

NOTES

- This drawing is to be read in conjunction with all relevant Eastwood & Partners drawings numbered 45471.
- All structural concrete and internal benching shall be designated C40A complying with the strength designation C32/40 to Table 5 of BS 8500-2:2006, but also with a maximum water/cement ratio of 0.40 and minimum cement content of 380kg/m<sup>3</sup>. In addition, the concrete shall provide for DC-1 sulphate resistance in accordance with Table A.11 of BS 8500-1:2006. The maximum aggregate size shall be 20mm.
- Concrete used for blinding shall be GEN3 to BS 8500-2:2006.
- All concrete to be cured and protected from frost for a minimum of 7 days after casting.
- Reinforcement to be Type 2 high yield steel to BS8666:2005.
- Mesh reinforcement to be Type 2 high yield steel to BS4483:2005.
- Cover to reinforcement to be 50mm unless stated otherwise.
- Minimum lap lengths to be:  
A393 Mesh - 400mm  
H8 - 350mm  
H10 - 400mm  
H12 - 500mm  
H16 - 650mm  
H20 - 800mm

250mm thick cast in-situ reinforced weir wall formed in RC40 concrete with A393 mesh to each face, cover 50mm. To be tied to base slab and walls with HM12, Hilti HAS-U A4 anchors 300 long (or similar approved) in HY200A resin, at 400mm centres with 125mm embedment. Joints to have a hydrophilic sealing strip between the weir wall and the base and sides of the chamber.

Flow control unit with pivoting bypass door, refer to Hydrobrake Detail. Fixing lugs with concrete anchor fixing bolts. A neoprene rubber gasket is to be placed between the flow control and concrete wall.

Plastic encapsulated stainless steel double width/rung step rungs to BS EN 13101:2002 at 250 c/c.

Cover and frame to be in accordance with BSEN124 with 675 x 675mm clear opening. 1:3 cement mortar bed & haunch to cover & frame sat on Class B eng Brickwork (min 2 courses-max 4 courses). Covers to be marked BS EN124, carry BSI certification trademark (The Kitemark) and the manufacturer's name.

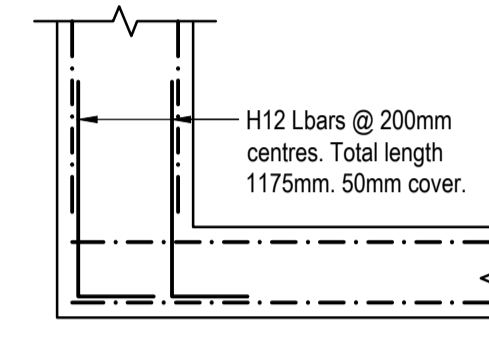
3000Ø precast manhole rings with minimum 200mm mass concrete surround.

250mm thick cast in-situ reinforced weir wall formed in RC40 concrete with A393 mesh to each face, cover 50mm. To be tied to base slab and walls with HM12, Hilti HAS-U A4 anchors 300 long (or similar approved) in HY200A resin, at 400mm centres with 125mm embedment. Joints to have a hydrophilic sealing strip between the weir wall and the base and sides of the chamber.

All exposed vertical and horizontal edges are to received a 25x25mm chamfer.

