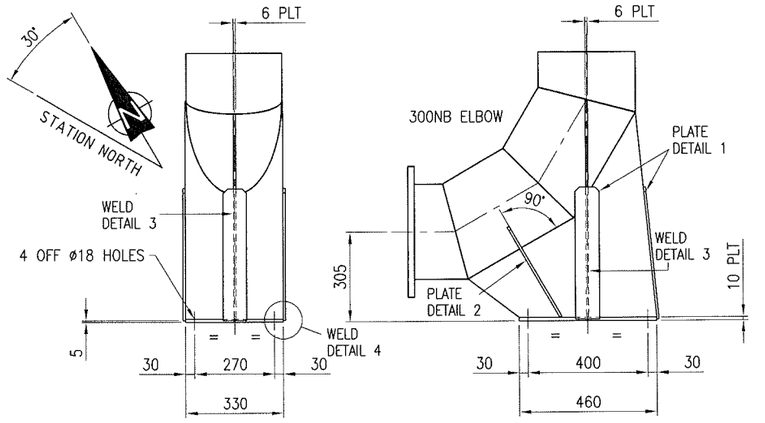
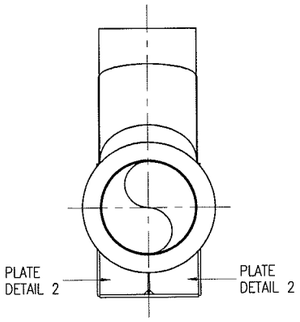




DETAIL 'X'

MAT:~ STEEL TO EN10025-2-S355JR OR 300WA

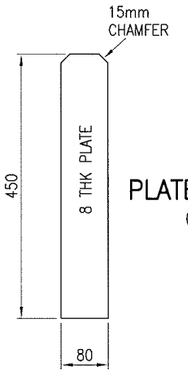
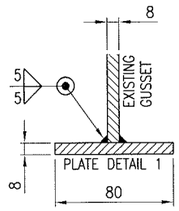


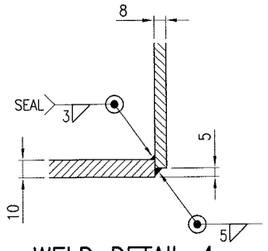
PLATE DETAIL 1

(3 PLACES)



