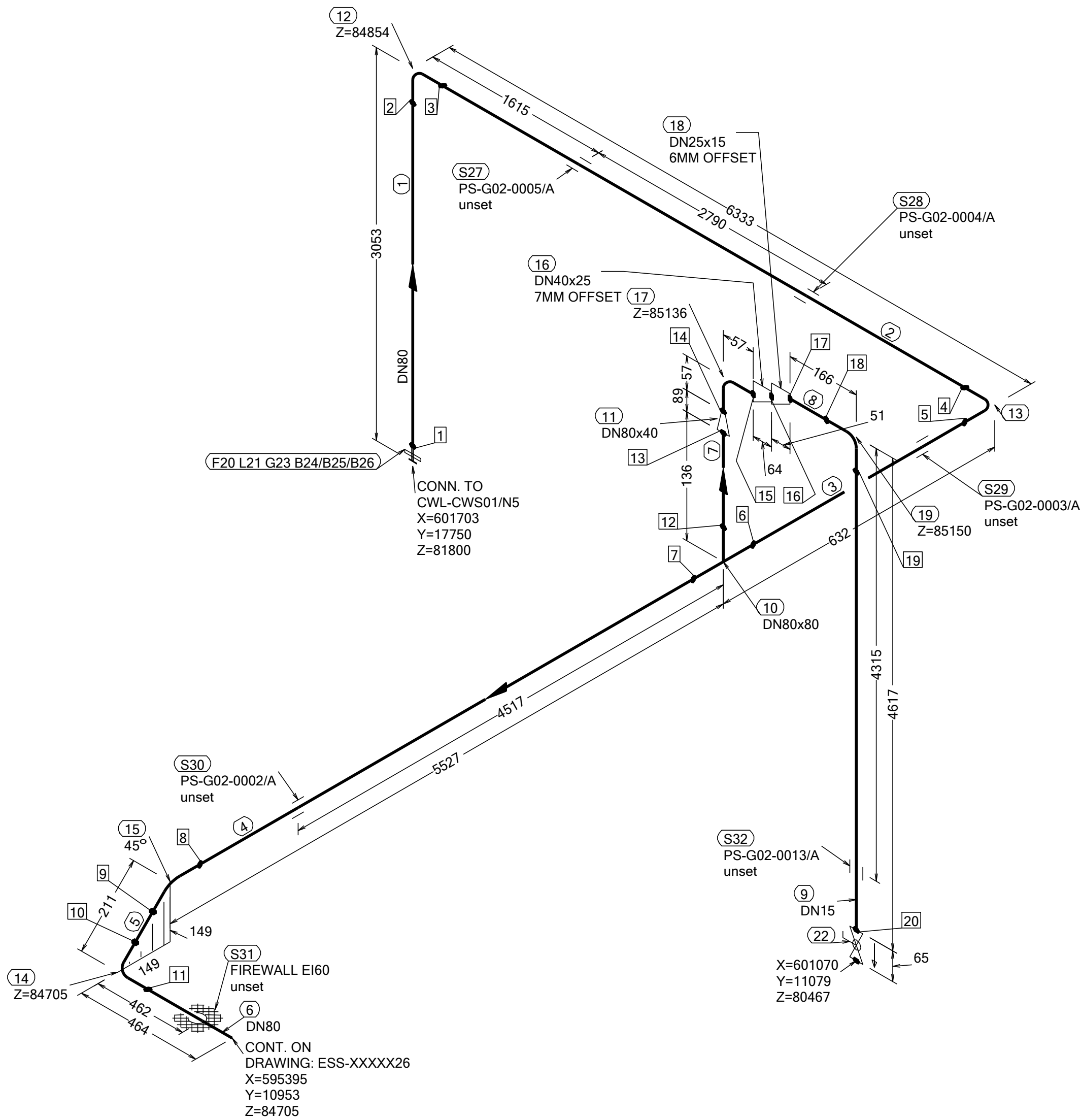
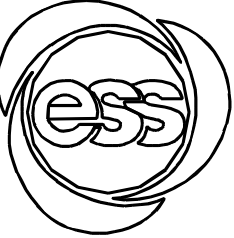


N (Y)



