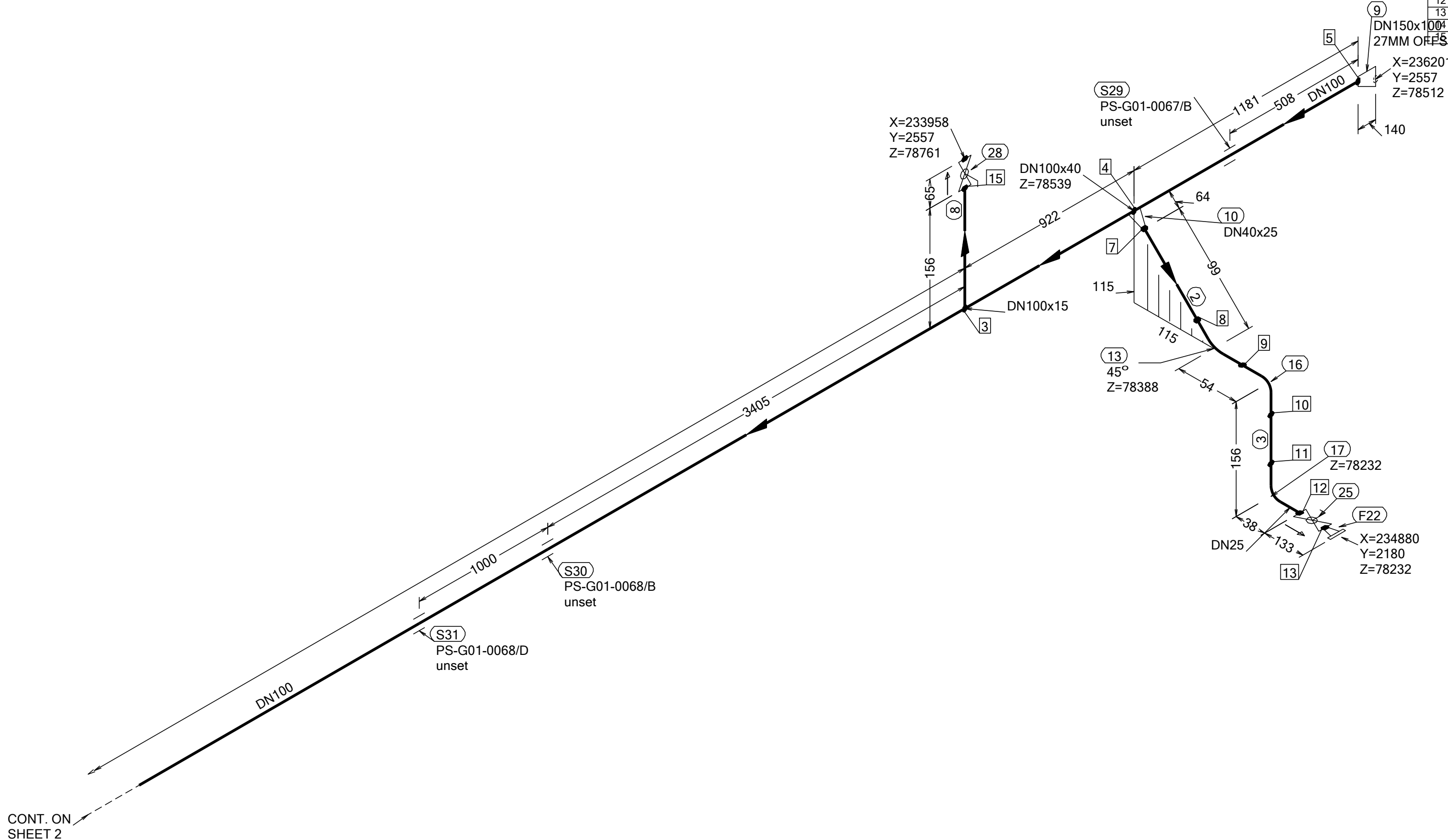


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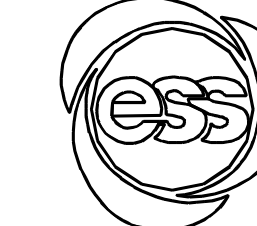


