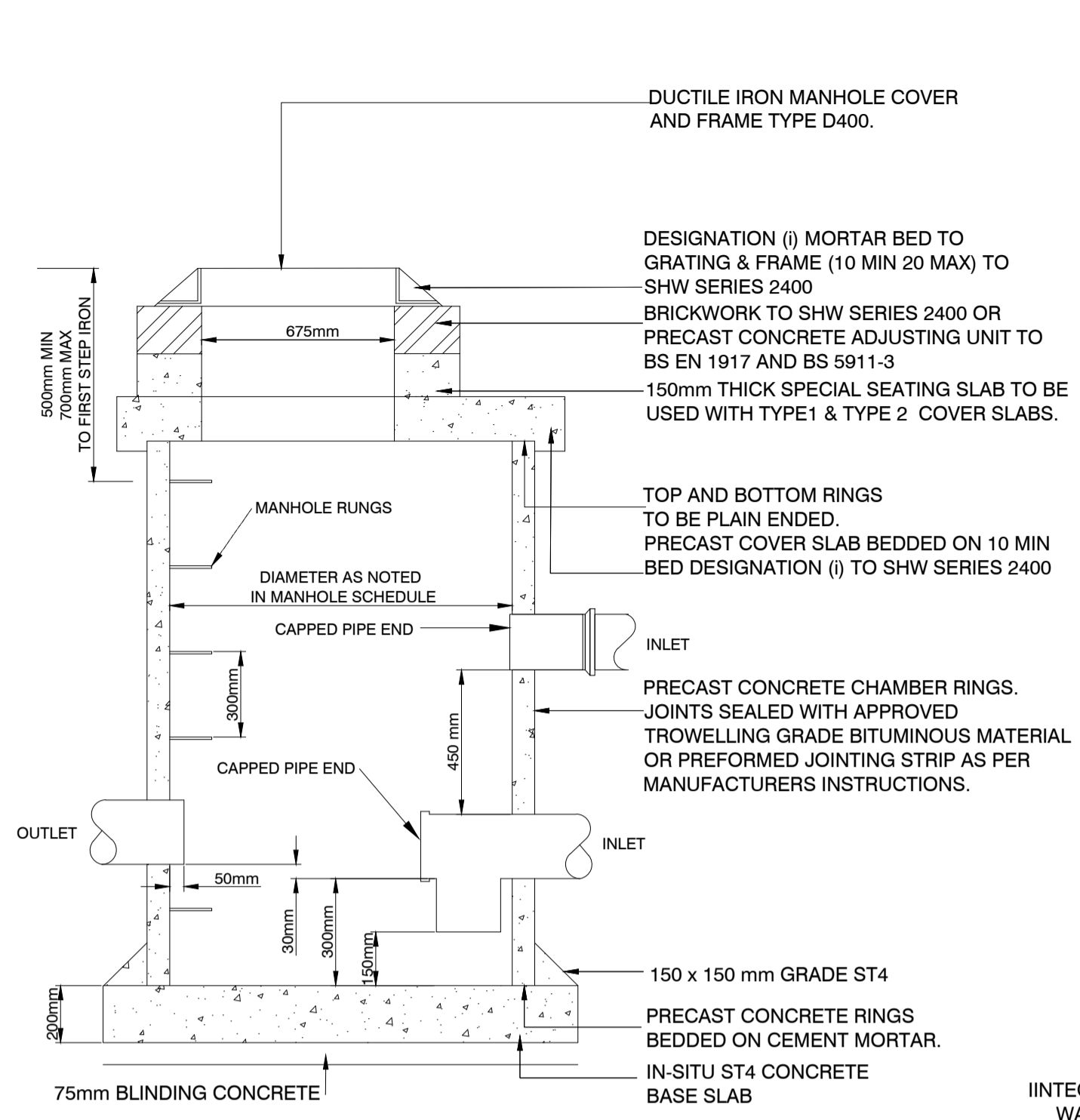
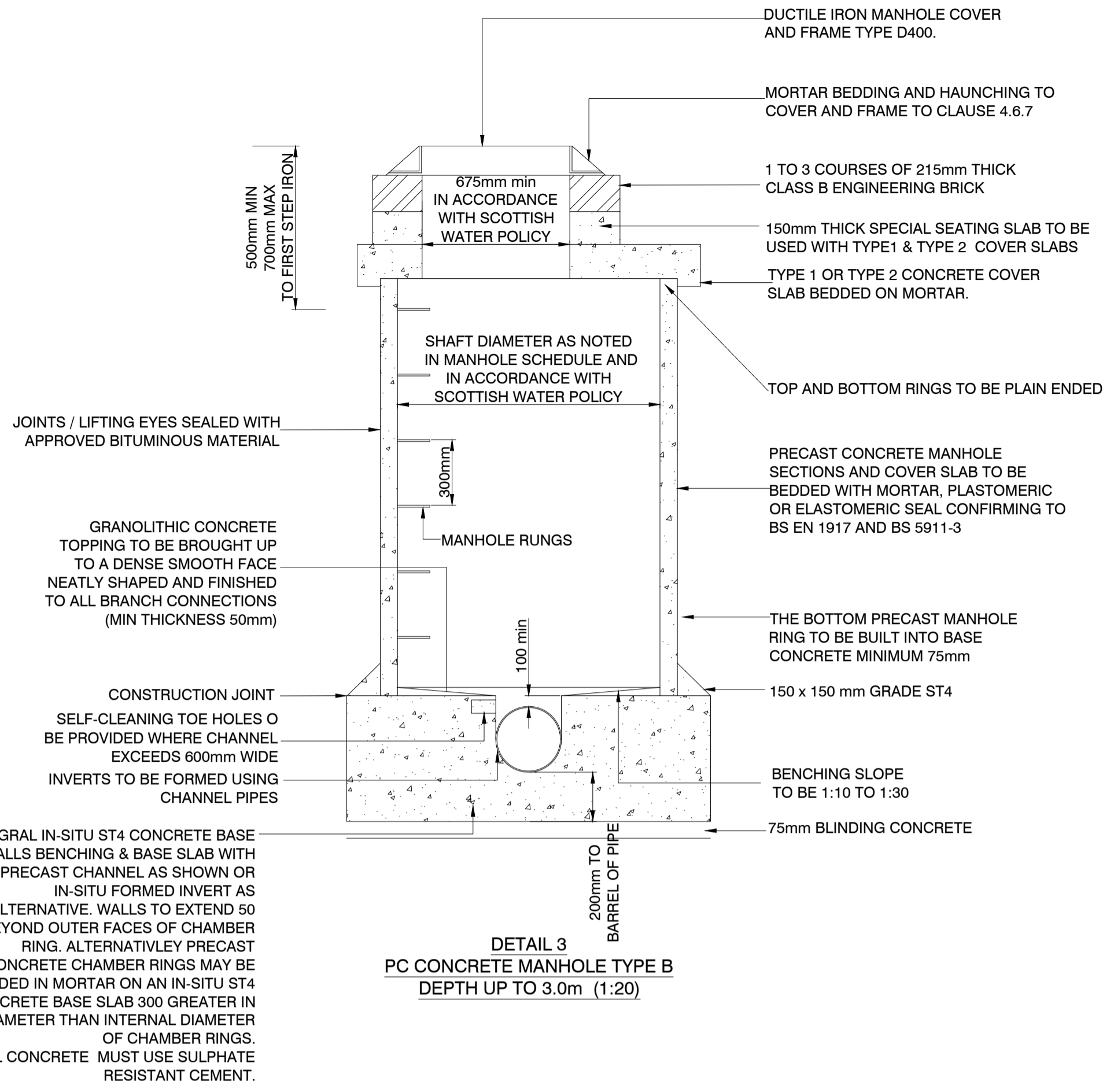


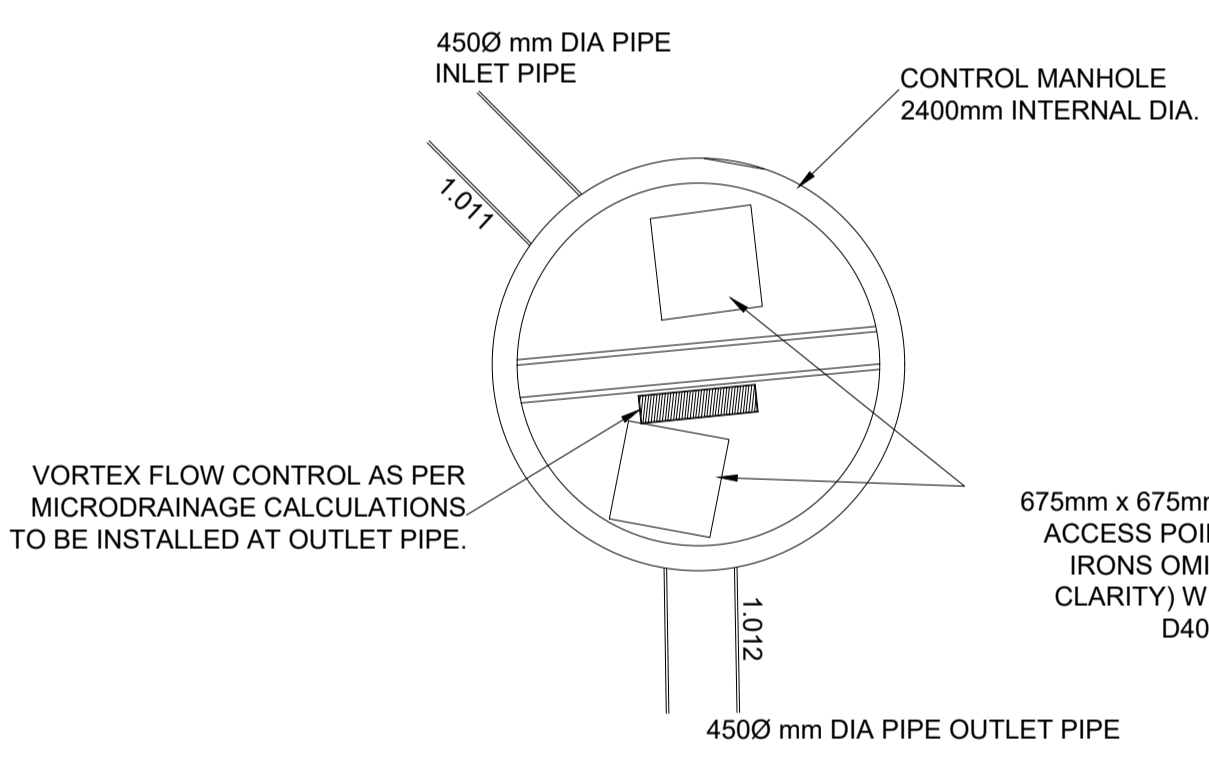
DETAIL 1
PC CONCRETE CATCHPIT (1:20)



