P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM

	DESCRIPTION	F	REVISION 22-07-05		F	REVISION 22-08-17		R	REVISION 22-11-16			REVISION		
SHEET		22			22			22				23-05-25		
		PROJECT	ACCIONA	EAI	PROJECT	ACCIONA	EAI	PROJECT	ACCIONA	EAI	PROJECT	ACCIONA	EAI	
00	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM. INDEX	IFR.P01	IFR.P01	01	IFR.P02	IFR.P02	02	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	
01	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM. MAIN STEAM	IFR.P01	IFR.P01	01	IFR.P02	IFR.P02	02	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	
02	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM. MAIN STEAM & EXTRACTIONS	IFR.P01	IFR.P01	01	IFR.P02	IFR.P02	02	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	
03	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM. MP STEAM / AUXILIARY STEAM DISTRIBUTION	IFR.P01	IFR.P01	01	IFR.P02	IFR.P02	02	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	
04	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM. MP STEAM / AUXILIARY STEAM CONSUMERS	_	_	_	_	_	_	_	_	_	IFD.P04	IFD.P04	04	
05	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM. BOILERS PRIMARY AIR HEAT EXCHANGERS	_	_	_	_	_	_	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	
06	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM. BOILERS SECONDARY AIR HEAT EXCHANGERS	_	_	_	_	_	_	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	
07	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM. FGT UNITS SEALING AIR HEAT EXCHANGERS	_	_	_	_	_	_	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	
08	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM. BOILER 1 BYPASS	IFR.P01	IFR.P01	01	IFR.P02	IFR.P02	02	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	
09	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM. BOILER 2 BYPASS	IFR.P01	IFR.P01	01	IFR.P02	IFR.P02	02	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	
10	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM. EJECTORS STEAM CONDITIONING	IFR.P01	IFR.P01	01	IFR.P02	IFR.P02	02	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	
11	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM. FGT UNITS STEAM / FLUE GAS HEAT EXCHANGERS	IFR.P01	IFR.P01	01	IFR.P02	IFR.P02	02	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	
12	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM. BOILERS STEAM DRAIN HEADERS	_	_	_	_	_	_		_	_	IFD.P04	IFD.P04	04	

55444644	DESIGN		
BRANCH	P barg	T °C.	
а	57	446	
b	24	350	
С	7	215	
d	3	210	
е	0.5	200	
f	3.5/-1	215	
g	6/-1	396	
h	17/-1	404	
i	42	150	
j	66	283	
k	41.5	283	
-	27.6	446	
m	17.25	350	
n	3.5	404	

	REFERENCE	DRAWINGS	CODE	DRAW]
0.	P&ID SYMBO	LOGY		NPE7-EA
1.	P&ID CONDE	ENSATE SYSTEM	LC	NPE7-EA
2.	P&ID BOILE	R BLOWDOWN SYSTE	M LCQ	NPE7-EA
3.	P&ID FEEDW	ATER SYSTEM	LA	NPE7-EA
4.	P&ID STEAM	TURBINE DRAINS	SYSTEM MAL	NPE7-EA
5.	P&ID BLEED	OS .		NPE7-SP
6.	P&ID DISTR	RICT HEATING	LCC	NPE7-EA
7.	P&ID SAMPL	ING SYSTEM	QU	NPE7-EA
8	P&ID BOILE	R WATER SIDE SUP	ERHEATER	NPE7-HZ
9.	P&ID PRIMA	ARY AIR PREHEATER		NPE7-HZ
10.	- P&ID SECO	NDARY AIR PREHEAT	ΓER	NPE7-HZ
11.	- P&ID FLUE	GAS PATH SCR		NPE7-HZ
12.	- P&ID AIR	EXTRACTION SYSTEM	LAM MAJ	PENDING
13.	- P&ID BOIL AND ECONO	ER WATER SIDE DRU MISER	JM	NPE7-HZ
14.	- P&ID PRIM	ARY AIR SYSTEM FE	ED	NPE7-HZ
15.	- P&ID SECO	NDARY AIR SYSTEM		NPE7-HZ

16.- P&ID GLAND STEAM SYSTEM

18.- P&ID BOILER DRAIN SYSTEM

19.- P&ID STEAM TURBINE SYSTEM

17.- P&ID BOILER BLOWDOWN

DRAWING Nº
NPE7-EAI-41XX-XXX-PD-XA-000001
NPE7-EAI-41XX-XXX-PD-XA-000008
NPE7-EAI-41AC-XXX-PD-XA-000005
NPE7-EAI-41XX-XXX-PD-XA-000010
NPE7-EAI-41XX-XXX-PD-XA-000015
NPE7-SK0-41AG-GF0-PD-XA-000009
NPE7-EAI-41XX-XXX-PD-XA-000009
NPE7-EAI-41XX-XXX-PD-XA-000014
NPE7-HZI-41AC2-ZZZ-PD-XA-0005
NPE7-HZI-41AC4-ZZZ-PD-XA-0002
NPE7-HZI-41AC4-ZZZ-PD-XA-0006
NPE7-HZI-41AE-ZZZ-PD-XA-0001
PENDING
NPE7-HZI-41AC2-ZZZ-PD-XA-000003
NPE7-HZI-41AC4-ZZZ-PD-XA-000001

NPE7-HZI-41AC2-ZZZ-PD-XA-000003
NPE7-HZI-41AC4-ZZZ-PD-XA-000001
NPE7-HZI-41AC4-ZZZ-PD-XA-000005
NPE7-SK0-41AG-GF0-PD-XA-000003
NPE7-HZI-41AC2-ZZZ-PD-XA-000007
NPE7-HZI-41AC2-ZZZ-PD-XA-000006
NPE7-SK0-41AG-GF0-PD-XA-000002