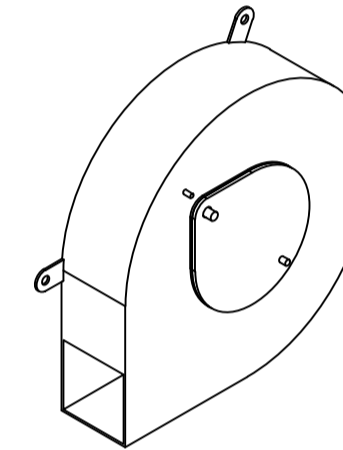
PLAN ON HYDROBRAKE MANHOLE S3

SCALE 1:25



STARTER BAR DETAIL

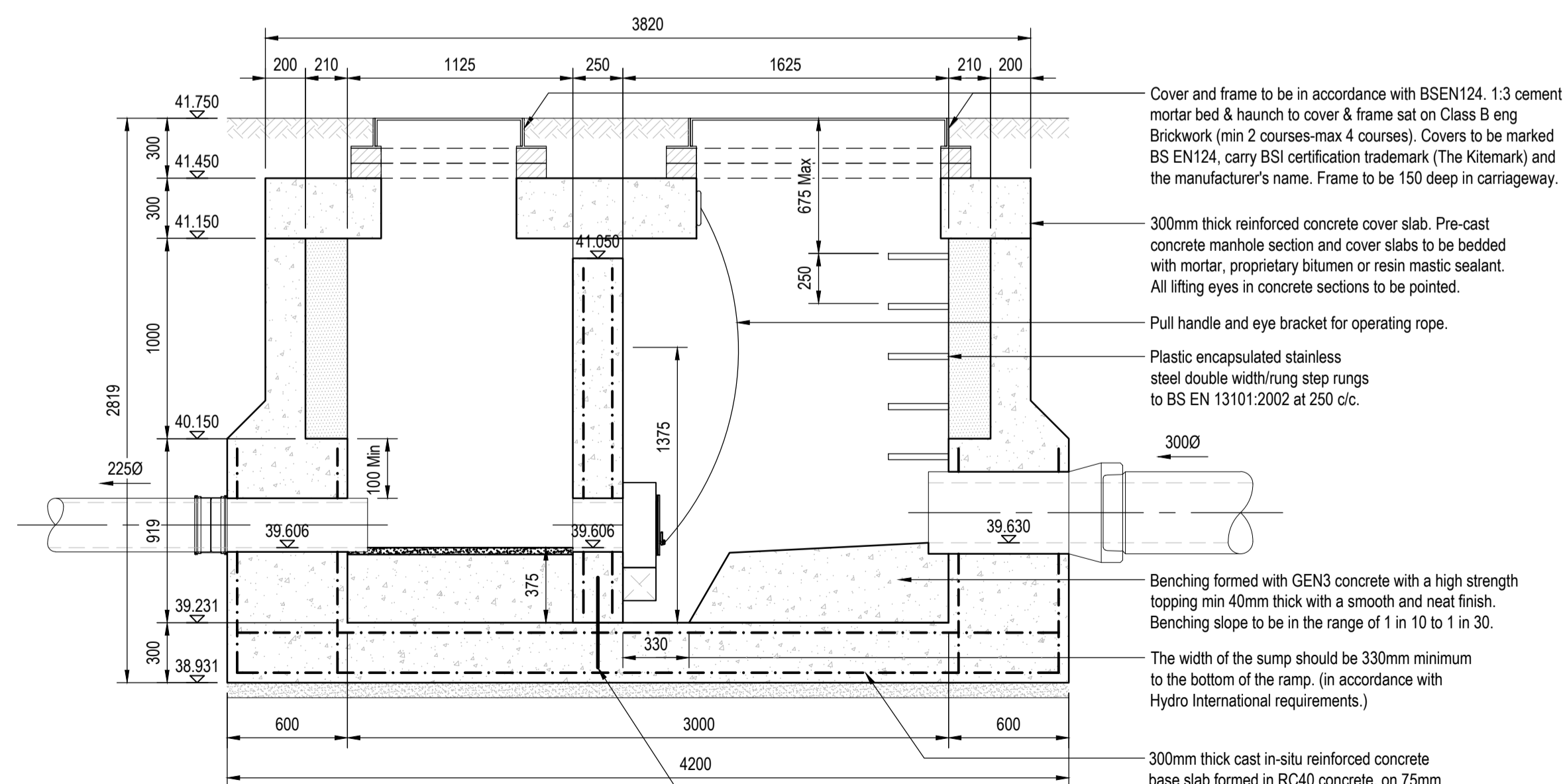
SCALE 1:25



Hydrobrake Optimum Vortex Flow Control Device:  
SHE-0160-1198-0900-1198  
Flow = 0.900 l/s  
Head = 11.980 m  
Minimum sump depth = 375mm  
Outlet size = 160mm