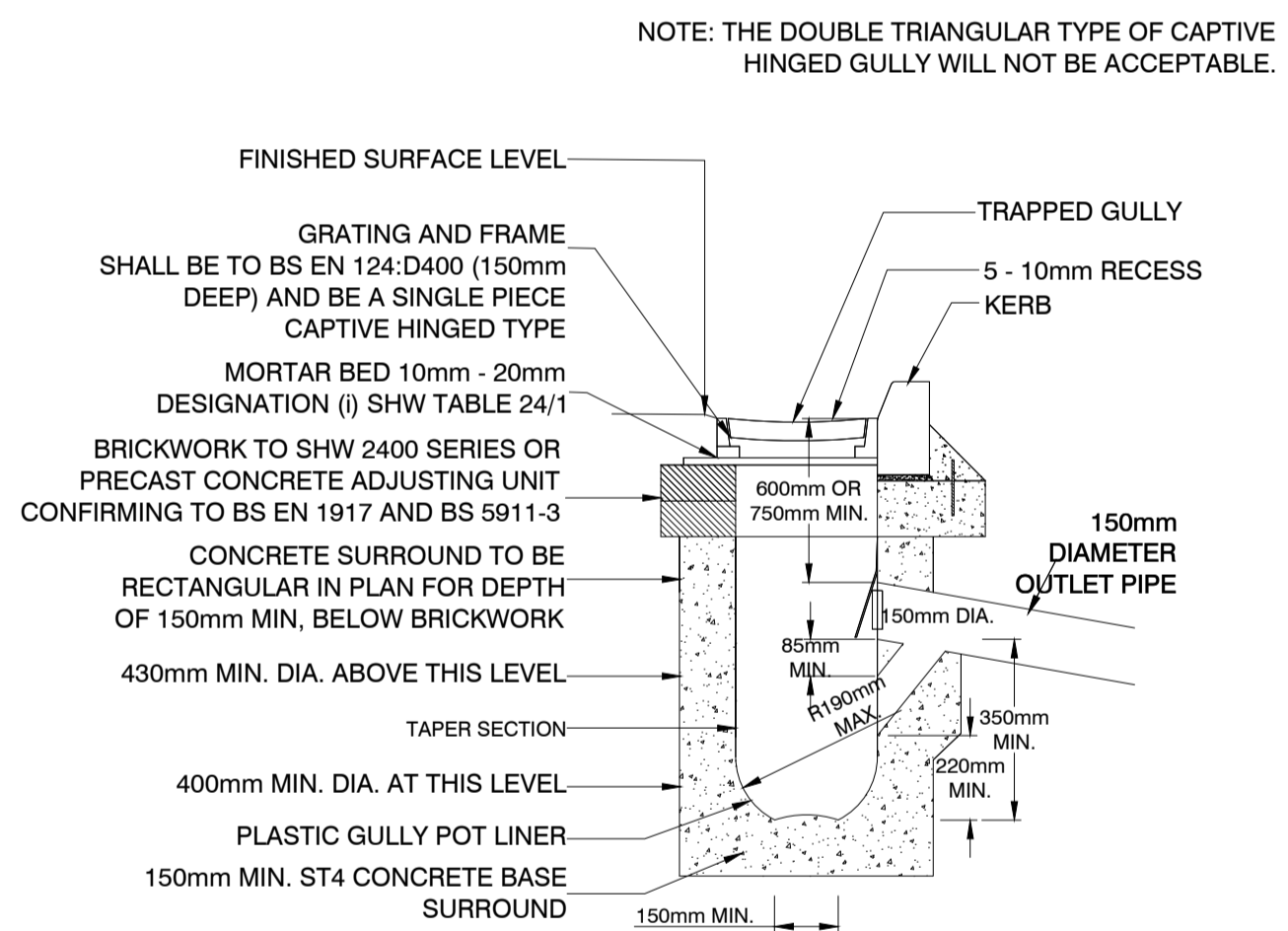
DETAIL 2
FILTER TRENCH CATCHPIT DETAIL
SCALE (1:20)



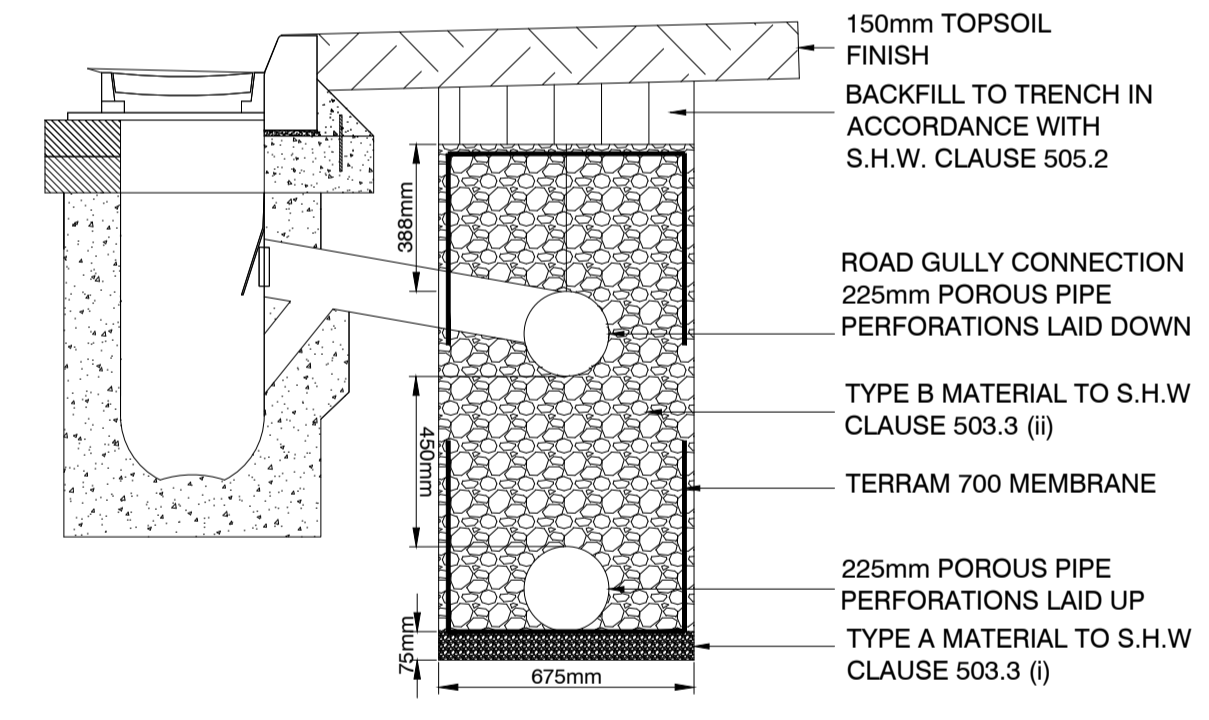
DETAIL 3
PC CONCRETE MANHOLE TYPE B