WELD	WPS
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FABRICATION MATERIALS					
PT NO	COMPONENT DESCRIPTION	DN	MATERIAL	QTY (mm)	REMARKS
PIPE					
1	PIPE, SS-EN 10217-7, TC1, 114.3x2.0	100	EN 1.4404	9030	SETON TEE
2	PIPE, SS-EN 10217-7, TC1, 33.7x2.0	25	EN 1.4404	83	
3	PIPE, SS-EN 10217-7, TC1, 33.7x2.0	25	EN 1.4404	80	
8	PIPE, SS-EN 10217-7, TC1, 21.3x2.0	15	EN 1.4404	100	
FITTINGS					
9	REDUCER ECC, SS-EN 10253-4, TABLE A.5, 168.3x2.0 / 114.3x2.0	150 x 100	EN 1.4404	1	
10	REDUCER CONC, SS-EN 10253-4, TABLE A.5, 48.3x2.0 / 33.7x2.0	40 x 25	EN 1.4404	1	
13	ELBOW 45, TYPE 3D, SS-EN 10253-4, TYPE A, 33.7x2.0	25	EN 1.4404	1	
16	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 33.7x2.0	25	EN 1.4404	1	
17	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 33.7x2.0	25	EN 1.4404	1	
FLANGES					
22	FLANGE WN, SS-EN 1092-1, TYPE 11, PN40	25		1	
VALVES / IN-LINE ITEMS					
25	WORCESTER BALL VALVE BW, A59-6666TT-BWJ DN25	25	EN 1.4404	1	
28	BALL VALVE, WORCESTER A44, SHORT, BW	15		1	

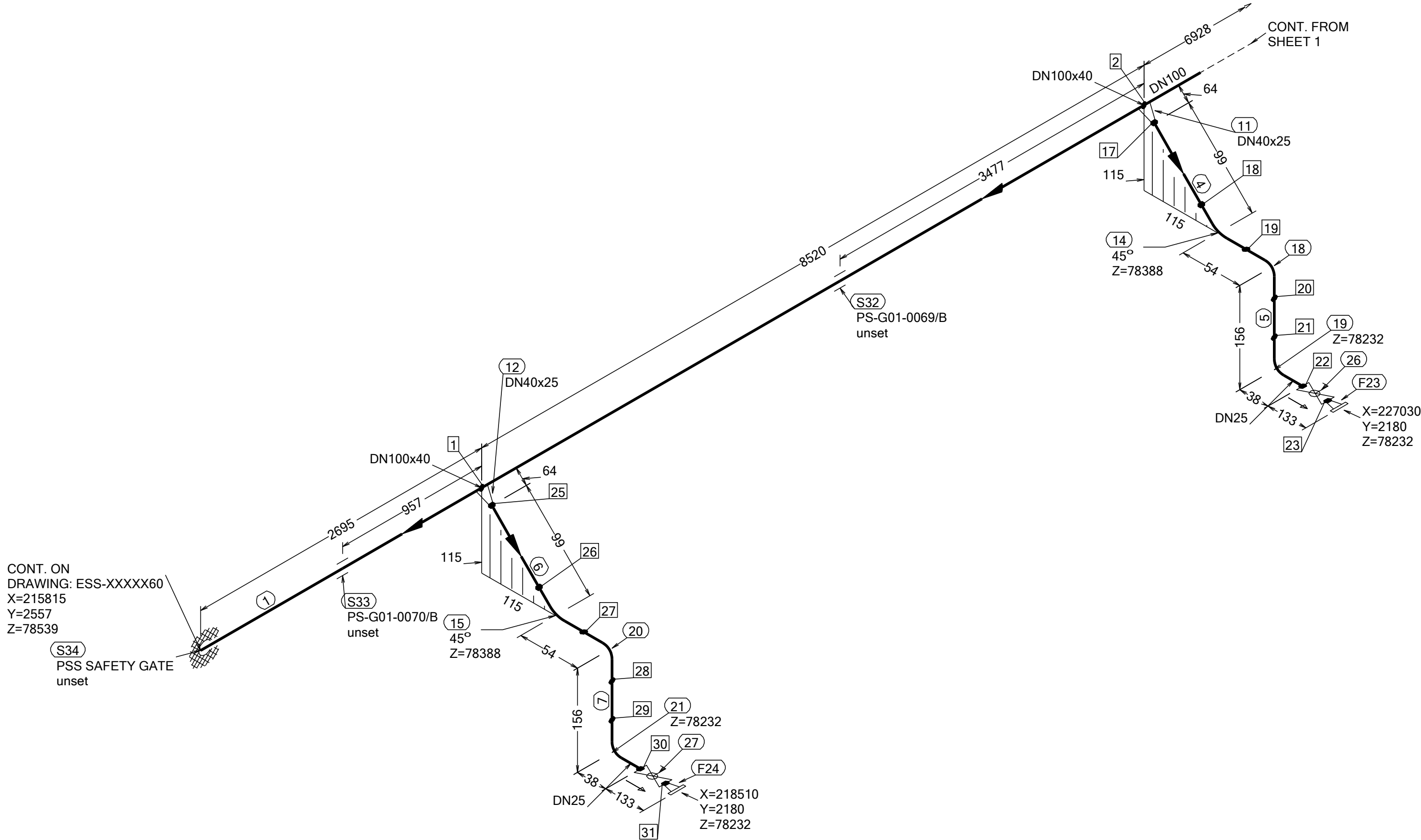
ERECTION MATERIALS					
PT NO	COMPONENT DESCRIPTION	DN	MATERIAL	QTY (mm)	REMARKS
SUPPORTS					
29	ESS Atta	100		1	
30	ESS Atta	100		1	
31	ESS Atta	100		1	

