

Water Leak Detection System Engineering and Installation

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 Electrical Engineer
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Scope:

To provide a reliable system that is:

Reliable,
Easy to maintain,
Easy to access,
Fits in with existing equipment,
Is protected from damage
Does the job it is intended to

Scrubber System Overview:

Five Scrubbers across four furnaces. Moisture analysis currently on B to D scrubbers

Designed maximum flow rates:

A: 10,660Nm³/h (Furnace 3 backup)

B: 15,000Nm³/h (Furnace 3 main)

C: 7,800Nm³/h (Furnace 2 main)

D: 7,800Nm³/h (Furnace 1 & 2 backup)

E: 7,800Nm³/h (Furnace 1 main)

Temperature Ranges:

300 to 500 Degrees C typical, Spiking to over 600 Deg C

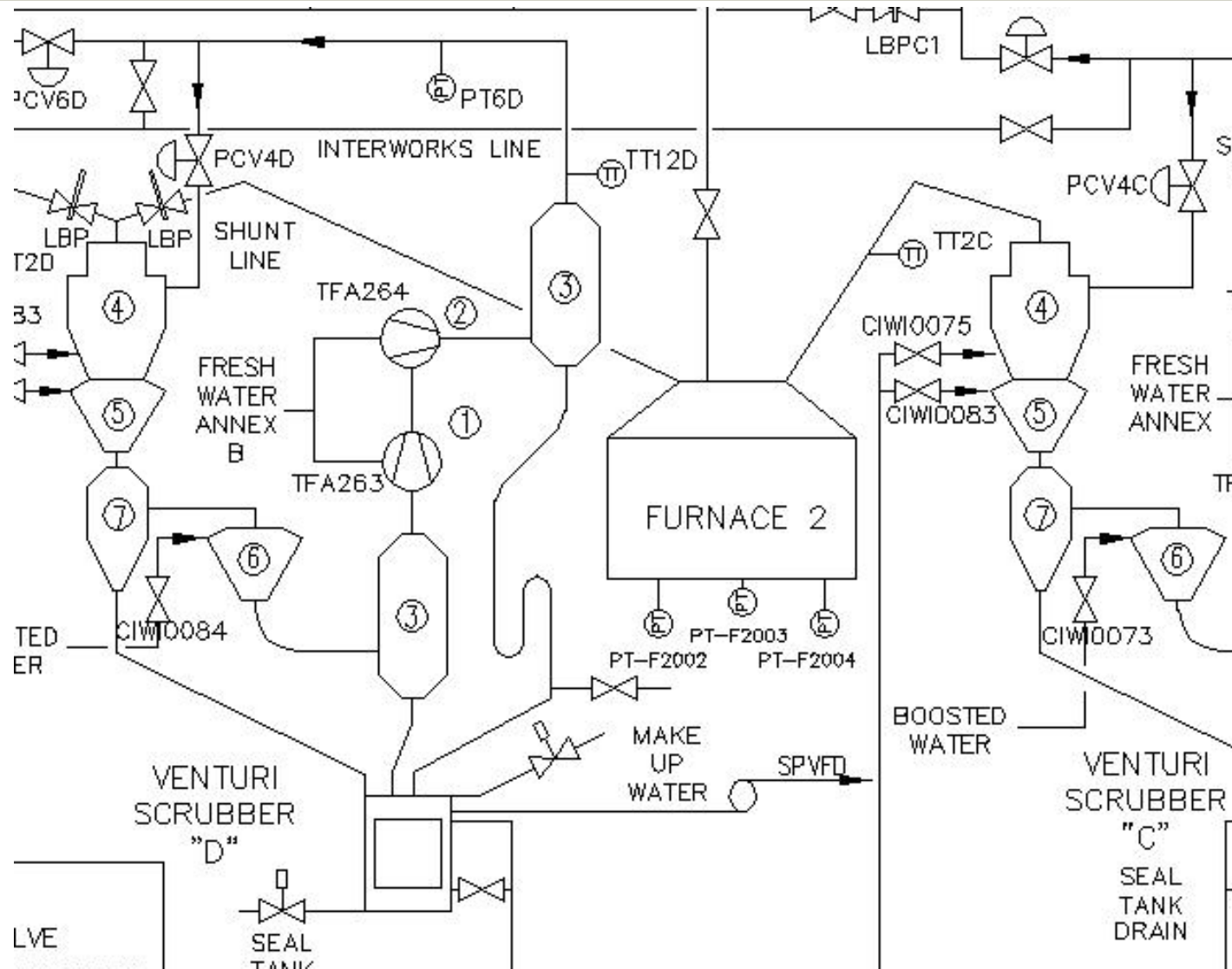
Pressure Ranges:

