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

REVISAR CONEXIONES DE TEMPERATURA -> DN25 / DN40

SHEET	DESCRIPTION	F	REVISION 22-07-05			REVISIC	N	REVISION		
		22				22-08-17			22-11-16	
		PROJECT	ACCIONA	EAI	PROJECT	ACCIONA	EAI	PROJECT	ACCIONA	EAI
00	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM. INDEX	S3.P01	S3.P01	01	S3.P02	S3.P02	02	S3.P03	S3.P03	03
01	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM	S3.P01	S3.P01	01	S3.P02	S3.P02	02	S3.P03	S3.P03	03
02	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM	S3.P01	S3.P01	01	S3.P02	S3.P02	02	S3.P03	S3.P03	03
03	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM	S3.P01	S3.P01	01	S3.P02	S3.P02	02	S3.P03	S3.P03	03
04	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM	_	_	_	_	_	_	S3.P03	S3.P03	03
05	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM	_	_	_	_	_	_	S3.P03	S3.P03	03
06	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM	_	_	_	_	_	_	S3.P03	S3.P03	03
07	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM	S3.P01	S3.P01	01	S3.P02	S3.P02	02	S3.P03	S3.P03	03
08	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM	S3.P01	S3.P01	01	S3.P02	S3.P02	02	S3.P03	S3.P03	03
09	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM	S3.P01	S3.P01	01	S3.P02	S3.P02	02	S3.P03	S3.P03	03
10	P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BY-PASS SYSTEM	S3.P01	S3.P01	01	S3.P02	S3.P02	02	S3.P03	S3.P03	03
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	DESIGN			
BRANCH	Р	Т		
	barg	°C		
а	57	446		
b	21	325		
С	11	300		
d	3.5/FV	160		
е	6/FV	396		
f	17/FV	404		
g	66	284		
h	42	150		
i	41.5	283		
j	27.6	431		
k	17.25	325		
l	20	102		

REFERENCE DRAWINGS	<u>CODE</u>	<u>DRAWING Nº</u>
O P&ID SYMBOLOGY		NPE7-EAI-41XX-XXX-PD-XA-000001
1 P&ID CONDENSATE SYSTEM	LC	NPE7-EAI-41XX-XXX-PD-XA-000008
2 P&ID BOILER BLOWDOWN SYSTEM	LCQ	NPE7-EAI-41AC-XXX-PD-XA-000005
3 P&ID FEEDWATER SYSTEM	LA	NPE7-EAI-41XX-XXX-PD-XA-000010
4 P&ID STEAM TURBINE DRAINS SYSTEM	MAL	NPE7-EAI-41XX-XXX-PD-XA-000015
5 P&ID SEAL STEAM SYSTEM	MAW	PENDING
6 P&ID DISTRICT HEATING	LCC	NPE7-EAI-41XX-XXX-PD-XA-000009
7 P&ID SAMPLING SYSTEM	QU	NPE7-EAI-41XX-XXX-PD-XA-000014
8 P&ID BOILER WATER SIDE SUPERHEAT	ER	NPE7-HZI-41AC2-ZZZ-PD-XA-0005
9 P&ID PRIMARY AIR PREHEATER		NPE7-HZI-41AC4-ZZZ-PD-XA-0002
10 P&ID SECONDARY AIR PREHEATER		NPE7-HZI-41AC4-ZZZ-PD-XA-0006
11 P&ID FLUE GAS PATH SCR		NPE7-HZI-41AE-ZZZ-PD-XA-0001
12 P&ID AIR EXTRACTION SYSTEM	MAJ	PENDING
13 P&ID BOILER WATER SIDE DRUM AND ECONOMISER		NPE7-HZI-41AC2-ZZZ-PD-XA-000003
14 P&ID PRIMARY AIR SYSTEM FEED		NPE7-HZI-41AC4-ZZZ-PD-XA-000001
15 P&ID SECONDARY AIR SYSTEM		NPE7-HZI-41AC4-ZZZ-PD-XA-000005

- 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.- INTRUMENTS FOR ST TURBINE CONTROL TO BE DEFINED BY ST SUPPLIER AND TO BE HARDWIRED TO ST CONTROL SYSTEM
- 8.- ST SUPPLIER SHALL DEFINE MAXIMUM DISTANCE BETWEEN INSTRUMENTS AND ST VALVES
- 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)