WELD DETAIL 3

TYPICAL SECTION



WELD DETAIL 4

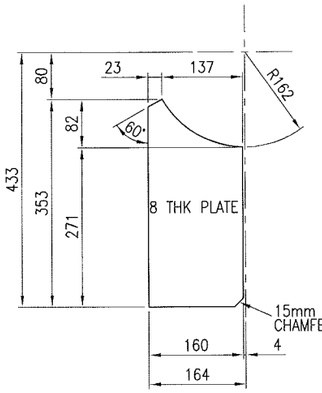
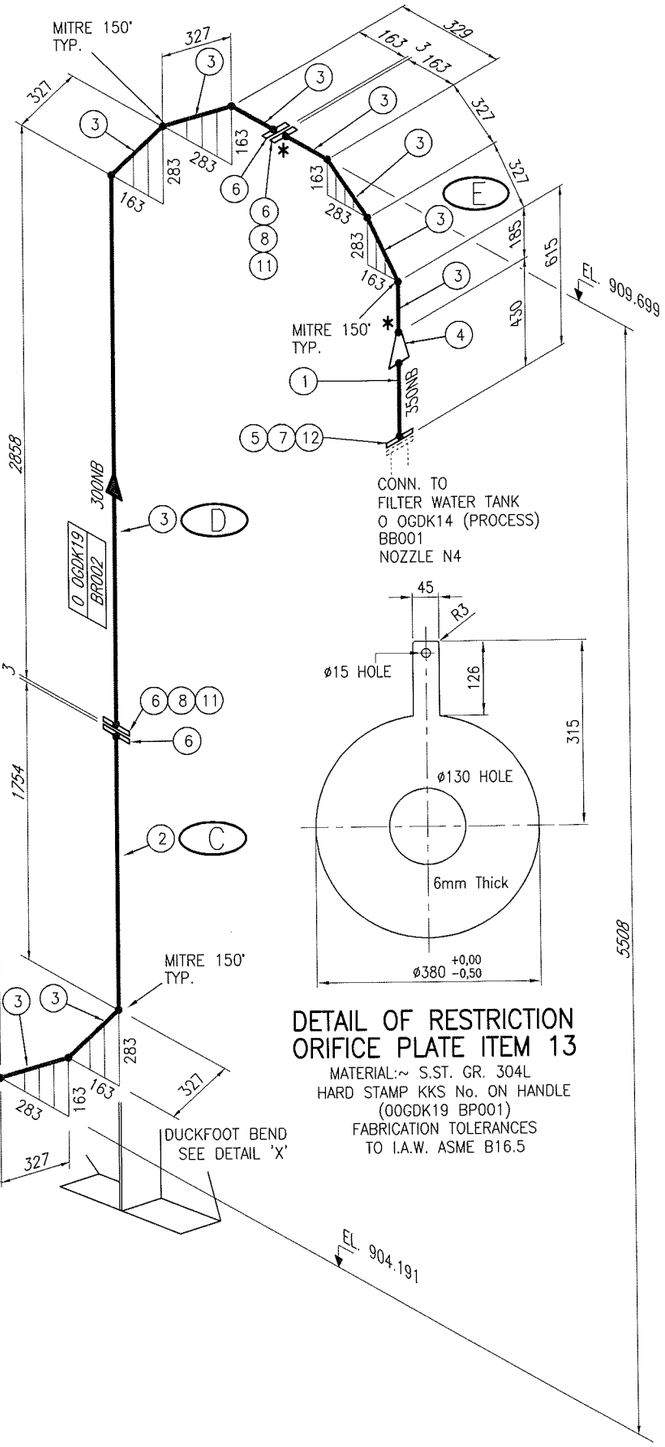


PLATE DETAIL 2

(2 PLACES)



DETAIL OF RESTRICTION ORIFICE PLATE ITEM 13

MATERIAL:~ S.ST. GR. 304L
HARD STAMP KKS No. ON HANDLE (00GDK19 BP001)
FABRICATION TOLERANCES TO I.A.W. ASME B16.5

AS BUILT
Signed .....
Date 26/10/2017

DESIGN NOTES

A. DESIGN PRESSURE :	1000 kPaG
B. OPERATING PRESSURE :	300 kPaG
C. TEST PRESSURE (HYDROSTATIC) : SYSTEM TEST ON SITE	450 kPaG
D. TEMPERATURE :	24 °C
E. STRESS RELIEF : YES / NO	
F. CORROSION ALLOWANCE :	1mm
G. NDE / NDT : YES / NO	

MATERIAL LIST

LINE No. 0 OGDK19 BR001-300NB

SERVICE: FW (FILTERED WATER) CC SPECIFICATION

ITEM	SIZE	QTY	DESCRIPTION
1	350	0.1 M	PIPE, SABS 719 Gr.B x 4,5mm WALL
2	300	10.2 M	PIPE, SABS 719 Gr.B x 4,5mm WALL
3	300	3.0 M	MITERED PIPE, SABS 719 Gr.B x 4,5mm WALL
4	350x300	1	REDUCER, CONC. JIS B2311-82
5	350	1	FLG, FFSO SABS 1123 T1000/3, M.S.
6	300	10	FLG, FFSO SABS 1123 T1000/3, M.S.
7	350	1	GASKET, FF TO SABS 1123 T1000x3mm, RUBBER INSERTION
8	300	4	GASKET, FF TO SABS 1123 T1000x3mm, RUBBER INSERTION
9	300	2	BUTTERFLY VALVE, HAITIMA 2014
10	M20x190	36	STUD BOLT C/W 2 NUTS&WASHERS HD GALV.SABS135 GR.4.6
11	M20x80	24	BOLT SABS 135 GR 4.6 HD GALV. C/W NUT & WASHER
12	M20x90	28	BOLT SABS 135 GR 4.6 HD GALV. C/W NUT & WASHER
13	ø380x6Th	1	ORIFICE PLATE ~ S.STEEL GR. 304L