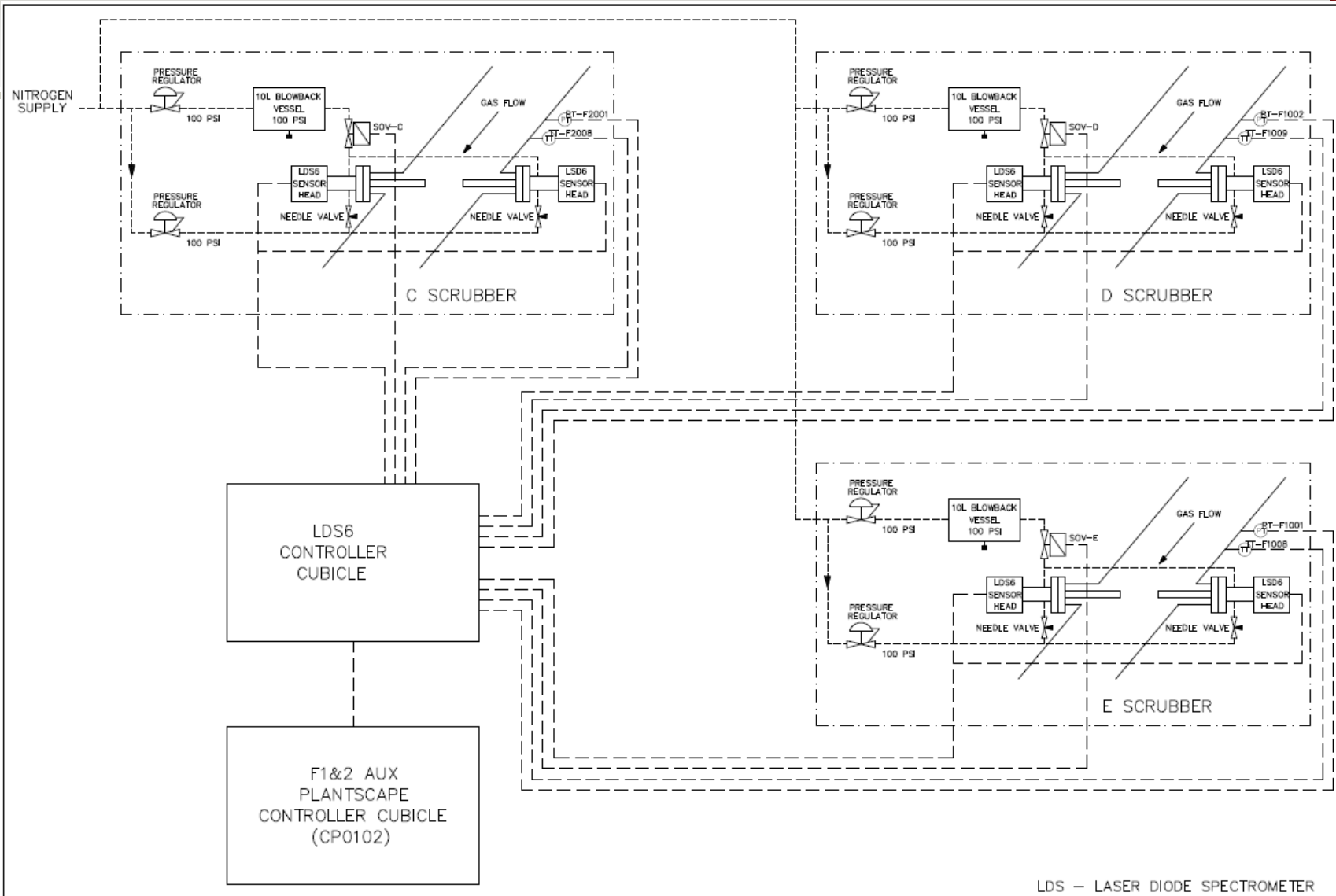
3 to 4kPa

Typical Dust Loading?

Would be nice to know but we don't

Scrubber System Overview:

