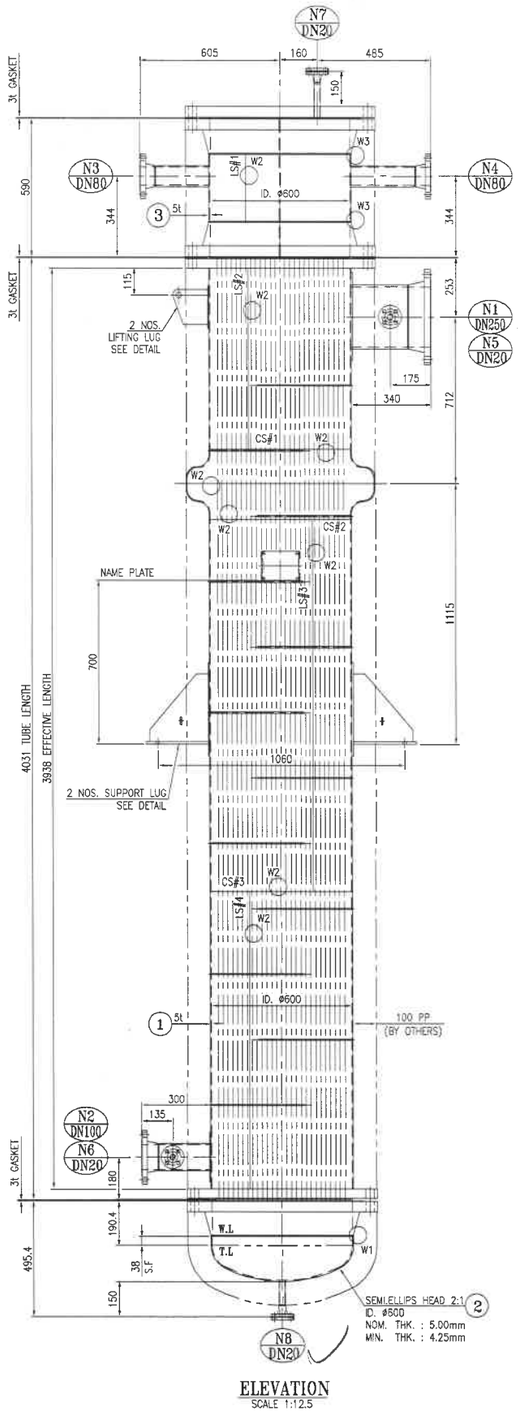
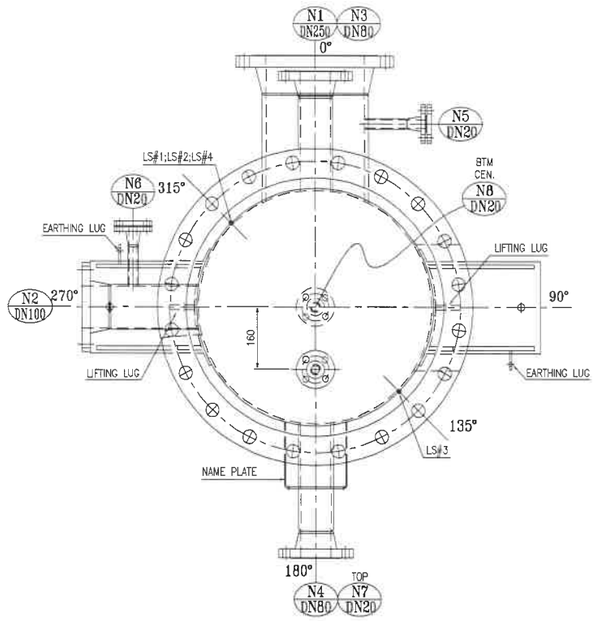
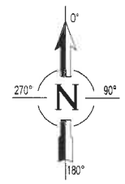


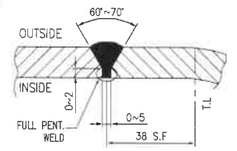
ELEVATION
SCALE 1:12.5



ORIENTATION
SCALE 1:7.5

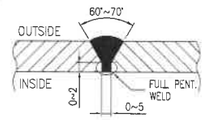


'W1'



