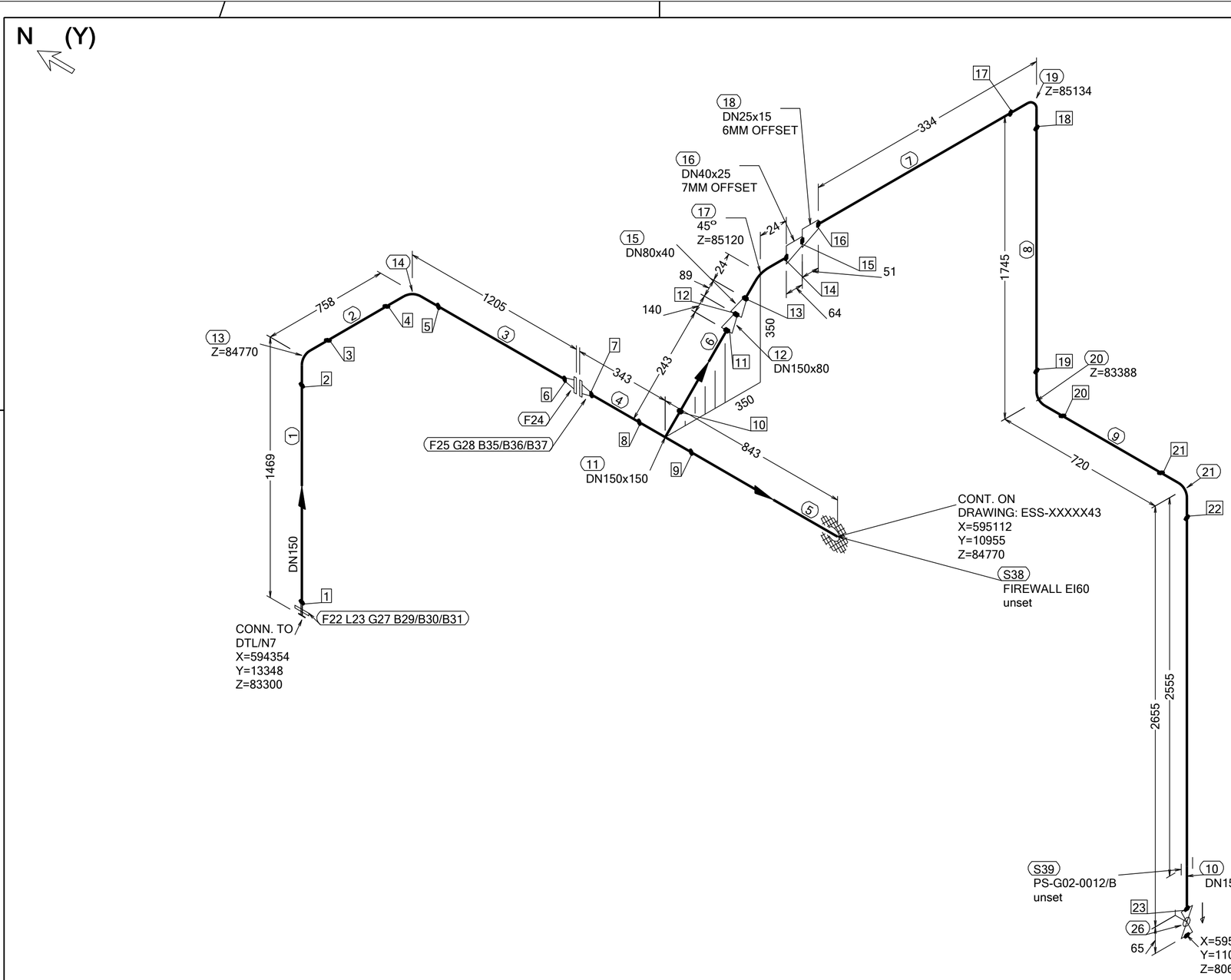

WELD	WPS
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FABRICATION MATERIALS