- O.- THIS DRAWING IS PRELIMINARY AND IS SUBJECTED TO REVISION DEPENDING ON THE FINAL EQUIPMENT SUPPLIERS. CONNECTIONS WITH MAIN EQUIPMENT TO BE CHECKED DURING FURTHER REVISIONS TAKING INTO ACCOUNT FINAL EQUIPMENT DOCUMENTATION.
- 1.- CONNECTION FOR DISTRICT HEATING FUTURE EXPANSION
- 2.- STRAIGHT RUN LENGTH WITHOUT INSTRUMENTATION TO BE DEFINED BY BYPASS/ATTEMPERATION VALVE MANUFACTURER
- 3.- ADEQUATE STRAIGHTS DIAMETERS SHALL BE CONSIDERED FOR FLOWMETER TIPOLOGY
- 4.- DRAIN POT VALVES SHALL BE PLACED NEAR THE CORRESPONDING DRAIN TANK
- 5.- FLOW METERS WILL BE INSTALLED ON A STRAIGHT RUN OF PIPE. FREE DISTANCE TO BE CONFIRMED BY SUPPLIERS.
- 6.- THE THERMOCOUPLE + THERMOWELL SHOULD HAVE A FAST RESPONSE AND MUST BE LOCATED IN THE MAIN SUPPLY STEAM LINE AS CLOSE AS POSSIBLE TO THE BOILERS THUS AS FAR AWAY AS POSSIBLE TO THE TURBINE
- 7.- STEAM TRAP ARRANGEMENT SHALL BE IN HORIZONTAL CONFIGURATION.
- 9.- VALVES OF DN200 SIZE OR HIGHER SHALL INCLUDE LOCALLY ACTUATED ELECTRICAL PINION
- 10.- FIRST ELBOW DOWNSTREAM THE ATTEMPERATION VALVE WILL BE SUBSTITUTED BY A TEE WITH A BLIND FLANGE
- 11.- FOR SATURATED STEAM, MINIMUN PIPE SLOPE IN FLOW DIRECTION SHALL BE AT LEAST 1% IN COLD POSITION AND 0.5% IN HOT POSITION. THE RECOMMENDED SLOPE IS 1.5% 12.- FOR SUPERHEATER STEAM, MINIMUN PIPING SLOPE IN FLOW DIRECTION SHALL BE AT LEAST 0.5% IN COLD POSITION AND 0.25% IN HOT POSITION. THE RECOMMENDED SLOPE IS 1.5%
- 13.- THE DESIGN CONCEPT OF THE STEAM SUPPLY SUBSYSTEM TO BOILER SHALL TO BE REVIEWED, CONFIRMED AND APPROVED BY BOILER MANUFACTURER (HZI)
- 14.- LOCATE AS CLOSE AS POSSIBLE TO THE DISCHARGE.

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GENERAL REVISION

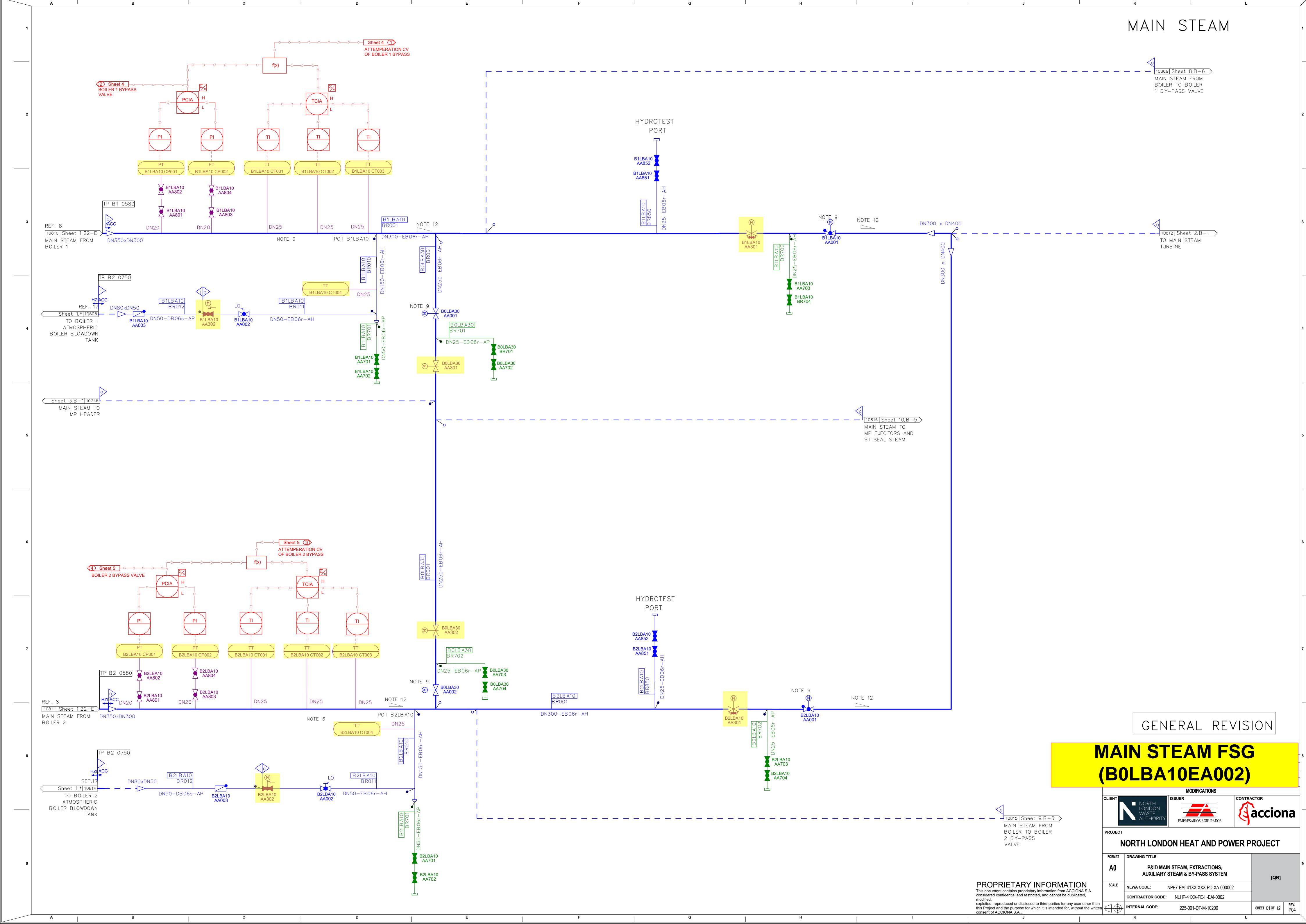
STEAM AND BYPASS FG (B0LBA10EA001)