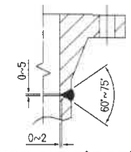
WELD'G.DT'L.
TABLE: UW-12(1)(ROOT=GTAW/SMAW)
(FILL&CAP=GTAW/SMAW/FCAW)

'W2'



WELD'G.DT'L.
TABLE: UW-12(1)(ROOT=GTAW/SMAW)
(FILL&CAP=GTAW/SMAW/FCAW)

'W3'



FLANGE WELD'G.DT'L.
App.2-Fig.2-4(6)(GTAW/FCAW/SMAW)

MATERIAL SPECIFICATION

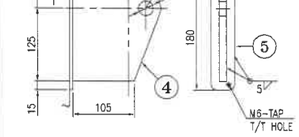
NO.	DESCRIPTION	MATERIAL	QTY.	REMARK
1	SHELL	SA-240-GR.316/316L	1	5t
2	SEMI ELLIPS HEAD 2:1	SA-240-GR.316/316L	2	5t (NOM.) 4.25t (MIN.)
3	CHANNEL BODY	SA-240-GR.316/316L	2	5t
4	LIFTING LUG	SA-36 OR EQ	2	12t
5	LIFTING LUG WEAR PAD	SA-240-GR.316/316L	2	5t
6	SUPPORT LUG	SA-36 OR EQ	4	10t
7	SUPPORT LUG BOTTOM	SA-36 OR EQ	2	10t
8	SUPPORT LUG WEAR PAD	SA-240-GR.316/316L	2	5t
9	EARTHING LUG	SA-240-GR.316/316L	2	5t
10	EXPANSION BELLOW	SA-240-GR.316/316L	1	8t

DESIGN DATA

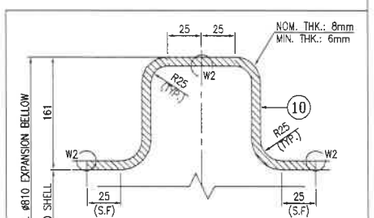
CODE & STANDARD.		ASME SECT. VIII DIV. 1 2017 ED./TEMA CLASS B 2007 ED.		
		SHELL SIDE	TUBE SIDE	
FLUID.		REFLUX WATER	CHILLED WATER	
VOLUME.		1.02	0.2	CU.M.
OPERATING PRESS.		0.1	5	Bar(g)
OPERATING TEMP.		50	35~40	C
DESIGN PRESS.		12/F.V	10	Bar(g)
DESIGN TEMP.		210	200	C
TEST PRESS.	HYDRO.	16.12	13.34	Bar(g)
	PNEU.	–	–	
PWHT.		–	–	
JOINT EFFICIENCY		0.7	0.7	
RADIOGRAPHIC EXAM.		NIL	NIL	
CORR. ALLOWANCE.		0	0	mm.
MMT		39.55	8.06	C
NUMBERS OF PASS		1	2	
SURF / SHELL (EFF)		64.3		m2
INSULATION		100 (BY OTHERS)		mm.
WIND LOAD		32.5		m/s
EMPTY WEIGHT		2239		Kg
OPERATION WEIGHT		2368		Kg
TEST WEIGHT		3628		Kg

GENERAL NOTES

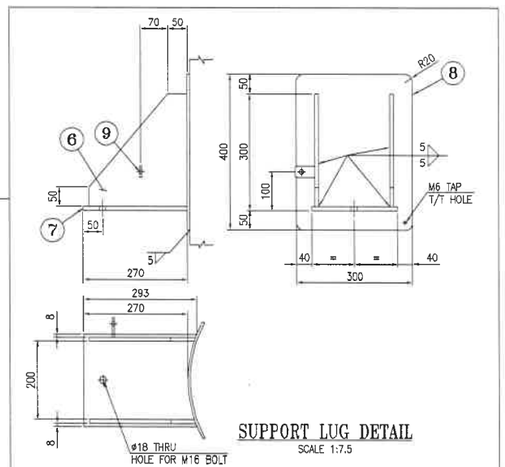
1. ALL DIMENSION SHALL BE IN MM UNLESS OTHERWISE NOTED.
2. ALL BOLTS HOLES SHALL STRADDLE THE PRINCIPAL AXIS.
3. REINFORCEMENT PLATE SHALL BE MADE IN ONE PIECE OF PLATE.
4. FLANGES SHALL BE ACCORDANCE TO ASME B16.5 2015.
5. PRIOR TO FINAL INSPECTION, ALL SLAGS, DIRT, DUST, LOOSE SCALE, OIL, PAINT ,WELD SPLATTERS AND OTHER FOREIGN MATERIAL SHALL BE REMOVED FROM INSIDE AND OUTSIDE OF THE VESSEL.
6. -DELETED-
7. SPECIFIED 316L MATERIAL SHALL BE COMPLY SS316 MECHANICAL STRENGTH AND CONFORM TO SS316L CHEMICAL COMPOSITION.