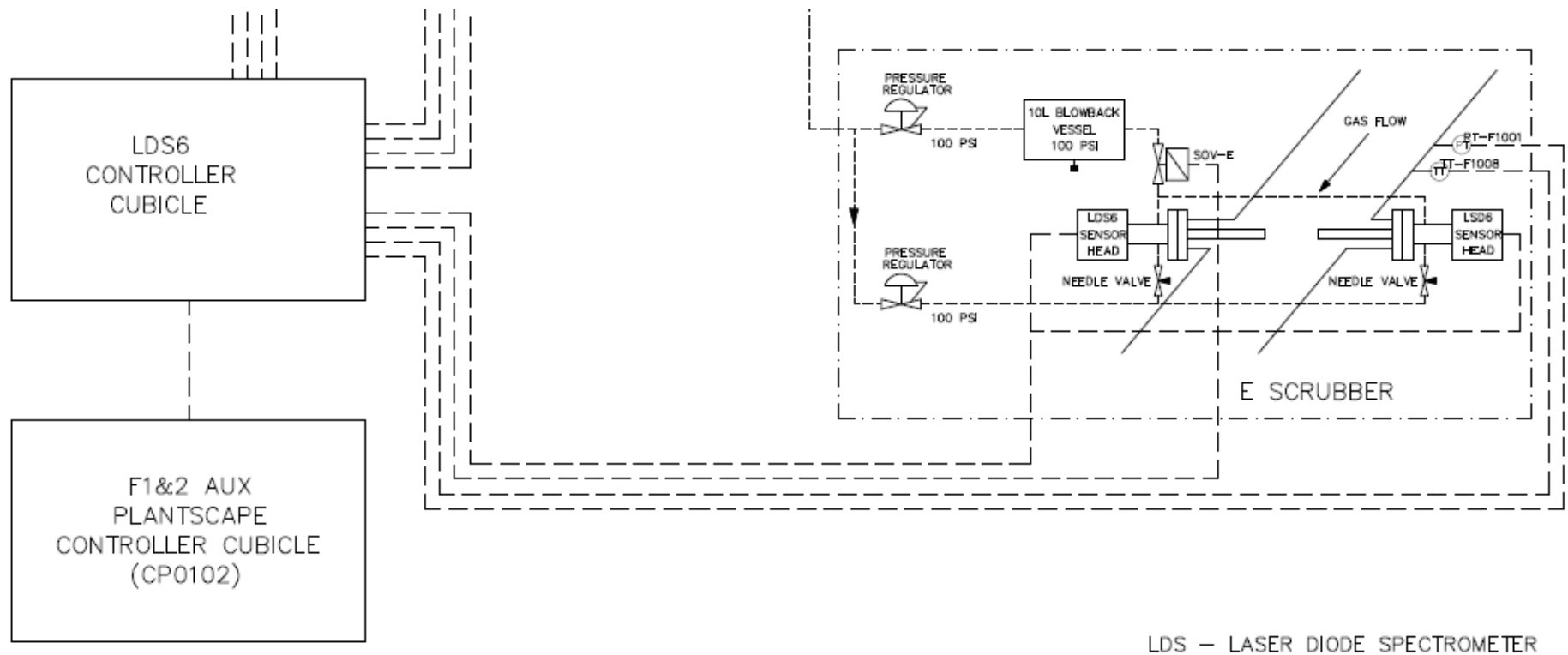




LDS — LASER DIODE SPECTROMETER

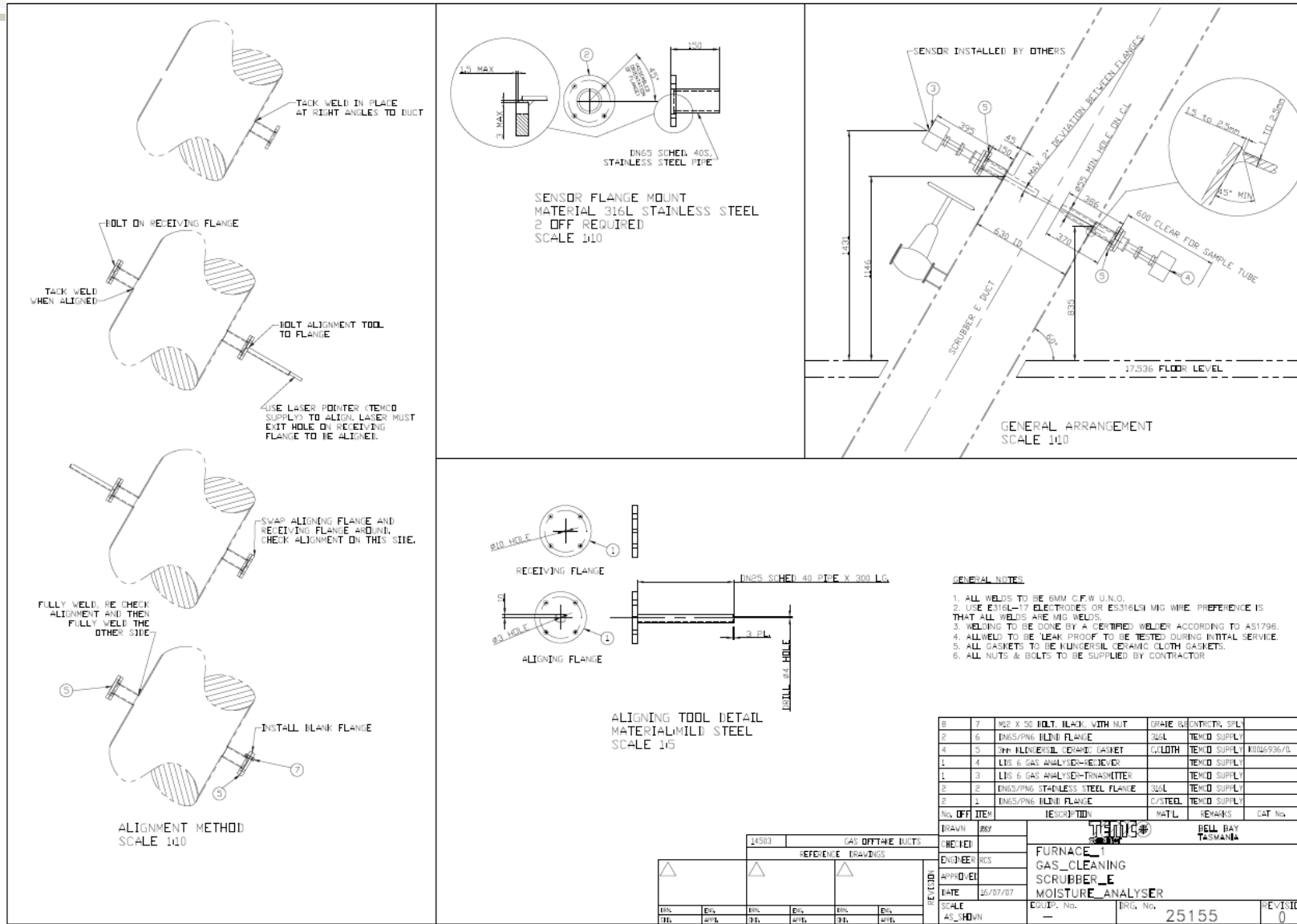
Revisions	△	△	△		Drawn	Date	Title FURNACE N°1&2 GAS CLEANING SCRUBBER C,D,E H2O LDS6 ANALYSER P&ID	DRG No 25159	SHT N°
	DRN.	DRN.	DRN.		DNT	15/05/08			EQUIP No
	CKD.	CKD.	CKD.	Checked	Engineer			REV N°	01
				PD	-				