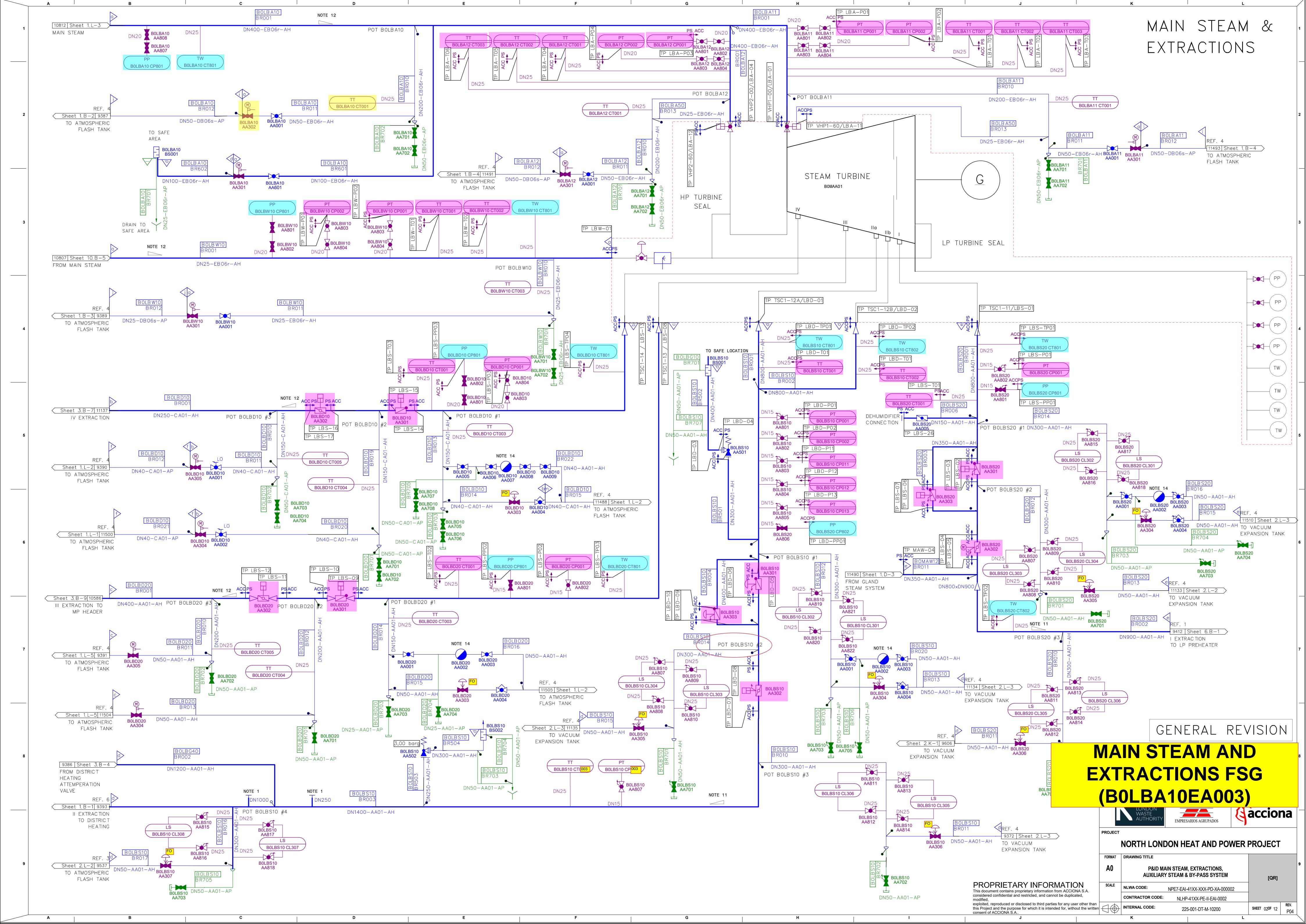


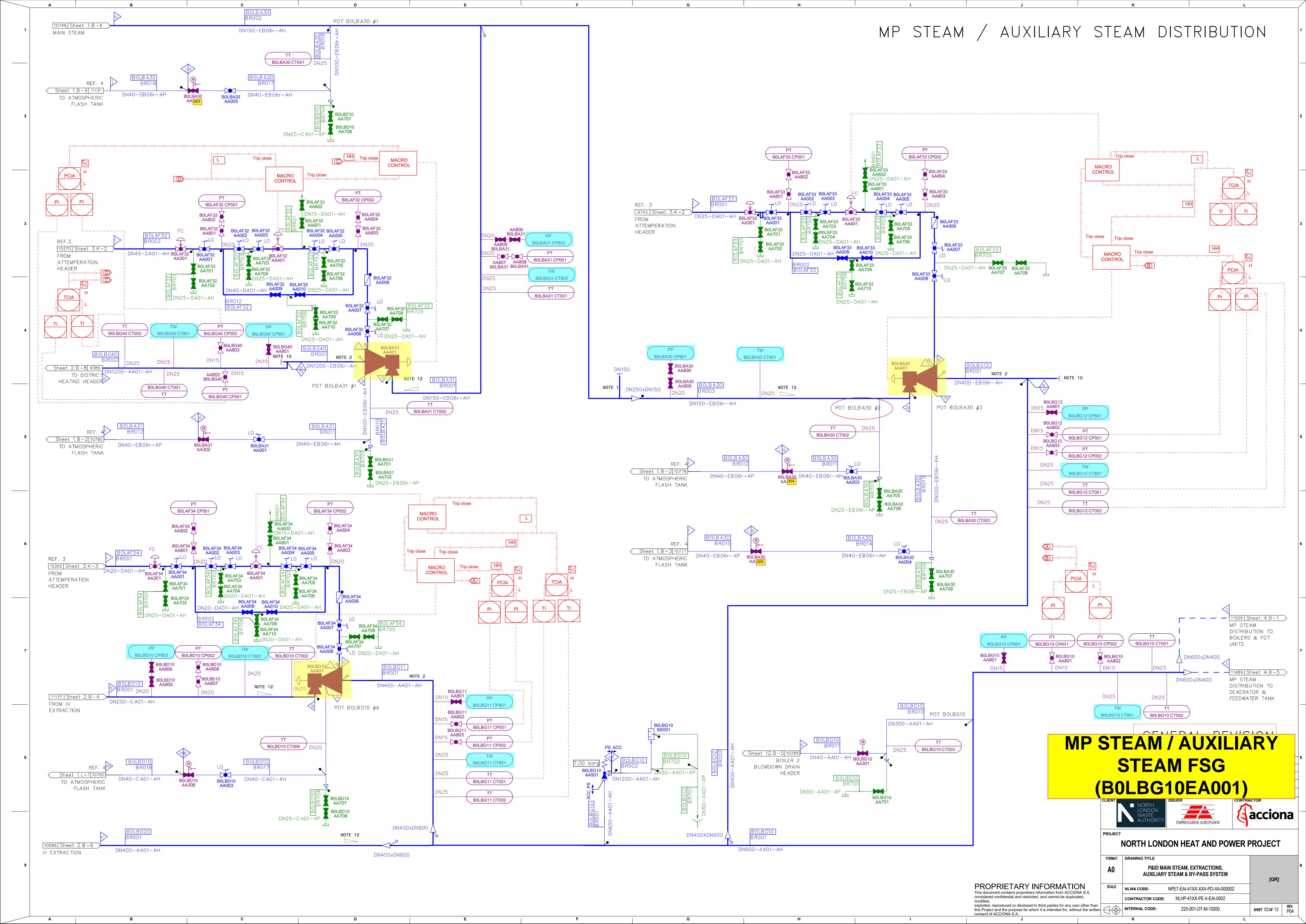
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