GENERAL NOTES

1) ALL PIPING MATERIAL AS PER AQUA SPECIFICATION 200-12752.
2) ALL FITTINGS AS PER AQUA SPECIFICATION 200-12752.
3) ALL WELDS MUST BE CONTINUOUS, SMOOTH & FREE FROM ANY SLAG, SPLATTER ETC.
4) ALL SHARP EDGES, CORNERS, HOLES ETC TO BE GROUND SMOOTH & ROUNDED (ie 3mm RAD. MIN)
5) ALL FLANGES & GASKETS AS PER AQUA SPECIFICATION 200-12752. BOLT HOLES TO STRADDLE CENTRE LINES
6) ALL ITEMS TO BE CLEARLY MARKED USING HARD STAMPED LETTERING
7) PIPE MARKING LEGEND :~ ITEM C048/15031-A (DRG ORIGINATED FROM / TAG No.)
8) CORROSION PROTECTION:
   INTERNAL - SAND BLAST TO SA 3
   CARBOLINE 891 TO MINIMUM DFT OF 250µ
   EXTERNAL: SAND BLAST TO SA 3
   CARBOLINE 891 TO MINIMUM DFT OF 130µ
   CARBOLINE 134 TOP COAT TO MINIMUM DFT OF 75µ
   COLOUR TO BE CONFIRMED.
9) CORROSION PROTECTION TO ESKOM SPECIFICATION - CSS 222
10) ALL S.STEEL BOLT THREADS MUST BE TREATED WITH A NICKEL BASED, ANTI-SEIZE CORROSION PROTECTION COMPOUND.
11) TOLERANCES - DIMENSIONS UP TO 1000mm = ±1mm
    - DIMENSIONS OVER 1000mm = ±3mm
    - HOLE CENTRES = ±0,5mm
    - ANGULAR TOLERANCE = ±30 minutes
12) PLAIN PIPE ENDS SHOULD BE SMOOTH, WITH NO SEAMS, SCORE MARKS, DENTS OF OVALITY BEYOND THOSE DETAILED IN BS 534-1990 SECTION 15
13) THE C.P. OF THE STATION IS Y=-57 470.00 AND X=2 622 675.00. (I.A.W. WGS84/Lo27 SYSTEM)
14) THE STATION DATUM LEVEL IS 902.250 m.

WHERE APPLICABLE :
* GREEN ENDS - ADD 200mm TO PIPE AND TACK WELD FLANGE. ON SITE, CUT PIPE AND FULLY WELD FLANGE TO SUIT. REPAIR CORROSION PROTECTION AFTER WELDING.

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E-Mail: info@aquasa.co.za

D.O.	REV	DATE	INDEX REFERENCE	AUTHORISED FOR ESKOM BY	DATE	REFERENCE DRAWINGS
	5	19.02.16	AS BUILT	JR JMK JM JV		
	4	20:10:14	D/FOOT CHANGED TO SUIT ENG. DESIGN	MJF JP NH JV		
	3	06.02.14	ITEM '8' CHANGED. AS BUILT.	TPS J.P. B.D. J.V.		
	2	13.01.11	KKS VALVE NUMBER UPDATE	E.R. B.R. B.D. J.V.		
	7	26.10.17	AS BUILT	N.A.S. N.M. J.P. J.V.		0.84/4672 P&ID FILTERED WATER TANK
	6	07:09:16	ORIFICE PLATE ADDED	MJF JMK SS JV		0.84/19963- INTERCONN. PIPING G.A.
			** REVISION **	REV BY CHKD BY AUTH BY KKS APP		

DRG REGISTR	14.06.10	E.J.M.	
DESIGN APPROVED	14.06.10	F.F.	
KKS APP	14.06.10	J.V.	
DD AUTH	27.05.10	H.H.	
CHKD BY	26.05.10	J.P.	
DRAWN BY	14.04.10	S.M.	
SCALE	NTS		

MEDUPI POWER STATION
WTP - UF
BACKWASH RECYCLE
ISOMETRIC SHEET 1 OF 2

C048-15133

0.84/16899

SPF CODE | SHEET 1 | REV 7

SIZE A1L