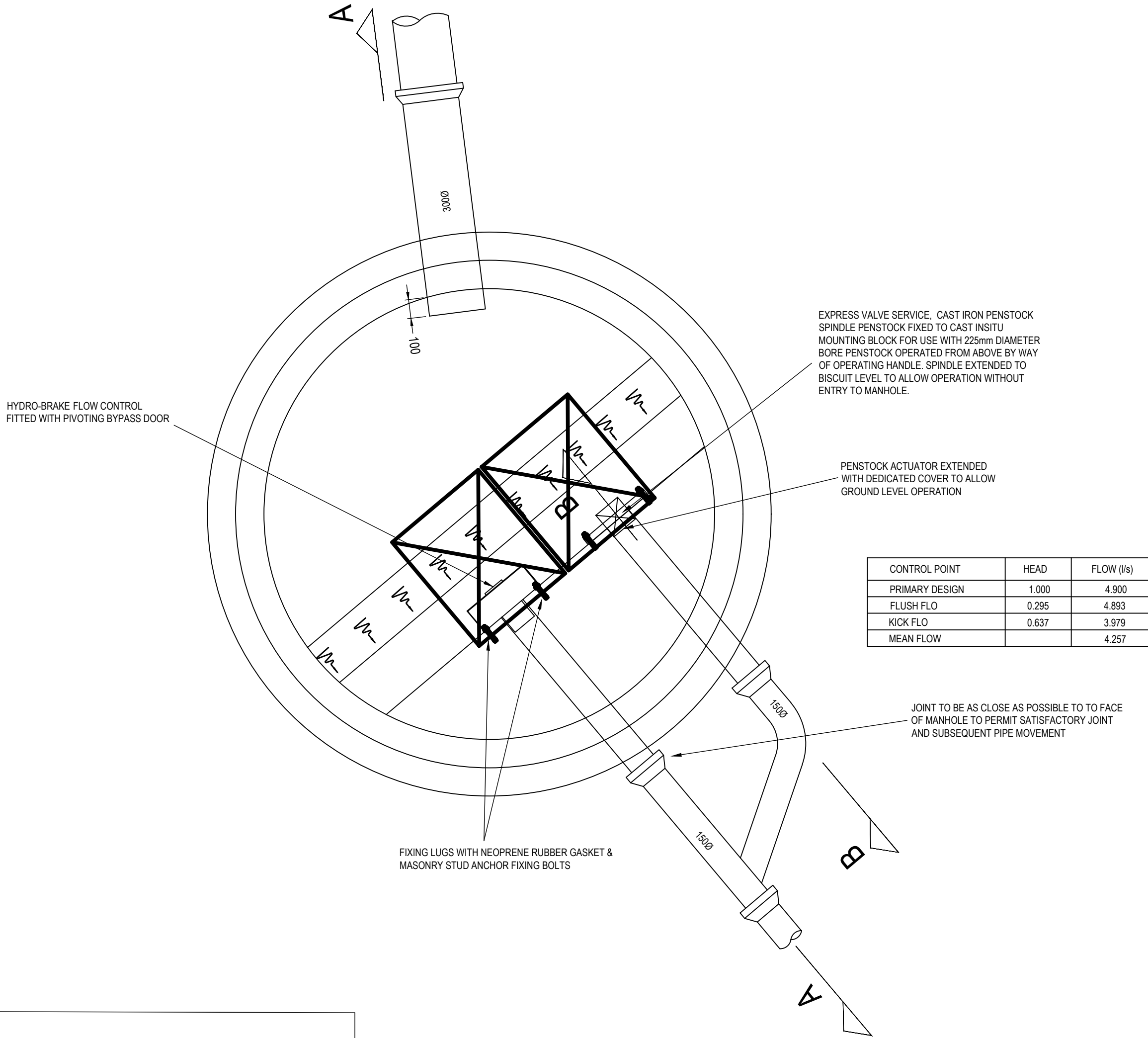


PLAN

NOMINAL SIZE	EFFECTIVE LENGTH (mm)
150 TO 600	600
675 TO 675	1000
825 AND ABOVE	1250

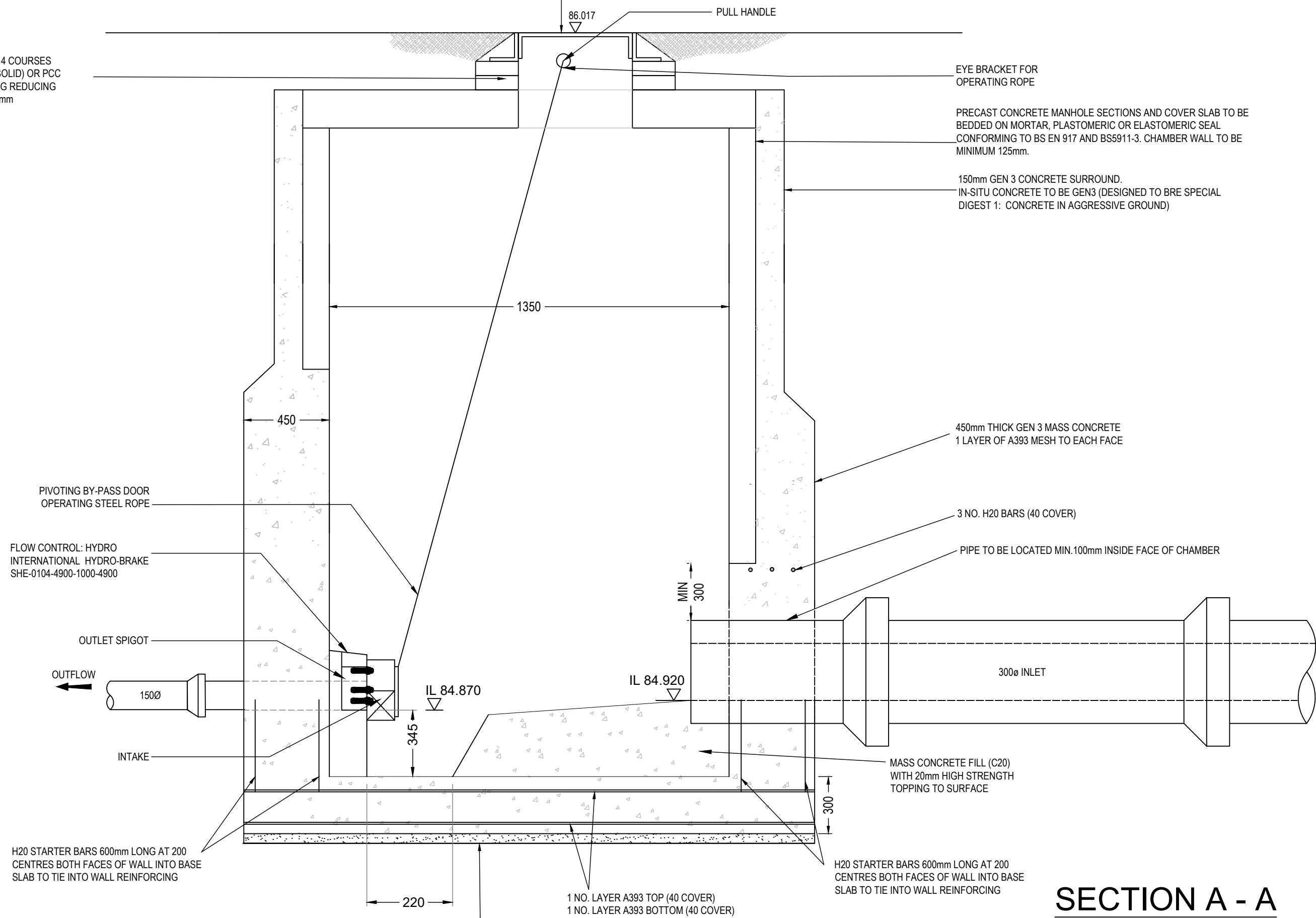
SHORT AND ROCKER PIPE LENGTHS TABLE  
APPLICABLE TO ALL MANHOLE TYPES



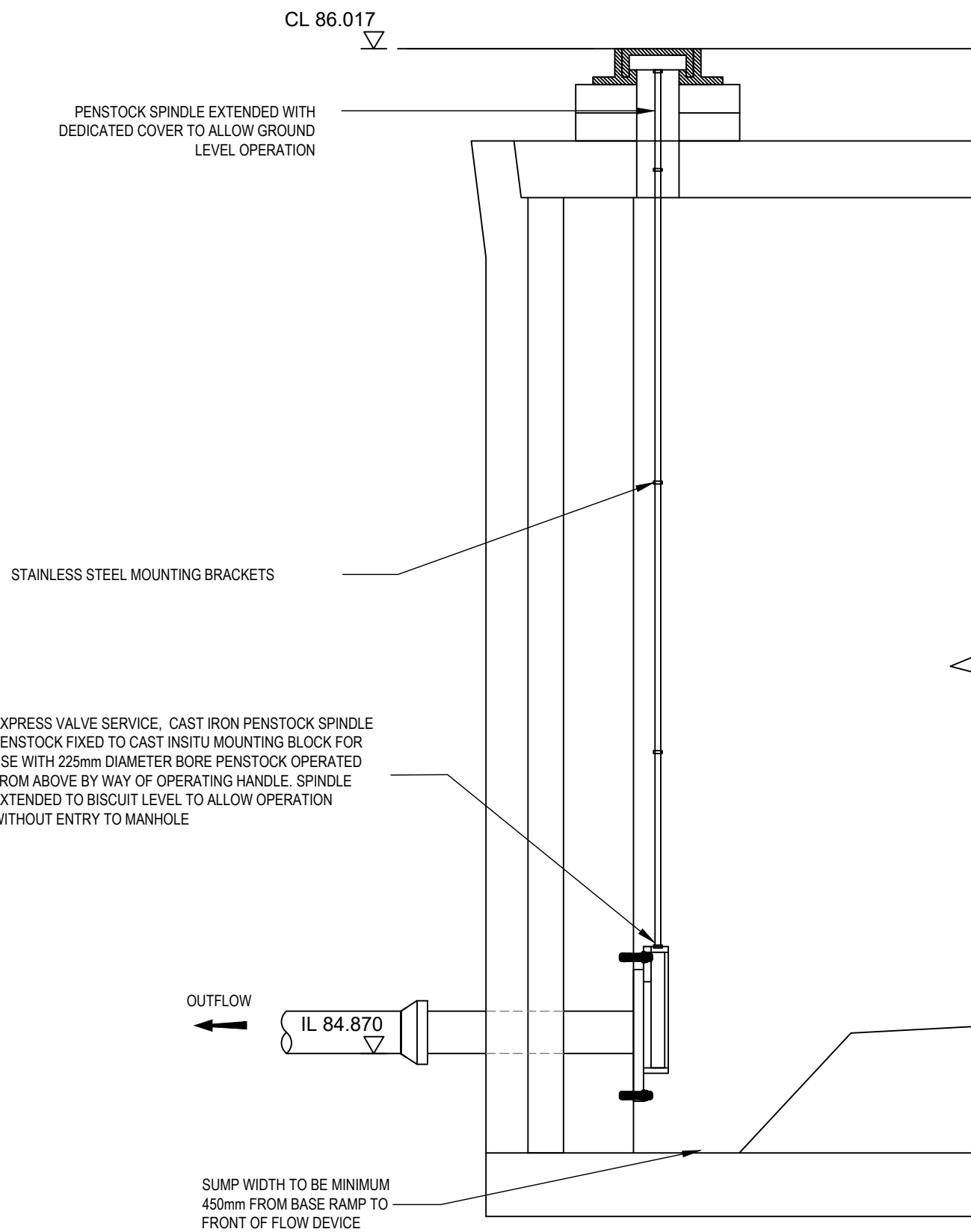
CONTROL POINT	HEAD	FLOW (l/s)
PRIMARY DESIGN	1.000	4.900
FLUSH FLO	0.295	4.893
KICK FLO	0.637	3.979
MEAN FLOW		4.257

DOUBLE TWIN 600 x 600mm WITH A CLEAR OPENING  
1220 x 675mm D400 COVER TO BS EN124 WITH  
150mm DEEP FRAMES AND A LOCKABLE DOUBLE  
FALL ARREST GRILLE FITTED OVER LANDING AREA  
FOR WINCH ACCESS.

MINIMUM 2 COURSES / MAXIMUM 4 COURSES  
CLASS B ENGINEERING BRICKS(SOLID) OR PCC  
COVER AND FRAME SEATING RING REDUCING  
CLEAR OPENING TO 600mm x 600mm



SECTION A - A



SECTION B - B

NOTE

THIS PRINT AND ANY DESIGN THEREON IS THE PROPERTY OF BECKWITH & HANLON CONSULTING ENGINEERS LIMITED AND IS TO BE RETURNED ON REQUEST. IT IS TO BE USED ONLY FOR THE PURPOSE FOR WHICH IT WAS EXPRESSLY LOANED AND IS NOT TO BE COPIED IN ANY MANNER, NOR IS INFORMATION TAKEN THEREFROM TO BE TRANSMITTED OR PASSED TO OTHERS.