CONT. ON SHEET 2

WPS See Weldlist TBN	Design Temperature 50degC	Tightening Torque For Flange Joints TBN	P&ID Drawing Number ESS-0059673	General Layout Drawing Number TBN	Calculation Report ESS-0058702	Inspection Plan TBN	Area Code G01-HB
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-CWS02 OVERVIEW ESS.ACC.E02.E02.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 2
	Pipe Specification MQC4-W-PN16	Surface Treatment N/A					Revision A1
			Document Number ESS-XXXXX57				

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

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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, 114.3x2.0	100	EN 1.4404	11216	SETON TEE
4	PIPE, SS-EN 10217-7, TC1, 33.7x2.0	25	EN 1.4404	83	
5	PIPE, SS-EN 10217-7, TC1, 33.7x2.0	25	EN 1.4404	80	
6	PIPE, SS-EN 10217-7, TC1, 33.7x2.0	25	EN 1.4404	83	
7	PIPE, SS-EN 10217-7, TC1, 33.7x2.0	25	EN 1.4404	80	
	FITTINGS				
11	REDUCER CONC, SS-EN 10253-4, TABLE A.5, 48.3x2.0 / 33.7x2.0	40 x 25	EN 1.4404	1	
12	REDUCER CONC, SS-EN 10253-4, TABLE A.5, 48.3x2.0 / 33.7x2.0	40 x 25	EN 1.4404	1	
14	ELBOW 45, TYPE 3D, SS-EN 10253-4, TYPE A, 33.7x2.0	25	EN 1.4404	1	
15	ELBOW 45, TYPE 3D, SS-EN 10253-4, TYPE A, 33.7x2.0	25	EN 1.4404	1	
18	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 33.7x2.0	25	EN 1.4404	1	
19	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 33.7x2.0	25	EN 1.4404	1	
20	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 33.7x2.0	25	EN 1.4404	1	
21	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 33.7x2.0	25	EN 1.4404	1	
	FLANGES				
23	FLANGE WN, SS-EN 1092-1, TYPE 11, PN40	25		1	
24	FLANGE WN, SS-EN 1092-1, TYPE 11, PN40	25		1	
	VALVES / IN-LINE ITEMS				
26	WORCESTER BALL VALVE BW, A59-6666TT-BWJ DN25	25	EN 1.4404	1	
27	WORCESTER BALL VALVE BW, A59-6666TT-BWJ DN25	25	EN 1.4404	1	

ERECTION MATERIALS					
PT NO	COMPONENT DESCRIPTION	DN	MATERIAL	QTY (mm)	REMARKS
SUPPORTS					
32	ESS Atta	100		1	
33	ESS Atta	100		1	
34	PENETRATION ATTA	100		1	

CONT. ON  
DRAWING: ESS-XXXXX60  
X=215815  
Y=2557  
Z=78539

(S34)  
PSS SAFETY GATE  
unset

DN100x40

2695

957

115

(S33)

PS-G01-0070/B

unset

(15)

45°

Z=78388

54

156

38

133

DN25

(31)

(F24)

X=218510

Y=2180

Z=78232

(27)

(30)

(21)

Z=78232

(20)

(28)

(26)

(25)

64

DN40x25

(12)

DN40x25

(11)

64

DN100x40

3477

8520

(S32)

PS-G01-0069/B

unset

6928

CONT. FROM SHEET 1

DN100

(2)

64

DN40x25

(17)

115

(14)

45°

Z=78388

54

156

38

133

DN25

(19)

Z=78232

(22)

(26)

(F23)

X=227030

Y=2180

Z=78232

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