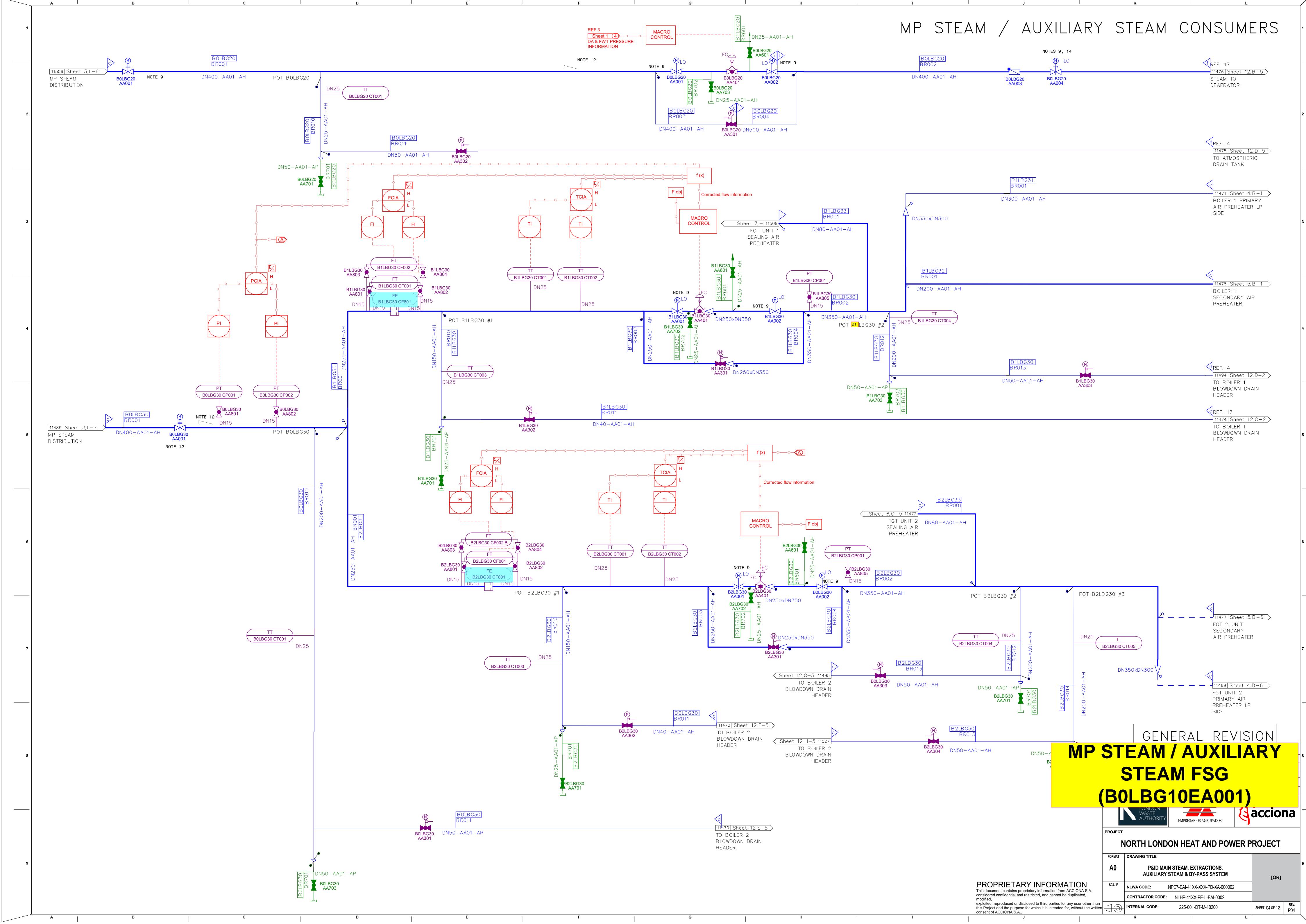
CONTRACTOR CODE: NLHP-41XX-PE-II-EAI-0002 | SHEET 00 OF 12 | P04 **∠** INTERNAL CODE: 225-001-DT-M-10200