DO NOT SCALE OFF THIS DRAWING.

DO NOT TAKE DIGITAL DIMENSIONS OFF THIS DRAWING.

NOTES:

GENERAL

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH BECKWITH AND HANLON DRG. 23-034-200 SERIES DRAWINGS.

DRAINAGE NOTES

- ANY ADOPTABLE DRAINAGE WORKS TO BE IN ACCORDANCE WITH THE WATER AUTHORITIES PUBLICATION "CODES FOR ADOPTION DESIGN AND CONSTRUCTION GUIDE (DCG)" AS WELL AS ANY ADDITIONAL REQUIREMENTS OF THE ADOPTING AUTHORITY AND APPROVED DRAWINGS.
- PRECAST CONCRETE MANHOLE RINGS TO COMPLY WITH THE RELEVANT PROVISIONS OF BS5911: PART 200.
- ALL BRICKWORK TO BE CLASS B ENGINEERING COMPLYING WITH THE RELEVANT PROVISIONS OF BS 3821. CONCRETE BRICKS MAYBE USED IF THEIR SPECIFICATION IS THE SAME AS CLASS B ENGINEERING BRICKS. PLEASE SEEK APPROVAL FROM RELEVANT WATER AUTHORITY BEFORE USING.
- MANHOLE COVERS AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 124 AND BE OF A NON-ROCKING, NON-VENTILATING DESIGN.
- THE USE OF PRECAST CONCRETE PRODUCTS & SULPHATE RESISTANT CEMENT IS MANDATORY, UNLESS A LABORATORY PROVES SUCH PRECAUTIONS ARE NOT NECESSARY.
- 150mm CONCRETE SURROUND IS REQUIRED AROUND PIPES WHERE THE DEPTH FROM FINISHED SURFACE TO PIPE SOFFIT IS LESS THAN 1200mm IN HARDSTANDING AREAS AND LESS THAN 900mm WITHIN OPEN SPACE.
- LOCATIONS OF ALL EXISTING SEWERS ON-SITE TO BE CONFIRMED & DETAILS PROVIDED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- ALL TRENCHES UNDER EXISTING & PROPOSED HIGHWAYS ARE TO BE BACKFILLED WITH THOROUGHLY COMPACTED DOT TYPE 1 SUB-BASE.
- ALL STREET WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT LOCAL AUTHORITY DESIGN GUIDE & SPECIFICATION.
- ROADS AND SEWERS CONTRACTOR MUST INFORM WATER AUTHORITY PRIOR TO WORKS COMMENCING ANY CONNECTION WORKS TO ADOPTED SEWERS.
- ALL CONNECTIONS TO EXISTING ADOPTED SEWERS ARE SUBJECT TO WATER AUTHORITY APPROVAL AND SECTION 106 OF THE WATER INDUSTRIES ACT 1991.
- PRIVATE DRAINAGE TO BE 110mm DIA. UPVC PIPES WITH GRP OR UPVC INSPECTION CHAMBERS UNLESS NOTIFIED OTHERWISE. SYSTEM DESIGN & CONSTRUCTION TO CONFORM WITH MANUFACTURER'S INSTRUCTIONS & "GOOD PRACTICE GUIDE".
- ALL PRIVATE DRAINAGE TO BE CARRIED OUT IN ACCORDANCE WITH BUILDING REGULATION REQUIREMENTS.
- ALL CONNECTIONS TO BE TURNED IN DIRECTION OF FLOW USING PIPE BENDS.
- ALL POLYPROPYLENE INSPECTION CHAMBERS SHALL BE IN ACCORDANCE WITH BS1758.

P2	HYDROBRAKE S51 UPDATED	JH	JM	01/05/25
P1	FIRST ISSUE	JH	JM	17/01/25
REV	AMENDMENT	BY	CKD	DATE

CLIENT

JOHN SWIFT HOMES LTD.

PROJECT

SUMMERGROVE  
WHITEHAVEN

DRAWING TITLE

HYDROBRAKE DETAIL - S51



**Beckwith & Hanlon**  
**Consulting Engineers Limited**  
F22 Willow Court, Marquis Court,  
Team Valley Trading Estate,  
Gateshead, NE11 0RU  
tel: 0191 273 7582

SCALE	BY	CHECKED	DATE
NOT TO SCALE	JH	JM	DEC. '24

DRAWING NO.  
23-034-236

STATUS	REV	P2
PRELIMINARY	SIZE	A1