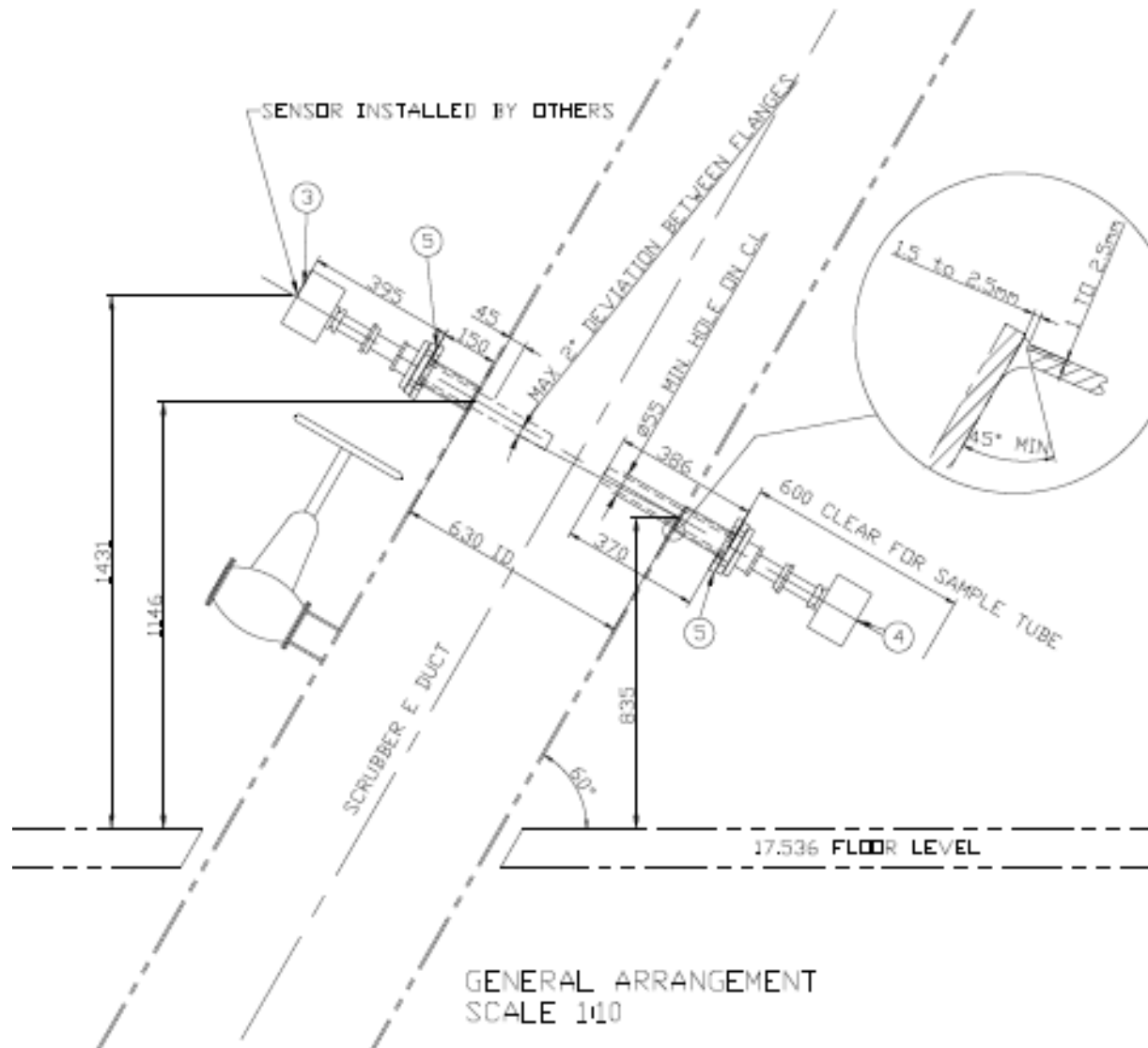
E Scrubber P&ID Detail



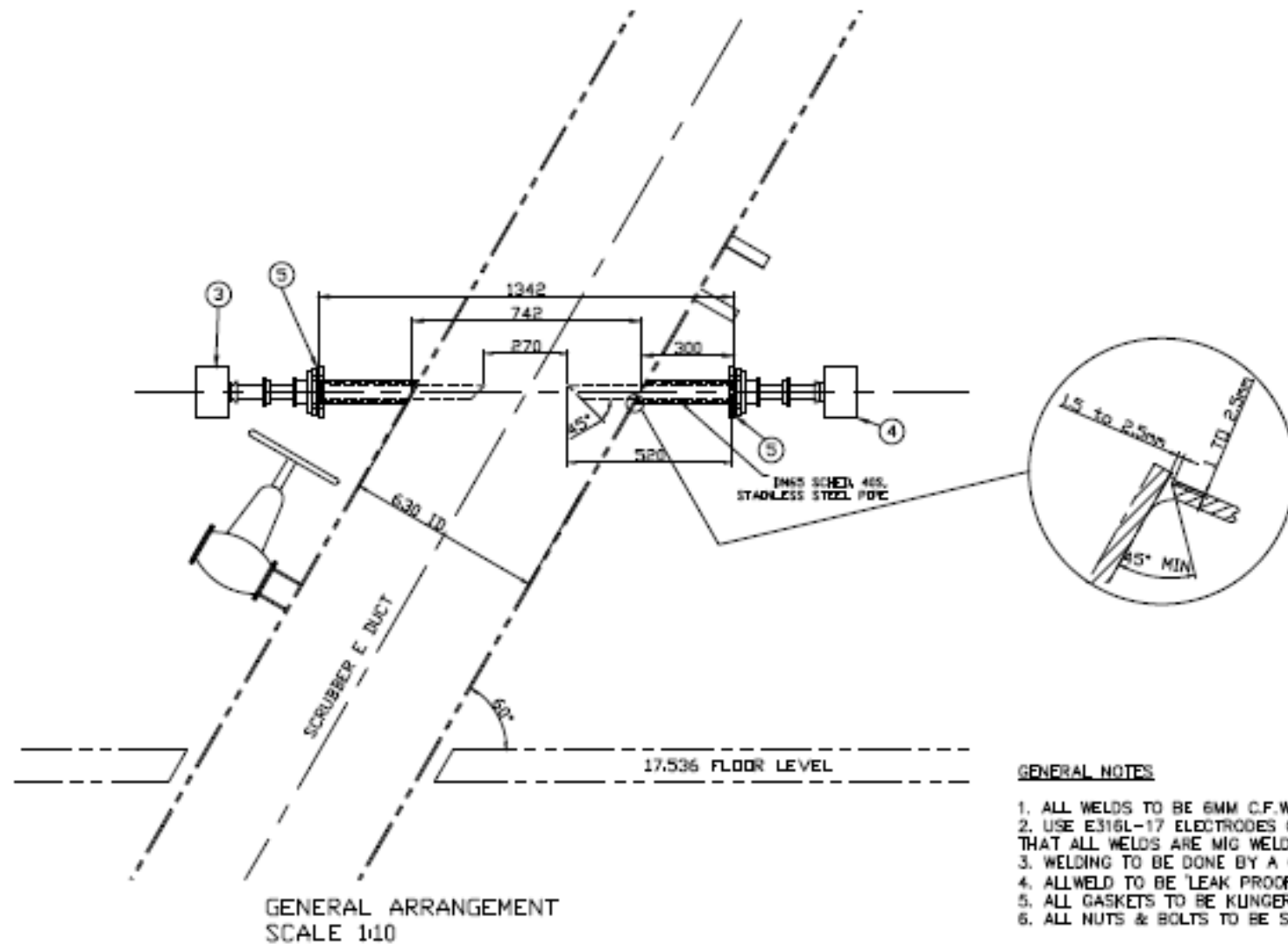


E Scrubber Mechanical 1st Installation

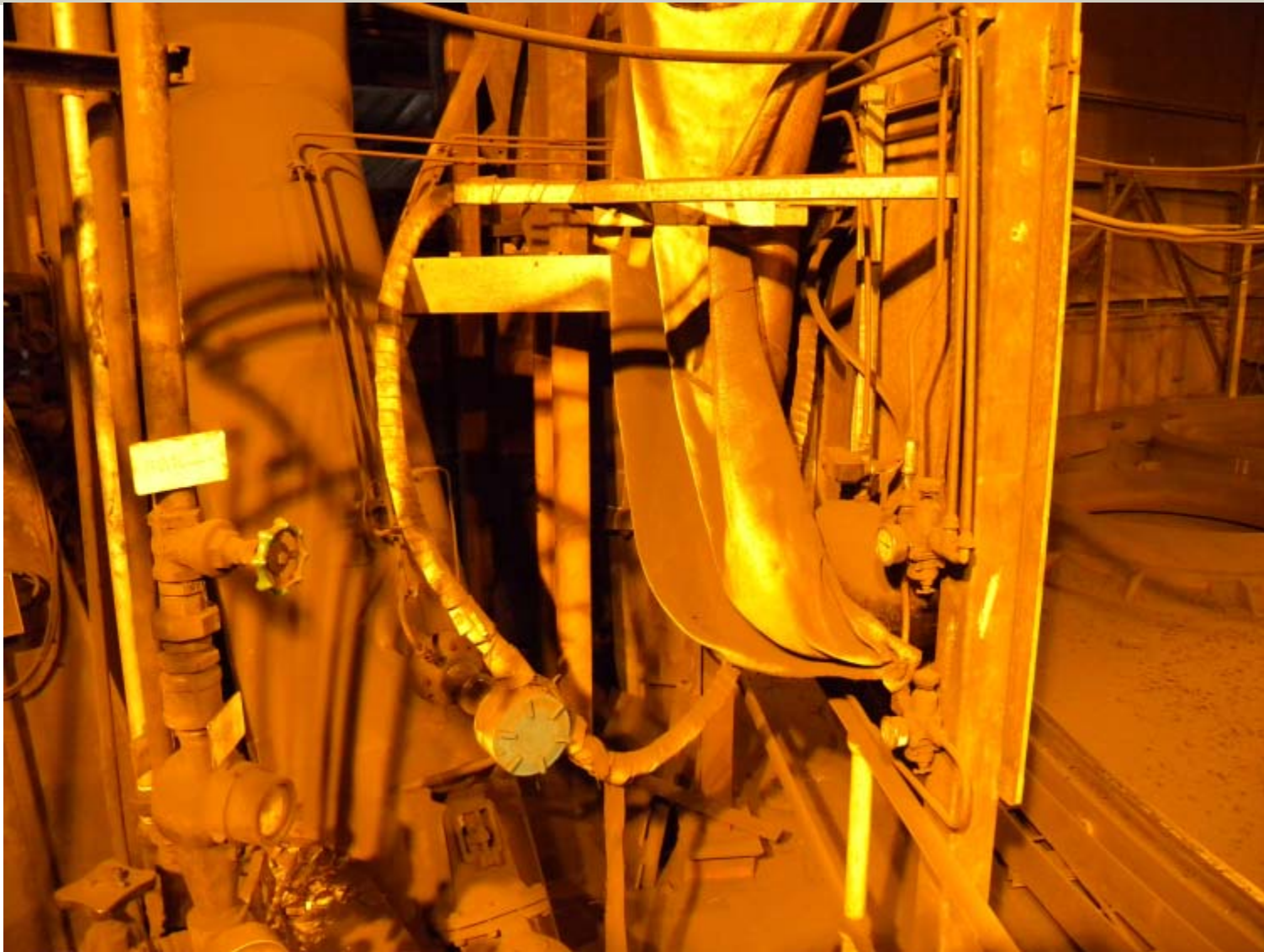




E Scrubber Mechanical 2nd Installation



E Scrubber Transmitter & Purge System