WELD	WPS	FABRICATION MATERIALS					
1		PT	COMPONENT DESCRIPTION	DN	MATERIAL	QTY	REMARKS
2		NO				(mm)	
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
			PIPE				
	1	1	PIPE, SS-EN 10217-7, TC1, 88.9x2.0	80	EN 1.4404	2889	
	2	2	PIPE, SS-EN 10217-7, TC1, 88.9x2.0	80	EN 1.4404	6105	
	3	3	PIPE, SS-EN 10217-7, TC1, 88.9x2.0	80	EN 1.4404	432	
	4	4	PIPE, SS-EN 10217-7, TC1, 88.9x2.0	80	EN 1.4404	5393	
	5	5	PIPE, SS-EN 10217-7, TC1, 88.9x2.0	80	EN 1.4404	50	
	6	6	PIPE, SS-EN 10217-7, TC1, 88.9x2.0	80	EN 1.4404	350	
	7	7	PIPE, SS-EN 10217-7, TC1, 88.9x2.0	80	EN 1.4404	50	
	8	8	PIPE, SS-EN 10217-7, TC1, 21.3x2.0	15	EN 1.4404	138	
	9	9	PIPE, SS-EN 10217-7, TC1, 21.3x2.0	15	EN 1.4404	4589	
			FITTINGS				
	10	10	TEE EQUAL, SS-EN 10253-4, TYPE A, 88.9x2.0 / 88.9x2.0	80 x 80	EN 1.4404	1	
	11	11	REDUCER CONC, SS-EN 10253-4, TABLE A.5, 88.9x2.0 / 48.3x2.0	80 x 40	EN 1.4404	1	
	12	12	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 88.9x2.0	80	EN 1.4404	1	
	13	13	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 88.9x2.0	80	EN 1.4404	1	
	14	14	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 88.9x2.0	80	EN 1.4404	1	
	15	15	ELBOW 45, TYPE 3D, SS-EN 10253-4, TYPE A, 88.9x2.0	80	EN 1.4404	1	
	16	16	REDUCER ECC, SS-EN 10253-4, TABLE A.5, 48.3x2.0 / 33.7x2.0	40 x 25	EN 1.4404	1	
	17	17	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 48.3x2.0	40	EN 1.4404	1	
	18	18	REDUCER ECC, SS-EN 10253-4, TABLE A.5, 33.7x2.0 / 21.3x2.0	25 x 15	EN 1.4404	1	
	19	19	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 21.3x2.0	15	EN 1.4404	1	
			FLANGES				
	20	20	LOOSE FLANGE, SS-EN 1092-1, TYP 02, PN16	80		1	
	21	21	WELDING RING WITH COLLAR, SS-EN 1092-1 TYPE 35, PN16	80		1	
			VALVES / IN-LINE ITEMS				
	22	22	BALL VALVE, WORCESTER A44, SHORT, BW	15		1	

PT NO	COMPONENT DESCRIPTION	DN	MATERIAL	QTY (mm)	REMARKS
GASKETS					
23	GASKET, EN 1514-1, TYPE XXX, T=1,5mm	80	EXPANDED GRAPHITE	1	
BOLTS					
24	HEXAGONAL NUT, M6M, ISO 4032	16	EN 1515-4, A4	8	
25	WASHER, BRB, ISO 7089	16	A4, HV≥250	16	
26	80 mm HEXAGONAL BOLT, M6S, ISO 4017	16	EN 1515-4, A4-70	8	
SUPPORTS					
27	ESS Atta	80		1	
28	ESS Atta	80		1	
29	ESS Atta	80		1	
30	ESS Atta	80		1	
31	PENETRATION ATTA	80		1	
32	ESS Atta	15		1	

WPS See Weldlist	Design Temperature	Tightening Torque For Flange Joints	P&ID Drawing Number	General Layout Drawing Number	Calculation Report	Inspection Plan	Area Code
TBN	50degC	TBN	ESS-0059672	TBN	ESS-0058702	TBN	G02
Quality Level For Weldign Acc To	Design Pressure	Bend Radius	Bending Procedure	Coupling Installation Procedure	Pressure Test Program	Alternate System Tag	Date (First Issue)
TBN	10bar (g)	N/A	N/A	TBN	TBN		170522
Weld Joint Efficiency Factor (Longitudinal)	Test Pressure	Insulation Specification			Title/Name EUROPEAN SPALLATION SOURCE ERIC WATER COOLING SYSTEM CWL-CWS01 OVERVIEW ESS.ACC.E02.E01.WP0001		Scale
1,0	14.3bar (g)	N/A					-
Elevation (z) Acc To	Quality Class	Insulation Thickness					Format
BCS	MQC4-C	N/A					A2
	Media	Allowance For Corrosion			Document Number ESS-XXXXXX6		Sheet
	CWM	0					1 of 1
	Pipe Specification	Surface Treatment					Revision
	MQC4-W-PN16	N/A					

Rev	Description	Date	Drawn	Designed	Reviewed	Verified	Quality	Approved
-----	-------------	------	-------	----------	----------	----------	---------	----------