PT NO	COMPONENT DESCRIPTION	DN	MATERIAL	QTY (mm)	REMARKS
	PIPE				
1	PIPE, SS-EN 10217-7, TC1, 168.3x2.0	150	EN 1.4404	1185	
2	PIPE, SS-EN 10217-7, TC1, 168.3x2.0	150	EN 1.4404	300	
3	PIPE, SS-EN 10217-7, TC1, 168.3x2.0	150	EN 1.4404	921	
4	PIPE, SS-EN 10217-7, TC1, 168.3x2.0	150	EN 1.4404	145	
5	PIPE, SS-EN 10217-7, TC1, 168.3x2.0	150	EN 1.4404	700	
6	PIPE, SS-EN 10217-7, TC1, 168.3x2.0	150	EN 1.4404	100	
7	PIPE, SS-EN 10217-7, TC1, 21.3x2.0	15	EN 1.4404	306	
8	PIPE, SS-EN 10217-7, TC1, 21.3x2.0	15	EN 1.4404	1689	
9	PIPE, SS-EN 10217-7, TC1, 21.3x2.0	15	EN 1.4404	664	
10	PIPE, SS-EN 10217-7, TC1, 21.3x2.0	15	EN 1.4404	2627	
	FITTINGS				
11	TEE EQUAL, SS-EN 10253-4, TYPE A, 168.3x2.0 / 168.3x2.0	150 x 150	EN 1.4404	1	
12	REDUCER CONC, SS-EN 10253-4, TABLE A.5, 168.3x2.0 / 88.9x2.0	150 x 80	EN 1.4404	1	
13	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 168.3x2.0	150	EN 1.4404	1	
14	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 168.3x2.0	150	EN 1.4404	1	
15	REDUCER CONC, SS-EN 10253-4, TABLE A.5, 88.9x2.0 / 48.3x2.0	80 x 40	EN 1.4404	1	
16	REDUCER ECC, SS-EN 10253-4, TABLE A.5, 48.3x2.0 / 33.7x2.0	40 x 25	EN 1.4404	1	
17	ELBOW 45, TYPE 3D, SS-EN 10253-4, TYPE A, 48.3x2.0	40	EN 1.4404	1	
18	REDUCER ECC, SS-EN 10253-4, TABLE A.5, 33.7x2.0 / 21.3x2.0	25 x 15	EN 1.4404	1	
19	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 21.3x2.0	15	EN 1.4404	1	
20	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 21.3x2.0	15	EN 1.4404	1	
21	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 21.3x2.0	15	EN 1.4404	1	
	FLANGES				
22	LOOSE FLANGE, SS-EN 1092-1, TYP 02, PN16	150		1	
23	WELDING RING WITH COLLAR, SS-EN 1092-1 TYPE 35, PN16	150		1	
24	FLANGE WN, SS-EN 1092-1, TYPE 11, PN16	150		1	
25	FLANGE WN, SS-EN 1092-1, TYPE 11, PN16	150		1	
	VALVES / IN-LINE ITEMS				
26	BALL VALVE, WORCESTER A44, SHORT, BW	15		1	

ERECTION MATERIALS

PT NO	COMPONENT DESCRIPTION	DN	MATERIAL	QTY (mm)	REMARKS
	GASKETS				
27	GASKET, EN 1514-1, TYPE XXX, T=1,5mm	150	EXPANDED GRAPHITE	1	
28	GASKET, EN 1514-1, TYPE XXX, T=1,5mm	150	EXPANDED GRAPHITE	1	
	BOLTS				
29	HEXAGONAL NUT, M6M, ISO 4032	20	EN 1515-4, A4	8	
30	WASHER, BRB, ISO 7089	20	A4, HV≥250	16	
31	90 mm HEXAGONAL BOLT, M6S, ISO 4017	20	EN 1515-4, A4-70	8	
35	HEXAGONAL NUT, M6M, ISO 4032	20	EN 1515-4, A4	8	
36	WASHER, BRB, ISO 7089	20	A4, HV≥250	16	
37	80 mm HEXAGONAL BOLT, M6S, ISO 4017	20	EN 1515-4, A4-70	8	
	SUPPORTS				
38	PENETRATION ATTA	150		1	
39	ESS Atta	15		1	

WPS See Weldlist: TBN	Design Temperature: 50degC	Tightening Torque For Flange Joints: TBN	P&ID Drawing Number: ESS-0060416	General Layout Drawing Number: TBN	Calculation Report: ESS-0058702	Inspection Plan: TBN	Area Code: G02
Quality Level For Weldign Acc To: TBN	Design Pressure: 10bar (g)	Bend Radius: N/A	Bending Procedure: N/A	Coupling Installation Procedure: TBN	Pressure Test Program: TBN	Alternate System Tag	Date (First Issue): 170522
Weld Joint Efficiency Factor (Longitudinal): 1,0	Test Pressure: 14.3bar (g)	Insulation Specification: N/A		Title/Name: EUROPEAN SPALLATION SOURCE ERIC WATER COOLING SYSTEM CWM DIW SUPPLY FOR FEB ESS.ACC.E02.E04.WP0002			Scale: -
Elevation (z) Acc To: BCS	Quality Class: MQC4-C	Insulation Thickness: N/A					Format: A2
	Media: CWM	Allowance For Corrosion: 0					Sheet: 1 of 1
	Pipe Specification: MQC4-W-PN16	Surface Treatment: N/A		Document Number: ESS-XXXXX17			Revision: A1

Rev	Description	Date	Drawn	Designed	Reviewed	Verified	Quality	Approved
A1	ISSUED FOR CDR	170522	FRPE	FRPE	AKCO	ANLU		

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