E Scrubber Receiver & Temperature Probe



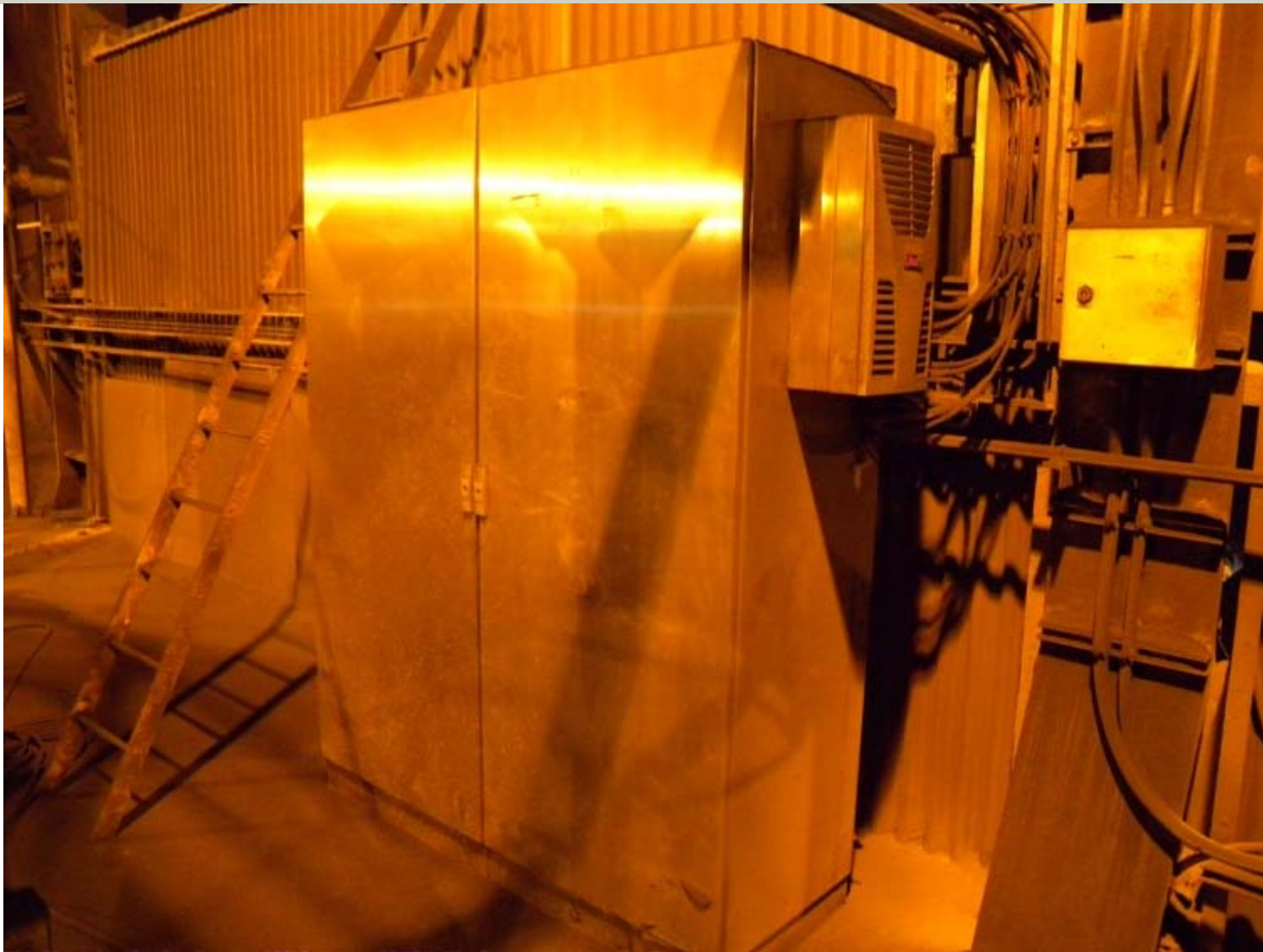
E Scrubber Cabling to Central Unit



Central Unit



Central Unit



D Scrubber Sensors & Temperature



C Scrubber



C Scrubber



C Scrubber



C Scrubber Purge Vessel



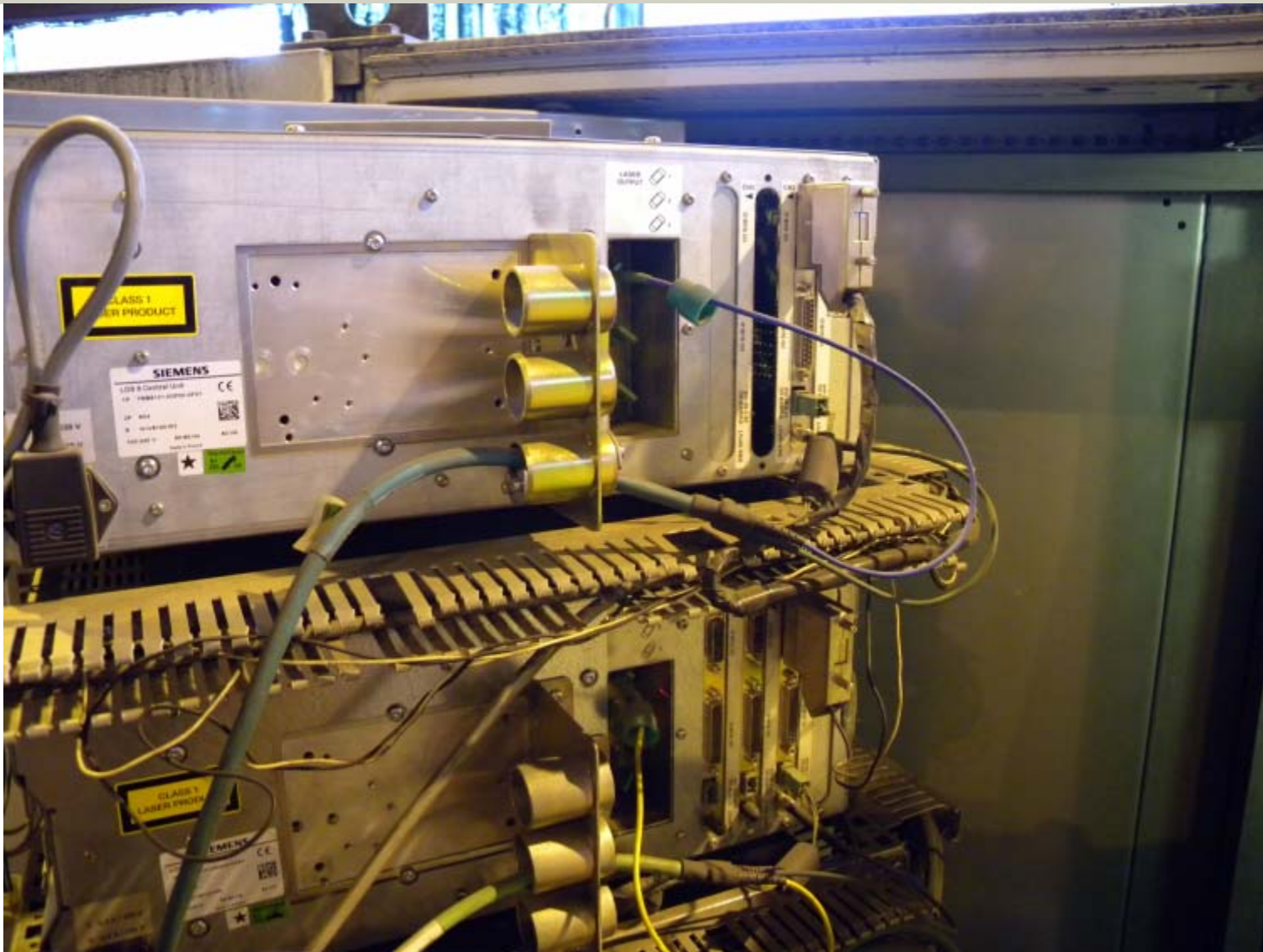