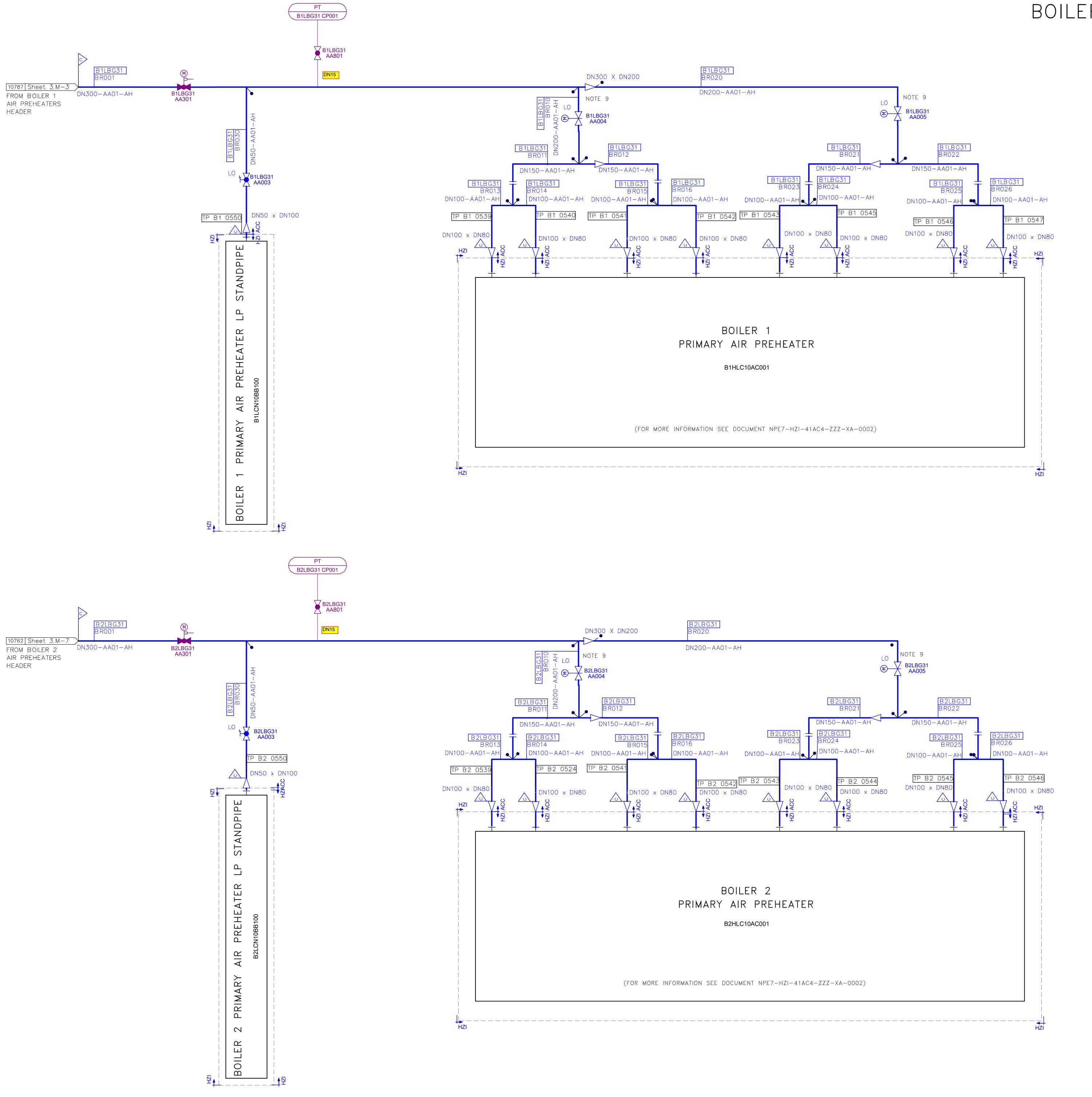
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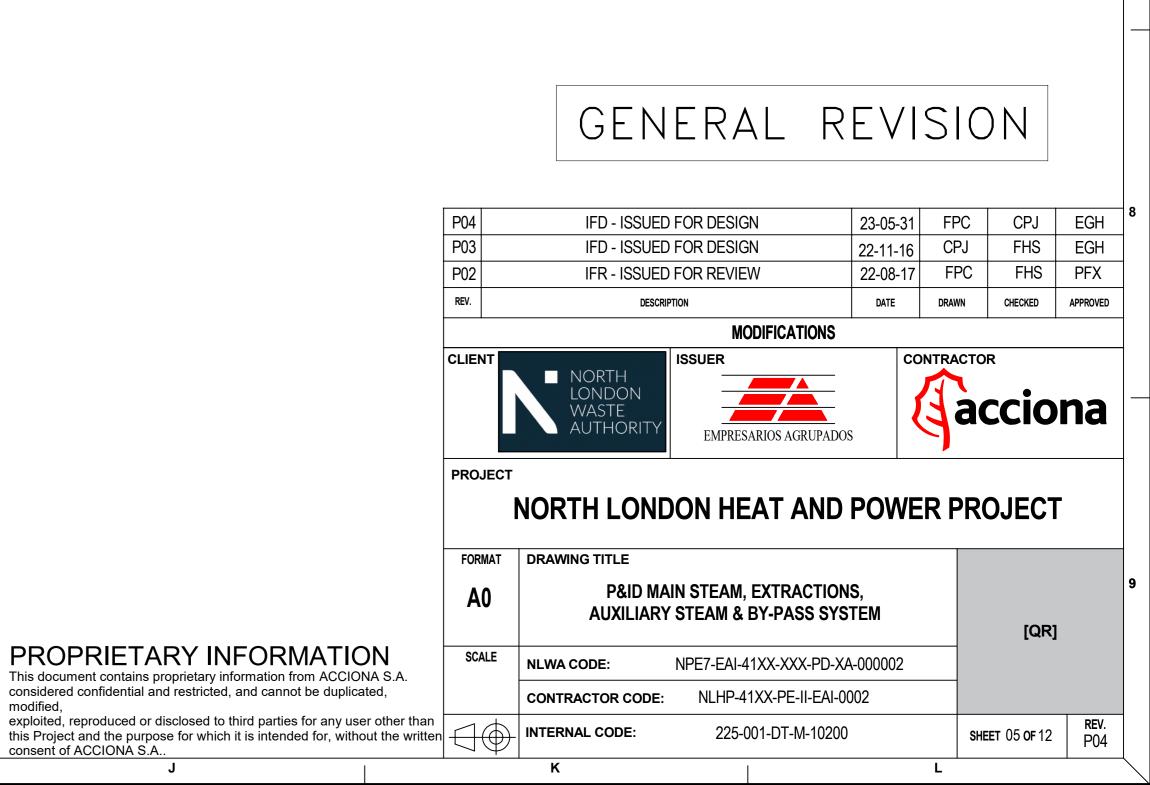