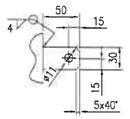
LIFTING LUG DETAIL
SCALE 1:5



EXPANSION BELLOW DETAIL
(N.T.S)



SUPPORT LUG DETAIL
SCALE 1:7.5



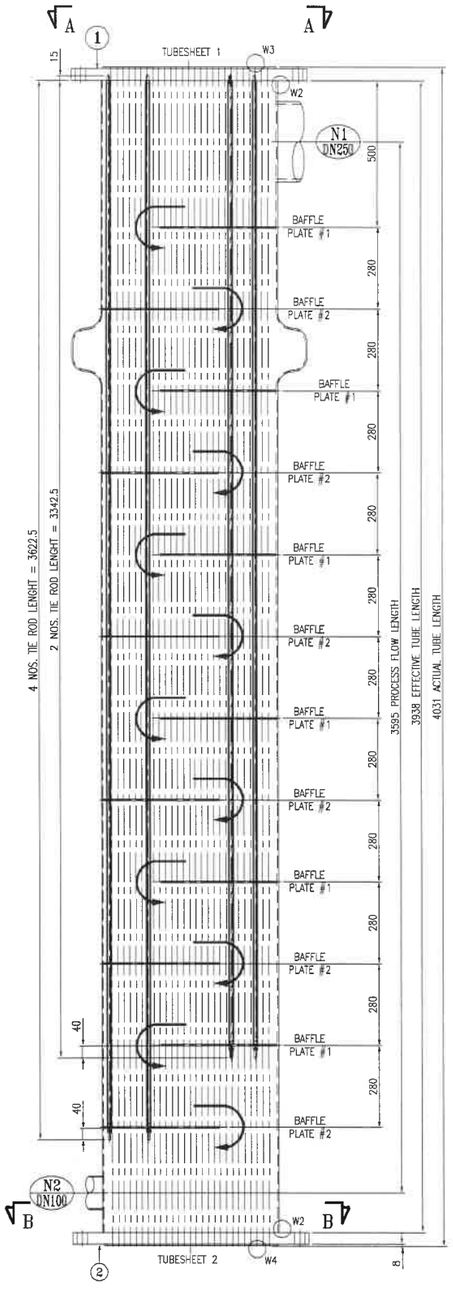
9 EARTHING LUG DT'L.
SCALE 1:4

JOB NO.: 18/02101PLCH	MARK	DESCRIPTION	QTY.	PIPE DATA SIZE	SCH/THK	MATERIAL	FLANGE DATA SIZE	TYPE	RATING	MATERIAL
	N8	DRAIN	1	DN20	SCH. 40s	SA-312-TP.316/316L	DN20	WNRF	150#	SA-182-F.316/316L
	N7	VENT	1	DN20	SCH. 40s	SA-312-TP.316/316L	DN20	WNRF	150#	SA-182-F.316/316L
	N6	DRAIN	1	DN20	SCH. 40s	SA-312-TP.316/316L	DN20	WNRF	150#	SA-182-F.316/316L
	N5	VENT	1	DN20	SCH. 40s	SA-312-TP.316/316L	DN20	WNRF	150#	SA-182-F.316/316L
	N4	CHILL WATER OUTLET	1	DN80	SCH. 40s	SA-312-TP.316/316L	DN80	WNRF	150#	SA-182-F.316/316L
	N3	CHILL WATER INLET	1	DN80	SCH. 40s	SA-312-TP.316/316L	DN80	WNRF	150#	SA-182-F.316/316L
	N2	DMSO OUTLET	1	DN100	SCH. 40s	SA-312-TP.316/316L	DN100	WNRF	150#	SA-182-F.316/316L
	N1	DMSO INLET	1	DN250	SCH. 40s	SA-312-TP.316/316L	DN250	WNRF	150#	SA-182-F.316/316L