B Scrubber Installation



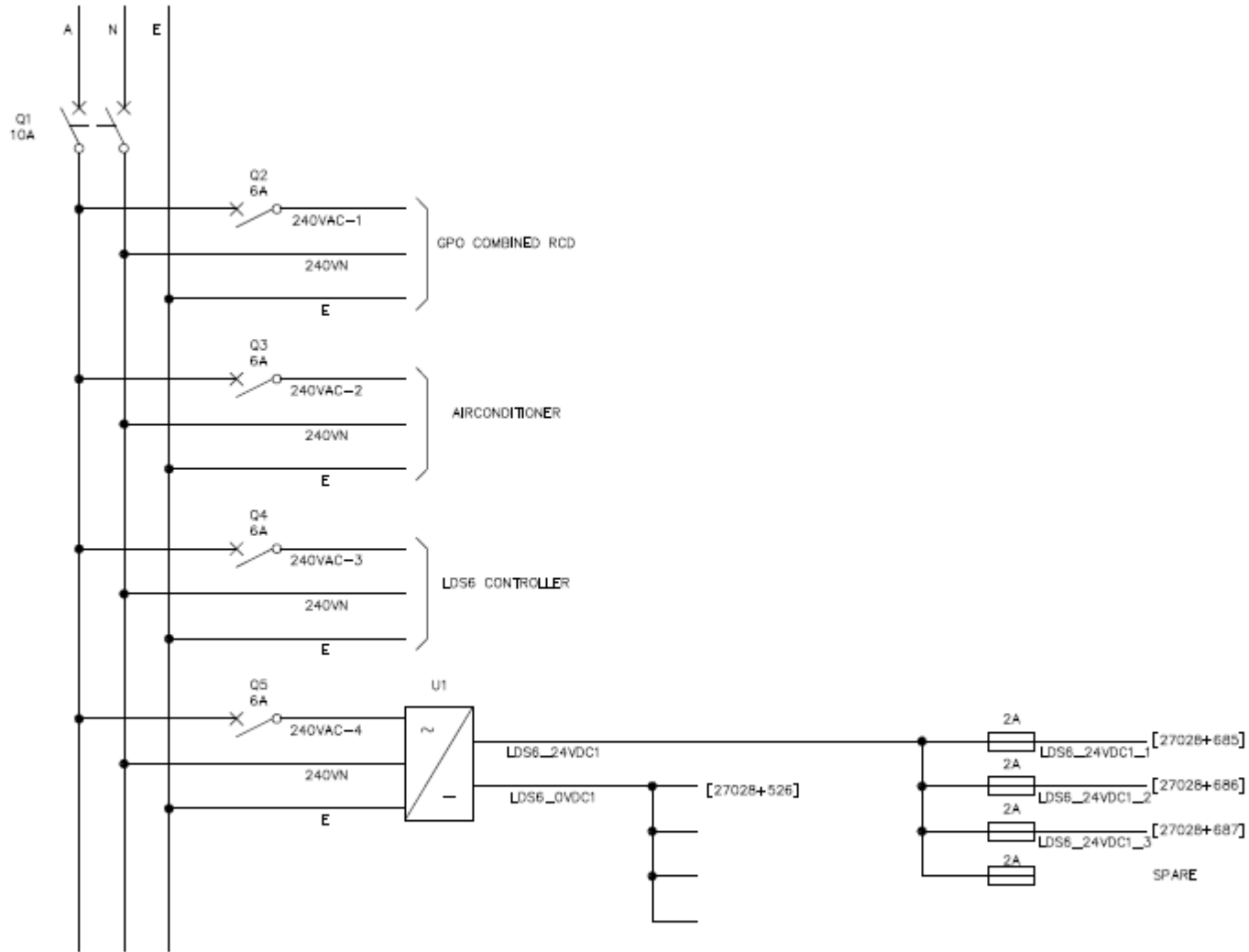
B Scrubber Installation



B Scrubber Installation

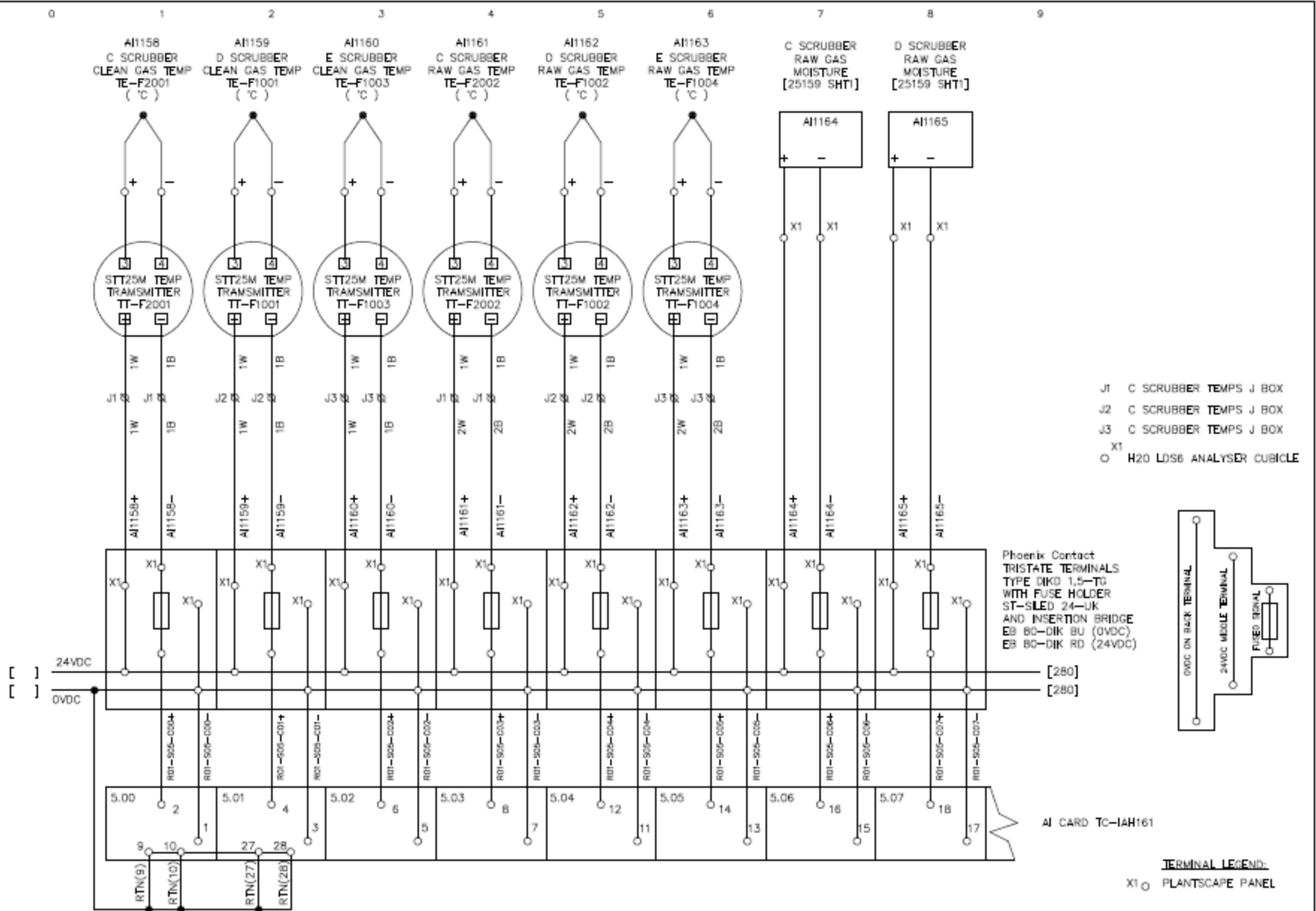


240V AC SUPPLY FROM
 UPS DB241 C/B13
 LOCATED IN F1&2 PLANTSCAPE ROOM
 REFER DRG 14159 SHT#1



Revisions	DRN. DATE	DRN. DATE	DRN. DATE	Drawn	Date	Title	DRG No	SHT N°
△	CNO.	CNO.	CNO.	INT	15/05/08	FURNACE N°1&2 GAS CLEANING	25159	02
				Checked	Engineer	SCRUBBER C,D,E H2O LDS6 ANALYSER POWER SUPPLY	EQUIP No	REV N°
				PD	-		-	01





Revisions	△	△	△
DRN. DATE CND.		DRN. DATE CND.	
DRN. DATE CND.		DRN. DATE CND.	



Drawn	Date	Title
DNT	23/11/07	FUNACE N°1&2
Checked	Engineer	AUXILIARY PLANTSCAPE CONTROLLER
		ANALOG INPUTS RACK 1 SLOT 5
		CIRCUIT DIAGRAM

DRG No	SHT N°
27028	27
EQUIP N°	REV N°
F1&2 AUX PSCAPE	04

DRG No	SHT N°
27028	27
EQUIP N°	REV N°
F1&2 AUX PSCAPE	04

Next - Furnace 5



Questions?