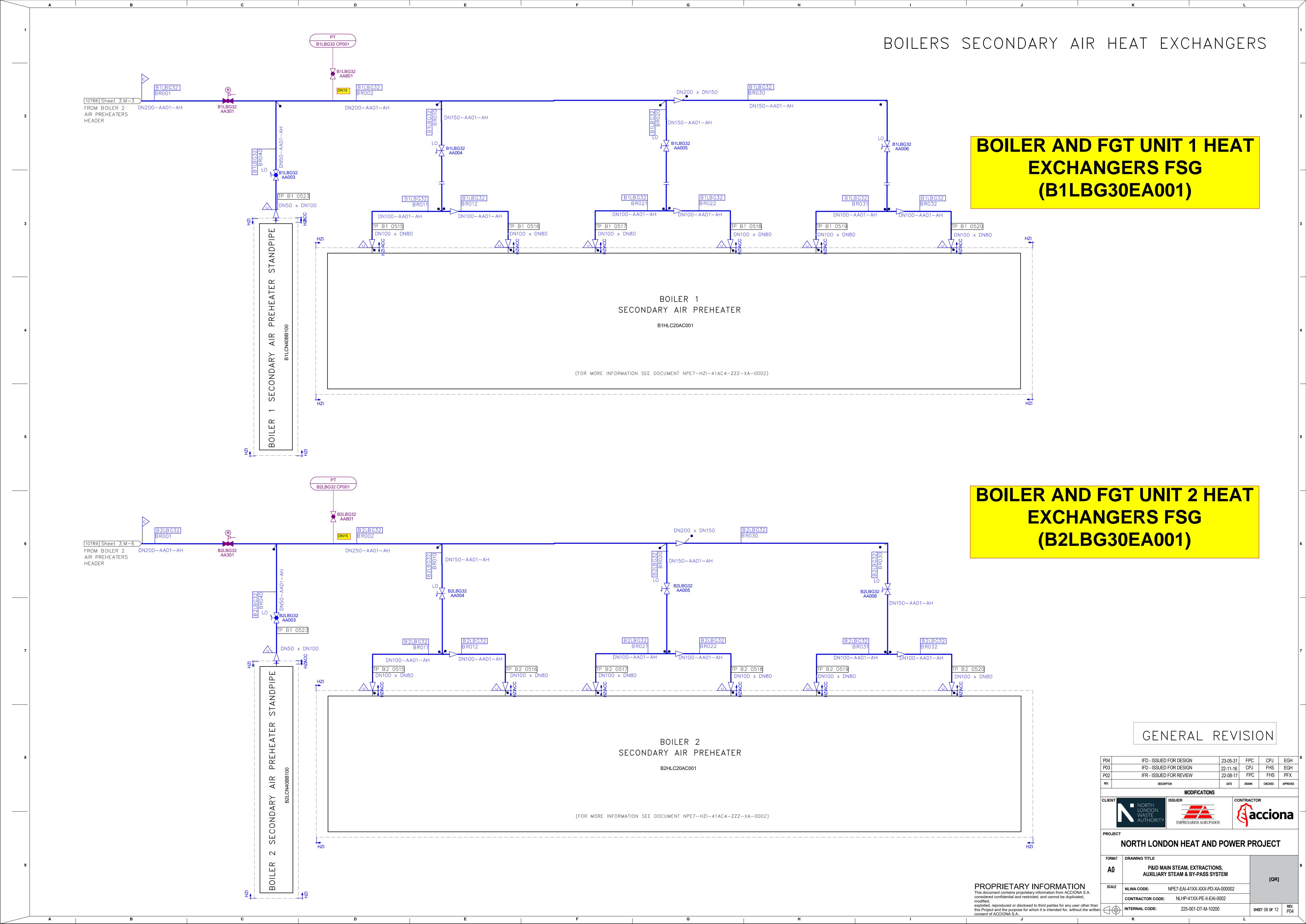




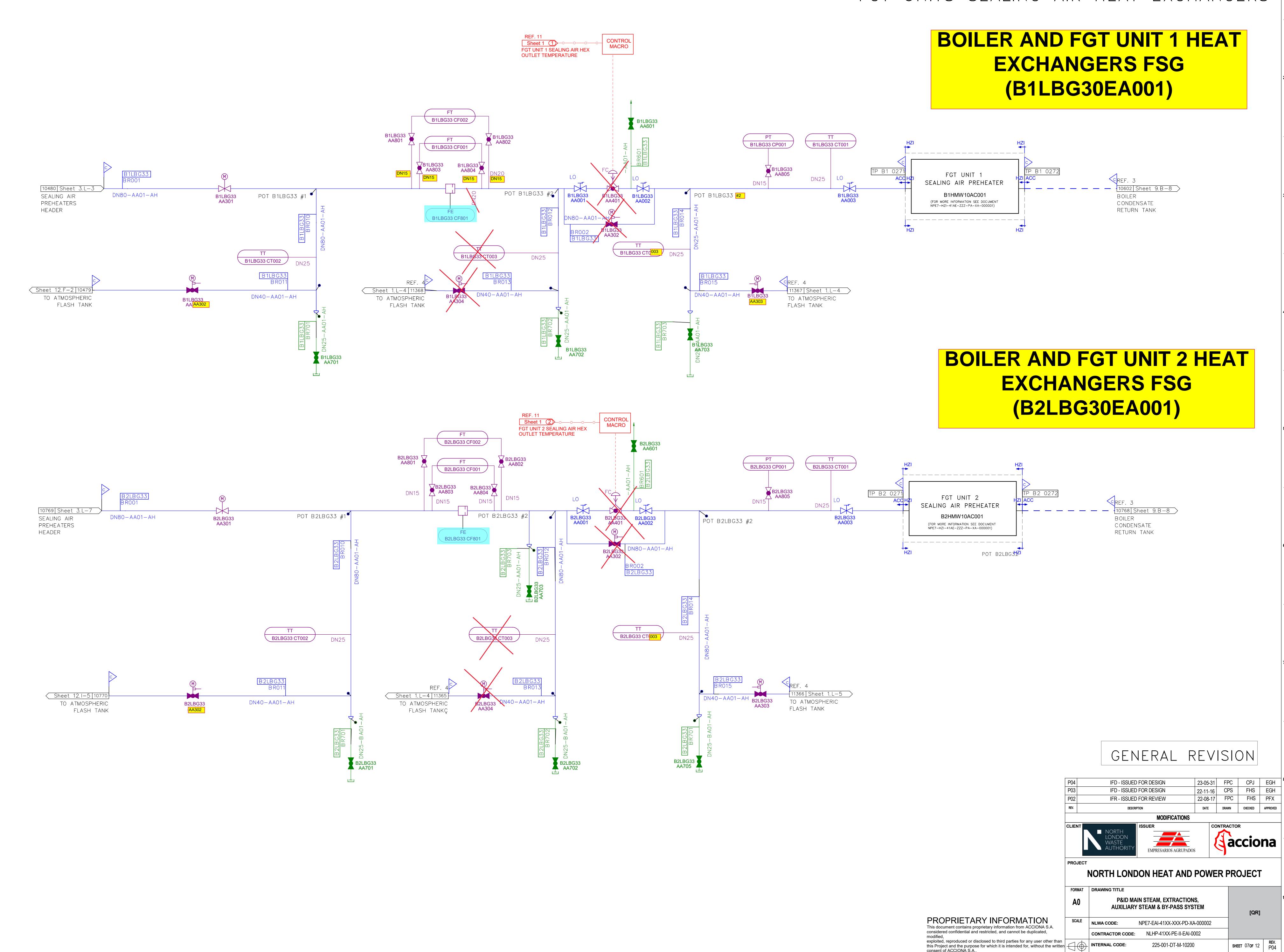
BOILER AND FGT UNIT 1 HEAT EXCHANGERS FSG (B1LBG30EA001)