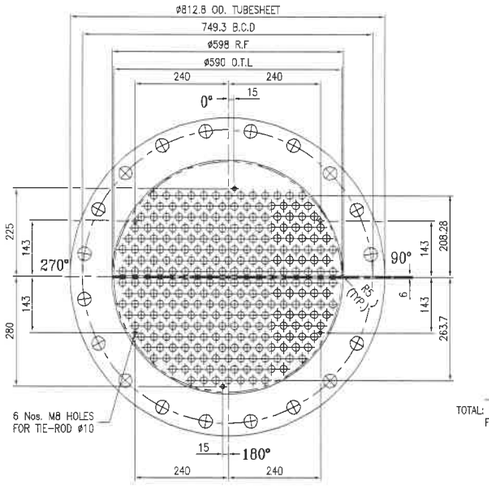
NOZZLE SCHEDULE

DOSH APPROVAL:

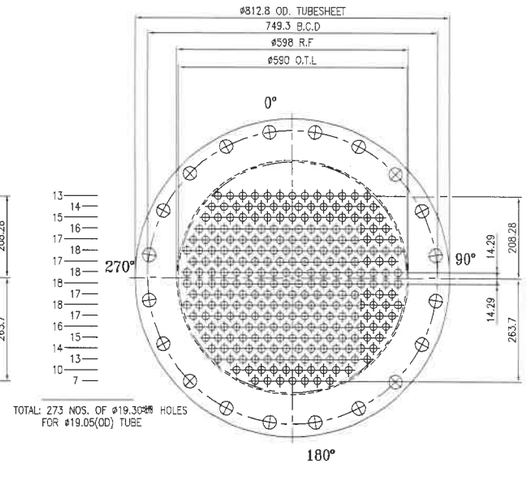
[redacted]



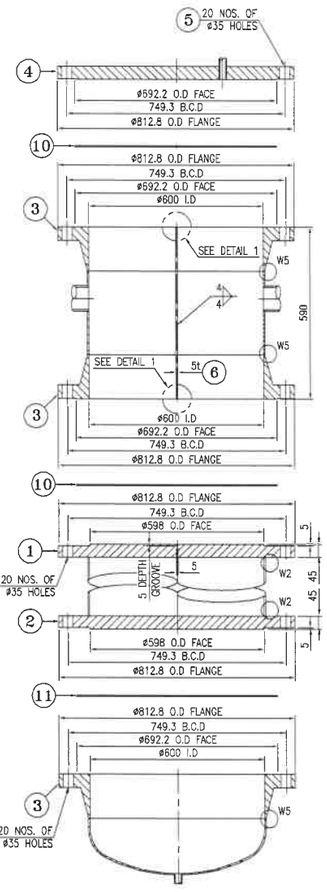
BAFFLE PLATE & TIE ROD ARRANGEMENT (SIDE VIEW)
SCALE 1:10



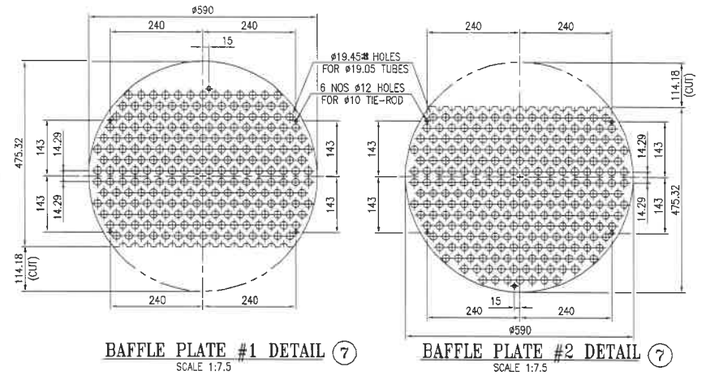
VIEW A-A
TUBESHEET#1 DETAIL (1)
SCALE 1:7.5