DEPTH UP TO 3.0m (1:20)



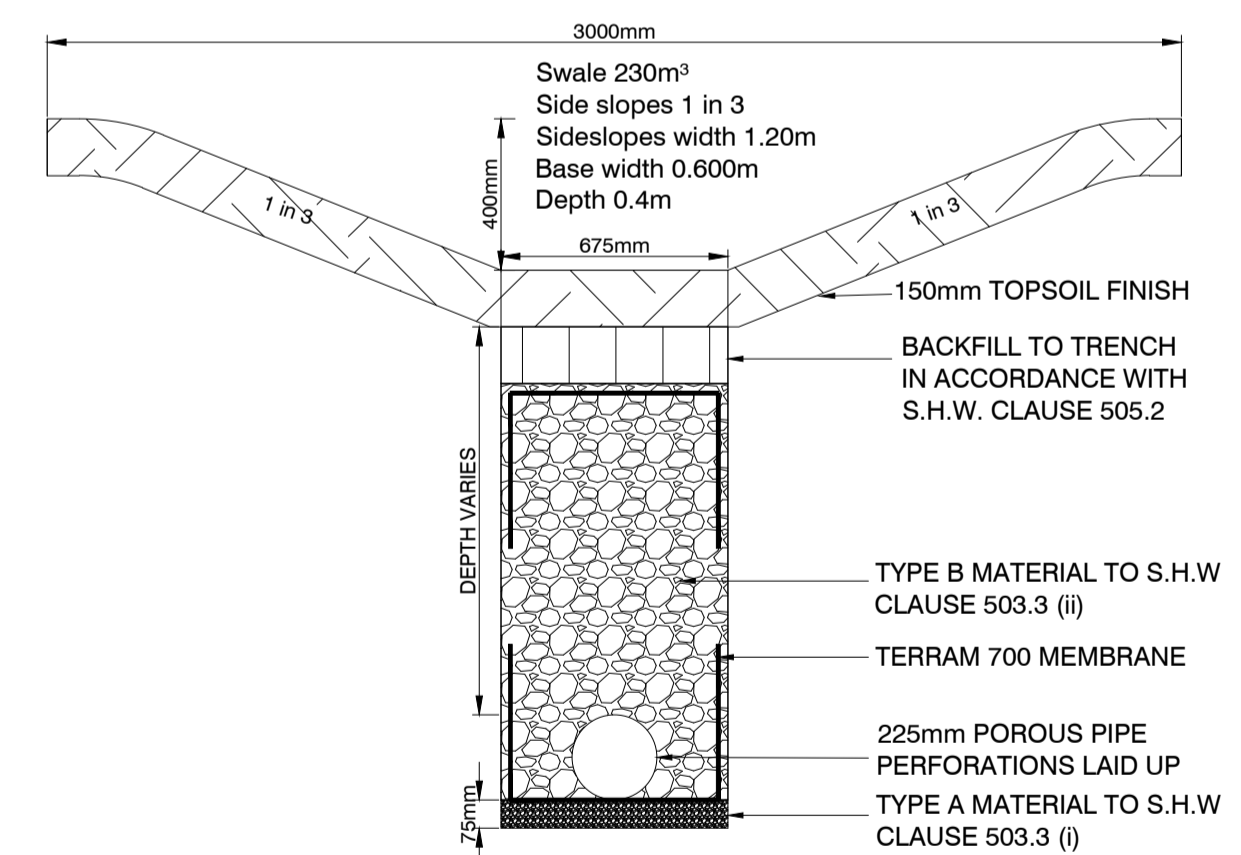
CONTROL CHAMBER S10 - PLAN (1:50)



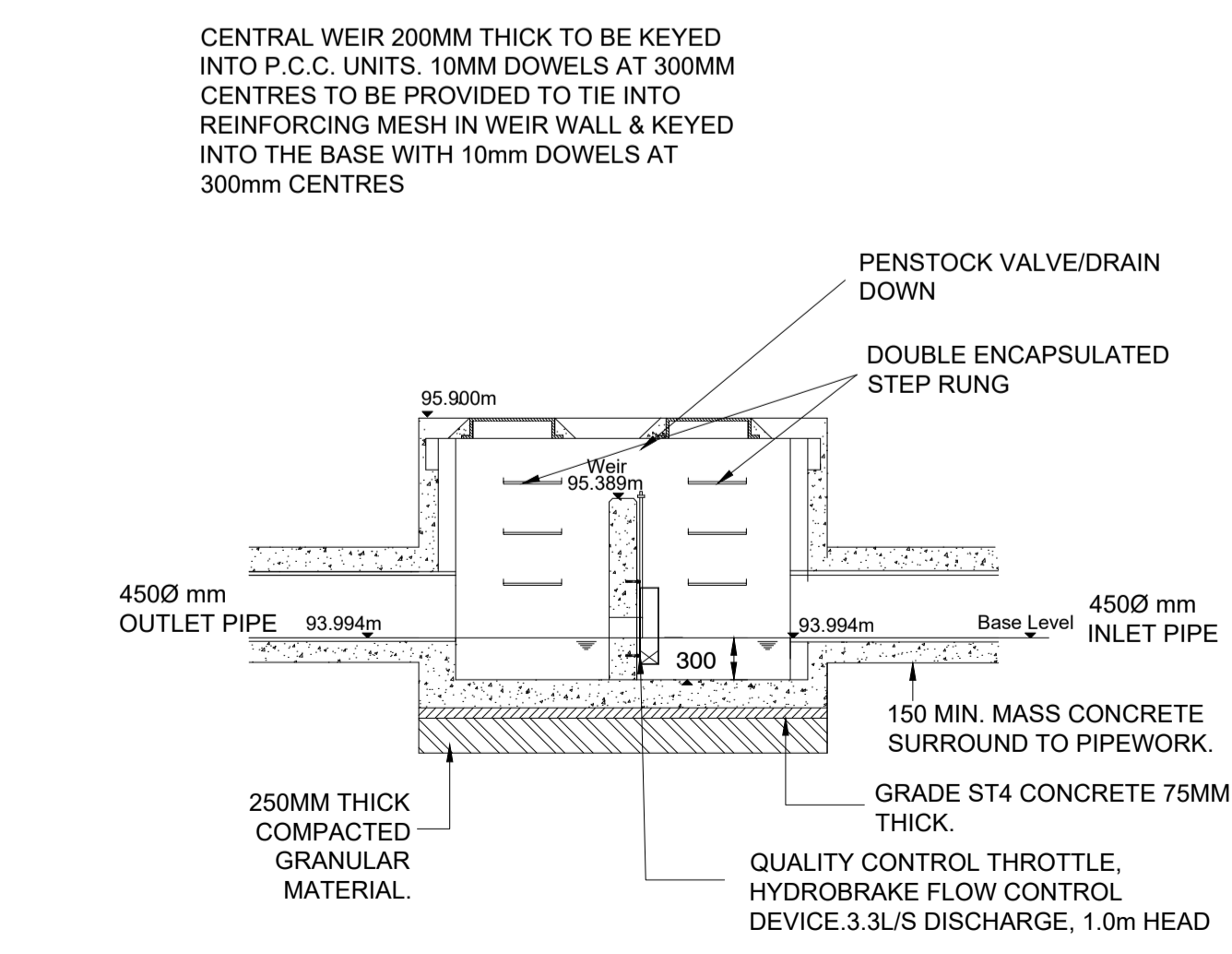
DETAIL 4