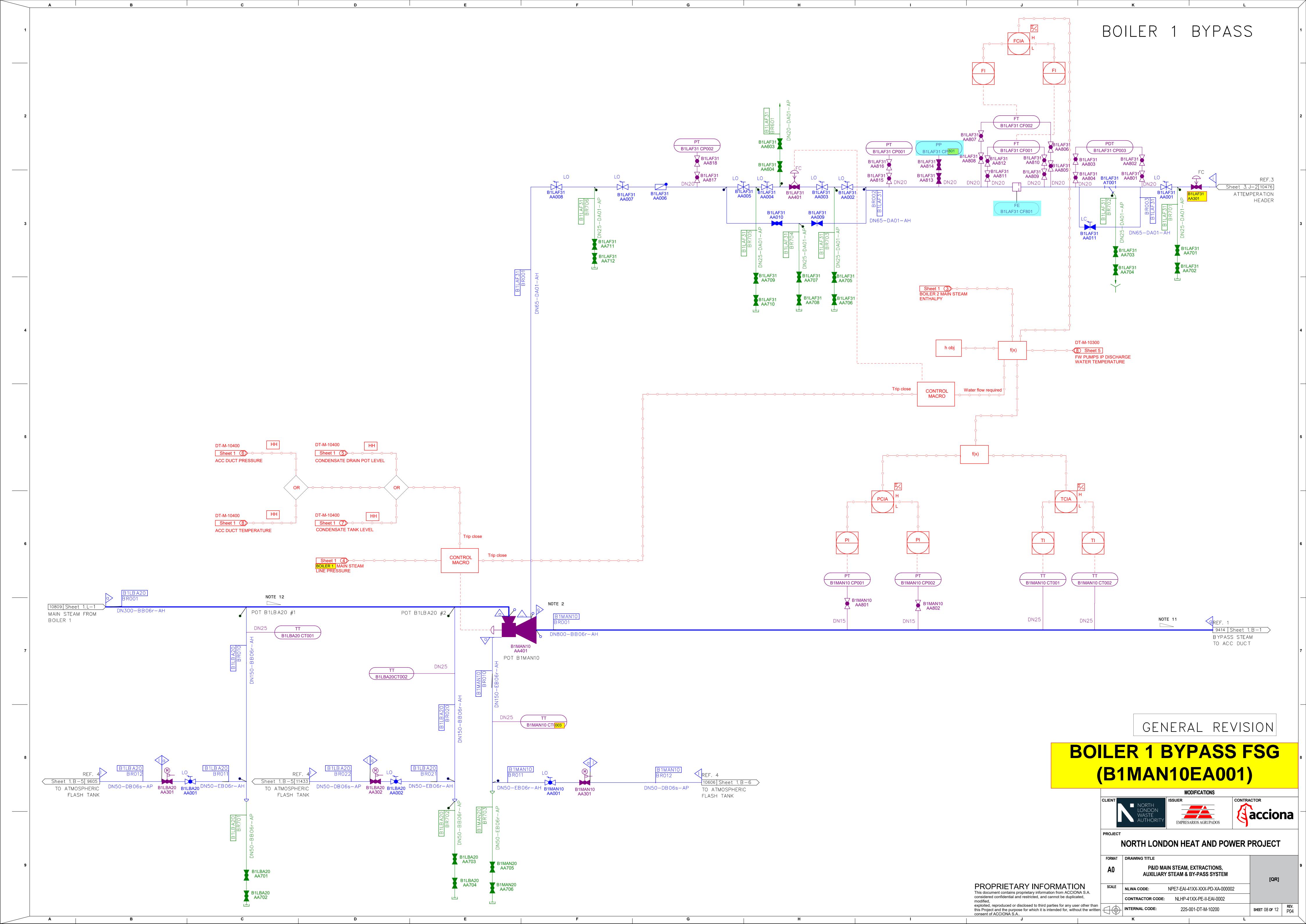
BOILER AND FGT UNIT 2 HEAT EXCHANGERS FSG (B2LBG30EA001)