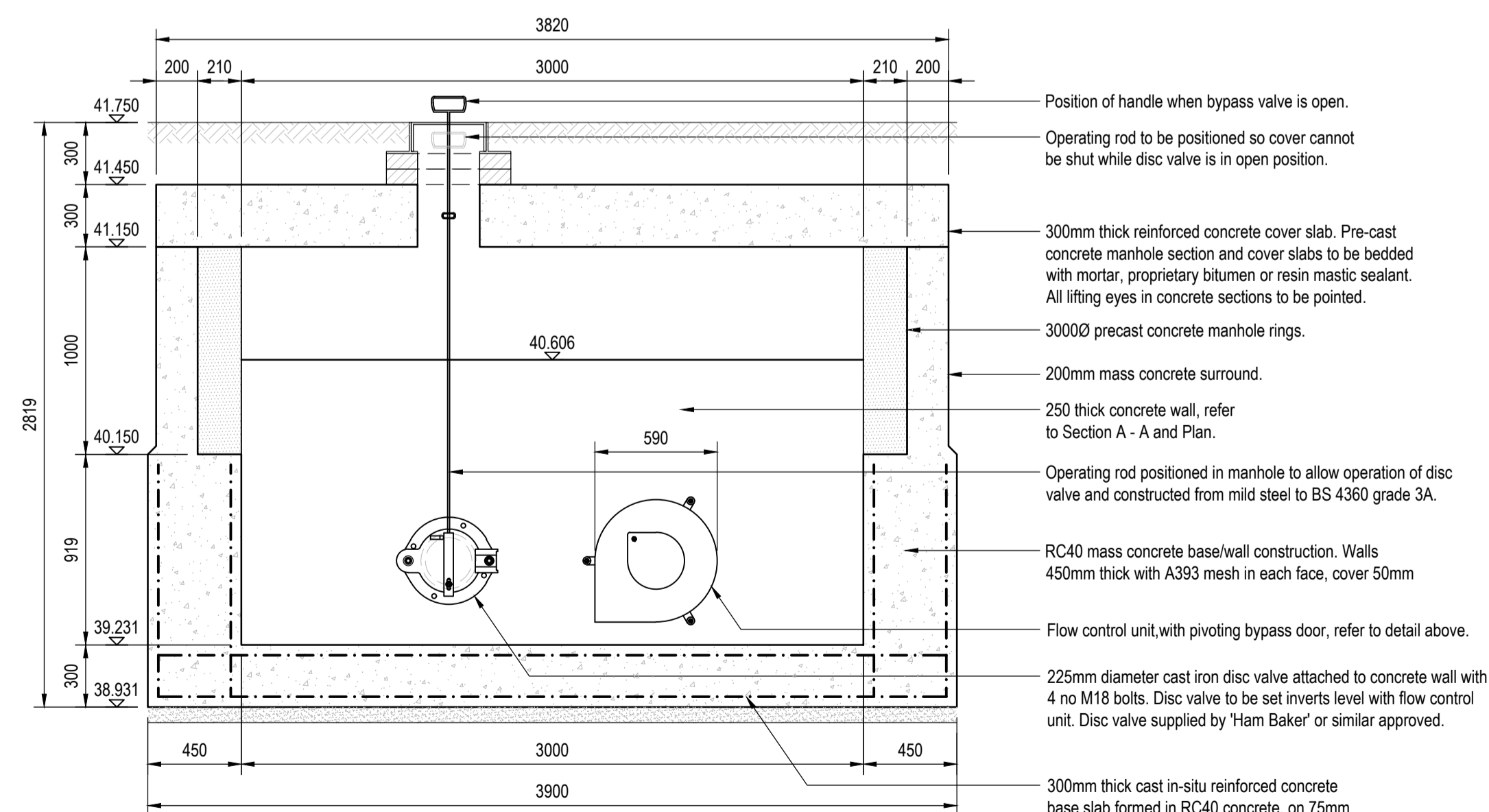
HYDROBRAKE DETAIL

NOT TO SCALE



SECTION A-A

SCALE 1:25



SECTION B-B

SCALE 1:25

B	Top of weir wall level amended to suit S104 comments.	SH	-	25.06.21
A	First Issue.			
REV	DESCRIPTION	SIG	CHK	DATE

T G SOWERBY

RIDDINGS METHODIST, SCUNTHORPE

MANHOLE S3  
HYDROBRAKE DETAILS

Eastwood & Partners  
CONSULTING ENGINEERS

St. Andrew's House  
23 Kingfield Road  
Sheffield  
S11 9AS  
Tel 0114 255 4554  
Fax 0114 255 4330  
mail@eastwoodandpartners.com  
www.eastwoodandpartners.com

SCALE WHEN PLOTTED AT A1		DRAWING STATUS	
1:200		APPROVAL	
DRAWN	CHECKED	DATE	DRAWING NUMBER
JB	SH	10.06.21	45471/017
			REV
			B