TRAPPED ROAD GULLY DETAIL (1:20)



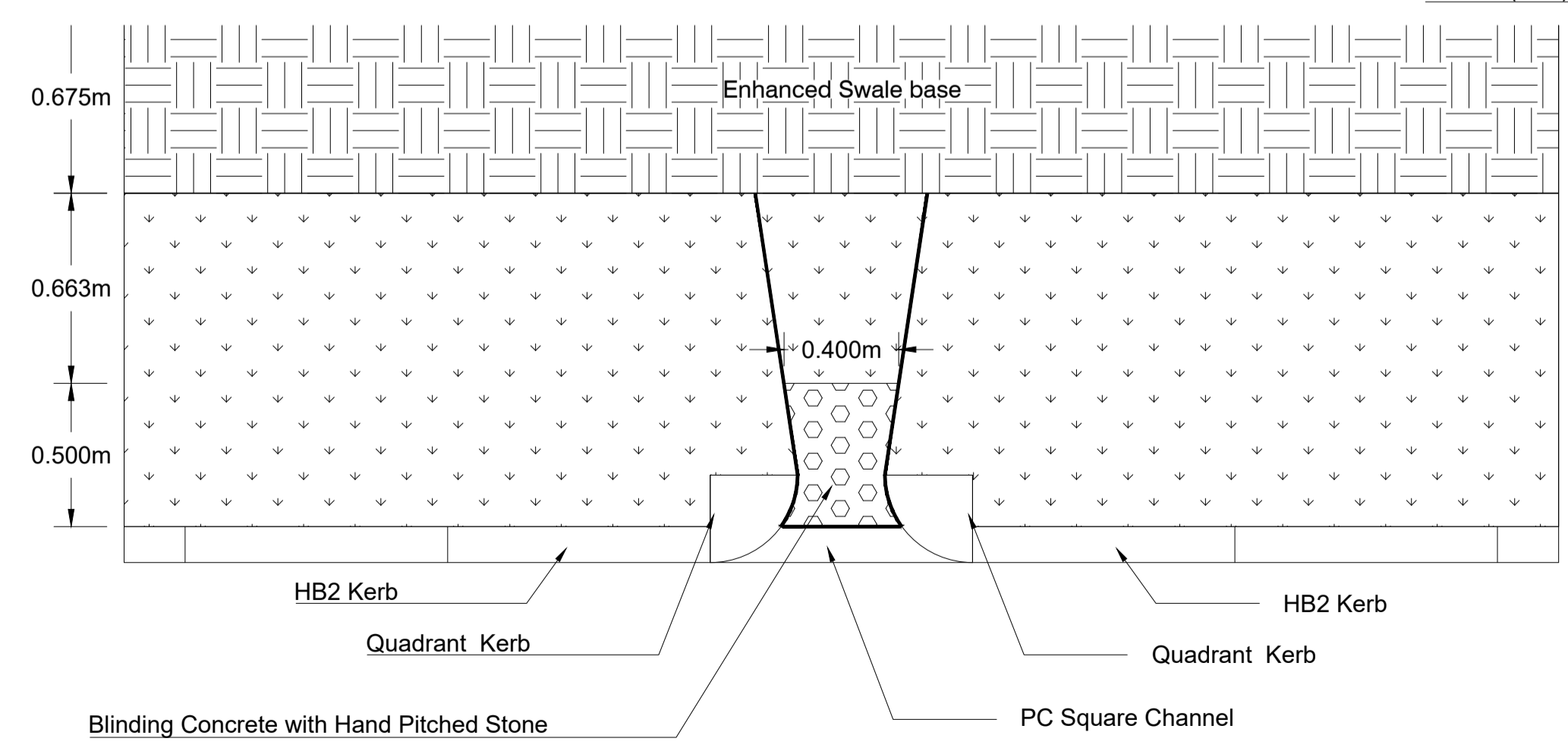
DETAIL 5
HIGHWAY FILTER TREATMENT TRENCH
SCALE (1:20)



DETAIL 6
HIGHWAY ENHANCED SWALE
SCALE (1:20)



DETAIL 7
CONTROL MANHOLE
S10 SECTION
1 IN 50



DETAIL 8: ROADSIDE SWALE INLET 1 IN 20

- Drainage Notes:**
- Refer to "Sewers for Scotland, 4th Edition" for typical details of manholes with depths from cover level to soffit of pipe not exceeding 6m. No significant departure from these shall be made without the approval of Scottish Water and/or Fire Council. Types D&F need the agreement of Scottish Water. Manholes should be designed and constructed in accordance with BS EN 752:2017.