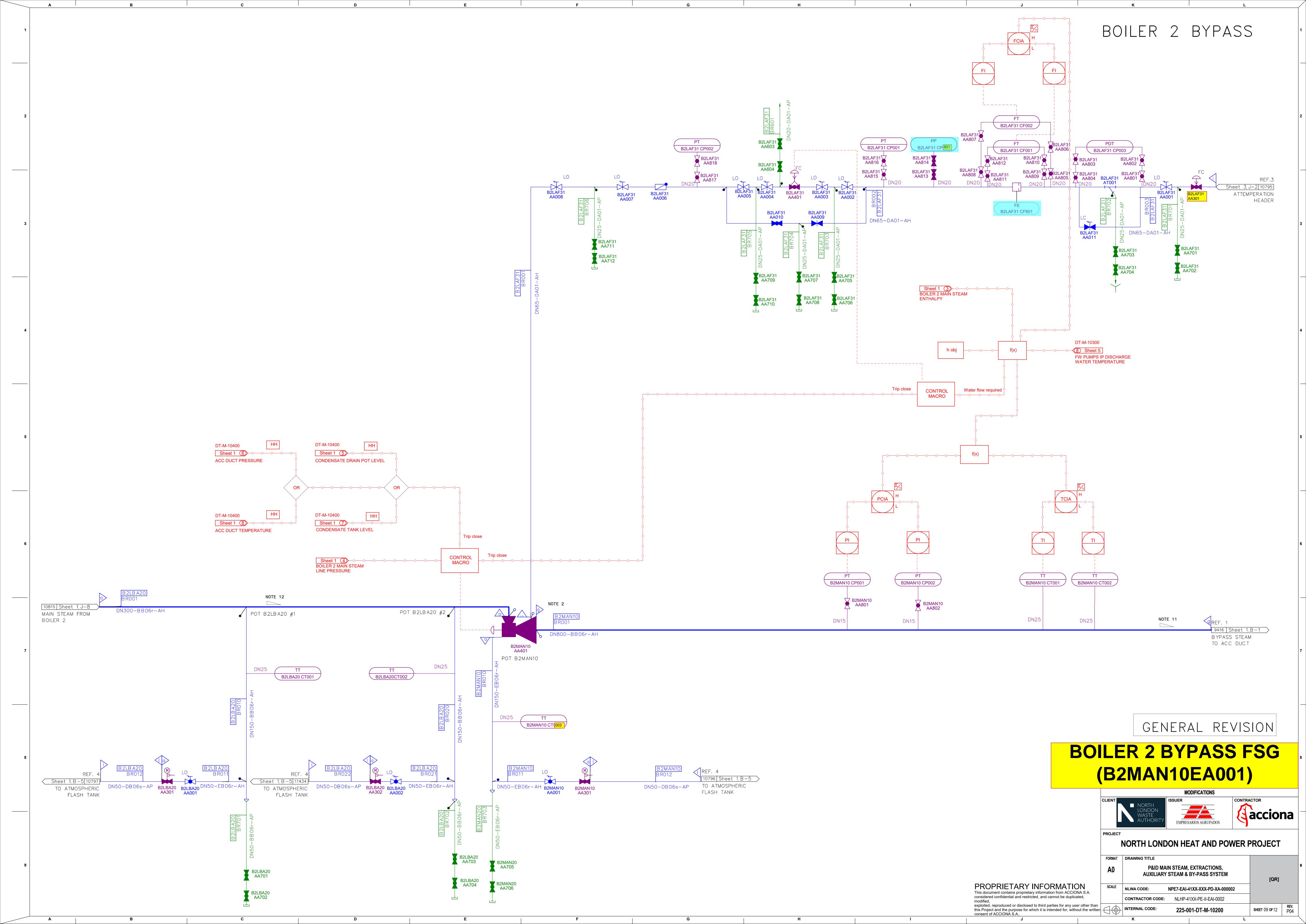


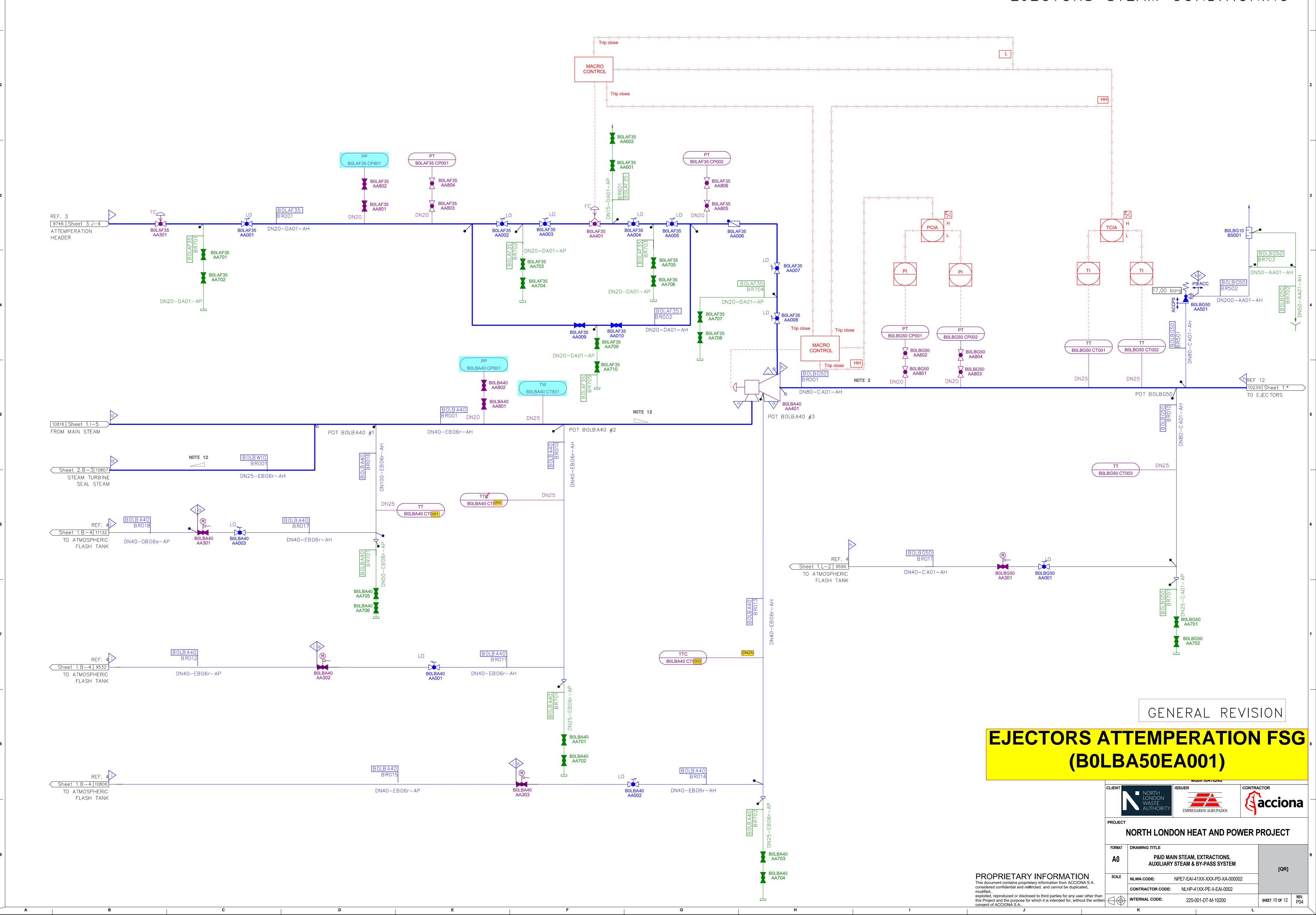


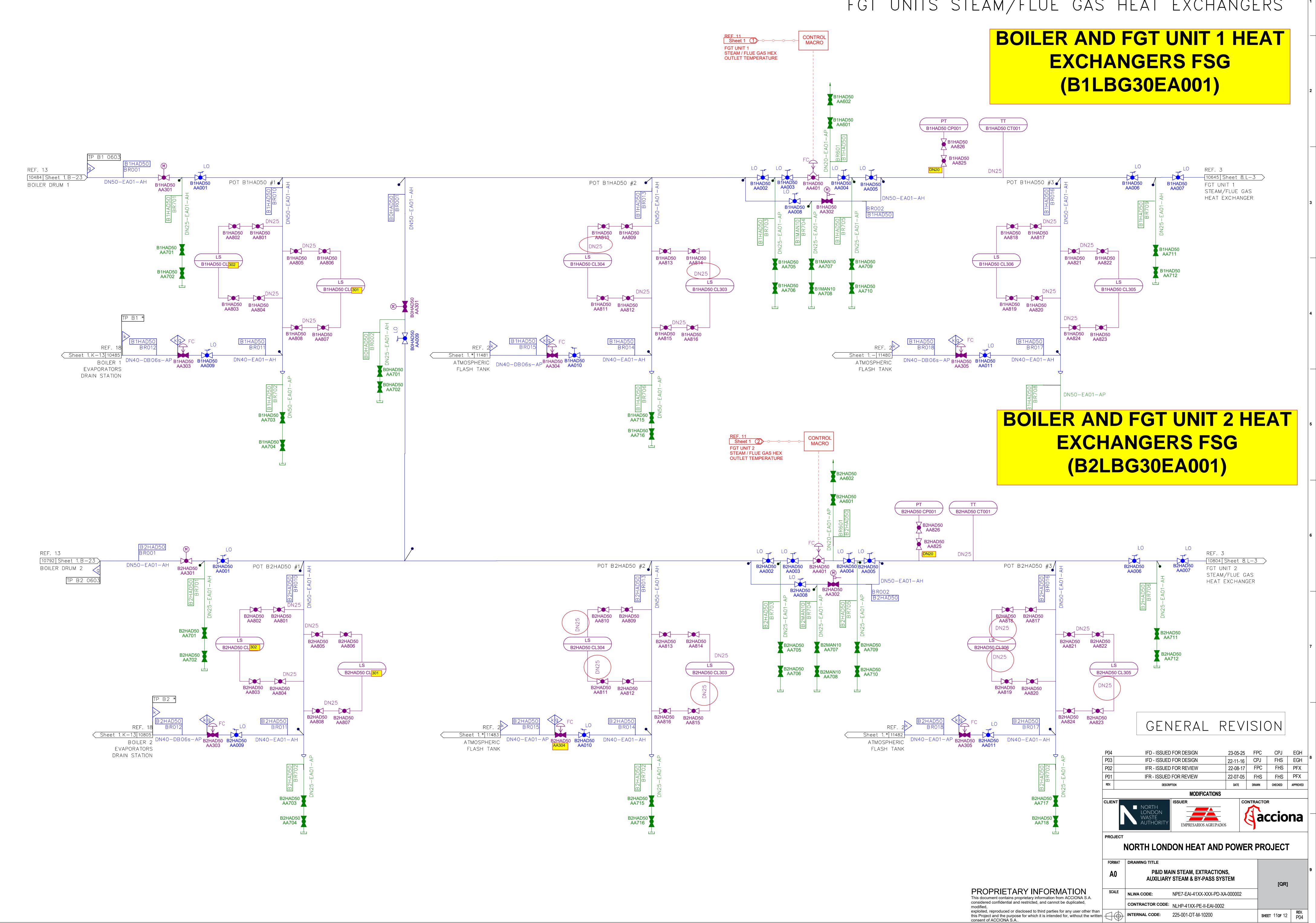
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BOILERS STEAM DRAIN HEADERS