VIEW B-B
TUBESHEET#2 DETAIL (2)
SCALE 1:7.5

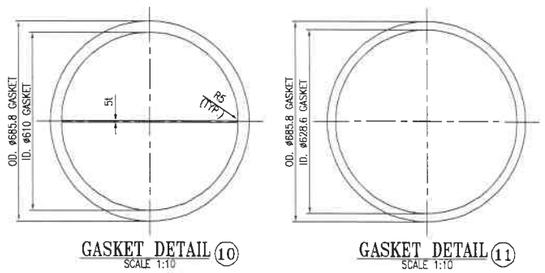


CHANNEL FLANGE DETAIL
SCALE 1:10



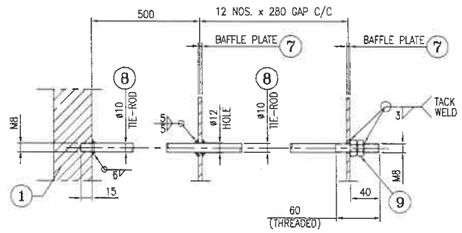
BAFFLE PLATE #1 DETAIL (7)
SCALE 1:7.5

BAFFLE PLATE #2 DETAIL (7)
SCALE 1:7.5



GASKET DETAIL (10)
SCALE 1:10

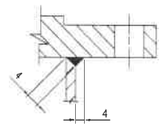
GASKET DETAIL (11)
SCALE 1:10



BAFFLE PLT.MOUNT'G.DT'L.
SCALE 1:4

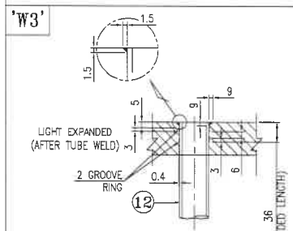
(DELETED)

'W2'



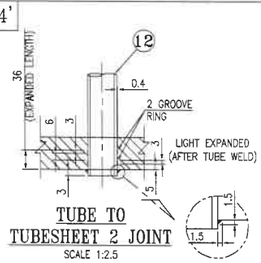
TUBESHEET TO SHELL WELD'G.DT'L
FIG. UW-13.2(i)(GTAW/FCAW/SMAW)

'W3'



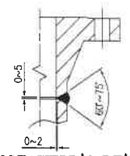
TUBE TO TUBESHEET 1 JOINT
SCALE 1:2.5

'W4'

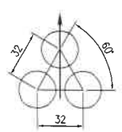


TUBE TO TUBESHEET 2 JOINT
SCALE 1:2.5

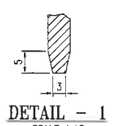
'W5'



FLANGE WELD'G.DT'L.
App.2-Fig.2-4(5)(GTAW/FCAW/SMAW)



PITCH DETAIL
SCALE 1:2



DETAIL - 1
SCALE 1:10

MATERIAL SPECIFICATION

NO.	DESCRIPTION	MATERIAL	QTY.	REMARK
1	TUBESHEET 1	SA-240-GR.316/316L	1	45t
2	TUBESHEET 2	SA-240-GR.316/316L	1	45t
3	BODY FLANGE	SA-182-F.316/316L	3	DN600 ASME B16.5 CLASS 150# RFWNF
4	BLIND FLANGE	SA-240-GR.316/316L	1	45t
5	HEX.BOLT & NUT	SA-193-B7 & SA-194-2H	60	1-1/4" x 175LG
6	PARTITION PLATE	SA-240-GR.316/316L	1	5t
7	BAFFLE PLATE	SA-240-GR.316/316L	12	5t
8	TIE ROD	SA-479-Gr.316/316L	6	RB. ø10
9	NUT	SA-194-8M	12	M8
10	GASKET	CNAF	2	3t
11	GASKET	CNAF	1	3t
12	TUBE (SEAMLESS)	SA-213-TP.316/316L	273	ø19.05 x 1.65t

DOSH APPROVAL:

[redacted]

JOB NO. 18/02101PLCH