 - Manhole diameter to be as follows:
1200mmØ (Pipe Ø up to 375mm.)
1500mmØ (Pipe Ø > 375mm up to 700mm.)
1800mmØ (Pipe Ø > 750mm up to 1050mm.)
2100mmØ (Pipe Ø > 1125mm up to 1500mm.)
Consult Scottish Water where largest pipe > 1500mm Ø
 - Where the depth to pipe soffit exceeds 3.0m, a Type A Manhole shall be used.
 - Manhole construction to be in accordance with "Sewers for Scotland, Fourth Edition", (SFS4).
 - Manhole covers and frames to be in accordance with SFS4 sub-section 4.2.30.
 - Rocker pipes shall be provided at entry to and exits from manholes. Their length shall be as shown in the Table in Section 4.6.6 and as indicated in Figure 24 of SFS4.
 - Steeper gradients are preferred to the use of backdrops. Backdrops shall be constructed as shown in Figure 25, SFS4.
 - Where step rungs and ladders are to be used top-step rungs are to be located not less than 500mm and not greater than 700mm from the finished manhole cover level with a minimum of two courses of brickwork.
 - Chambers more than 450mm in depth have to have one or more step rungs or toe holes and 25mm diameter solid bar handrail to be provided to the benching.
 - Where no step rungs are to be used, there shall be between two and four courses of brickwork under cover.
 - Refer to Table 3 in SFS4 for minimum clear access opening sizes and requirements for fittings.
 - Pipes of different diameters entering manholes shall be installed with soffits at the same level.
 - Clause numbers to the Specification for Highway Works (S.H.W.)
 - The minimum depth from the top of the grating to the top of the gully outlet is to be 750mm; when the connecting pipe is under a carriageway or a hard shoulder and 600mm elsewhere.
 - Precast concrete gullies shall be to BS 5911-4:2002+A2:2010 & BS EN 1917:2002.
 - When an in situ cast gully has a trap, the stoppers shall comply with requirements of BS 5911-4:2002+A2:2010 & BS EN 1917:2002.
 - The gully grating to be D400.
 - Brickwork shall be flat bedded (mortar thickness 10mm to 25mm) and not to be trafficked until specified strength (as indicated in the contract document) is attained.
 - The back face of the gully pot shall be in a vertical line with the front face of the kerb and this will preclude corbelled brickwork.
 - Corbelling to brickwork if necessary, 25mm maximum.
 - Levelling brickwork depth shall be a multiple of 75mm.
 - Where in situ concrete gullies are formed with permanent shuttering such shuttering shall have a current British Board of Agreement roads and bridges certificate.
 - Where both non rock and captive hinge grating is required, then type D400 single piece, hinged, non rock watershed or similar approved type can be used.
 - Pipe materials shall be in accordance with part 4 Sewers for Scotland 4th Edition and be terracotta in colour.
 - The use of perfect manhole or similar precast base units shall be precluded without the express consent of the engineer.
 - All ST concrete shall be to SHW, Clause 2602.

Date	Revision	No	Initials	North Point	Project
12.02.21	Box Culvert Detail Removed	A	JL	↑	Halbeath
05.03.21	Detail 8 added, detail 7 updated to match change to General Arrangement following RCC comments	B	BA		Client: Shepherd Offshore (Scotland) Ltd
					Date: 07.12.20
					Scale: As noted
					Original Size: A1
					Copyright Acknowledgment: Ordnance Survey © Crown Copyright 2012. All rights reserved. Licence No. AL100017966.
					Quality Assurance: UKAS 905 Quality Assurance ISO 9001:2008 SGS Certificate GB02/54359

Drawing No.	Revision
8891/407	B

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