PROPRIETARY INFORMATION

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S3-SUITABLE FOR REVIEW AND COMMENTS | 22-11-16 | CPJ | FHS | EGH S3-SUITABLE FOR REVIEW AND COMMENTS | 22-08-17 | FPC | S3-SUITABLE FOR REVIEW AND COMMENTS 22-07-05 FHS FHS PFX DATE DRAWN CHECKED APPROVED **MODIFICATIONS** CONTRACTOR PROJECT NORTH LONDON HEAT AND POWER PROJECT FORMAT DRAWING TITLE P&ID MAIN STEAM, EXTRACTIONS,

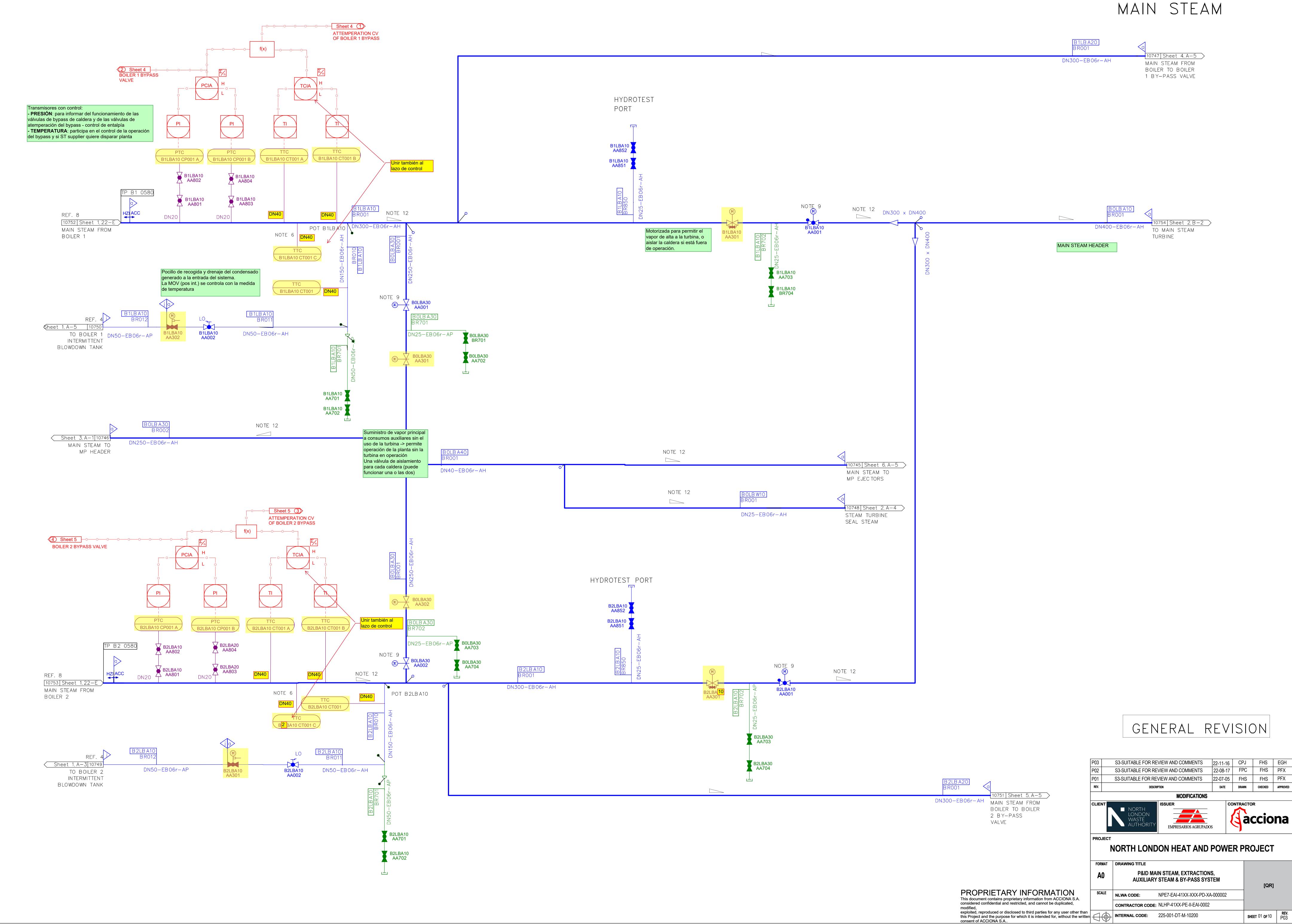
NPE7-EAI-41XX-XXX-PD-XA-000002

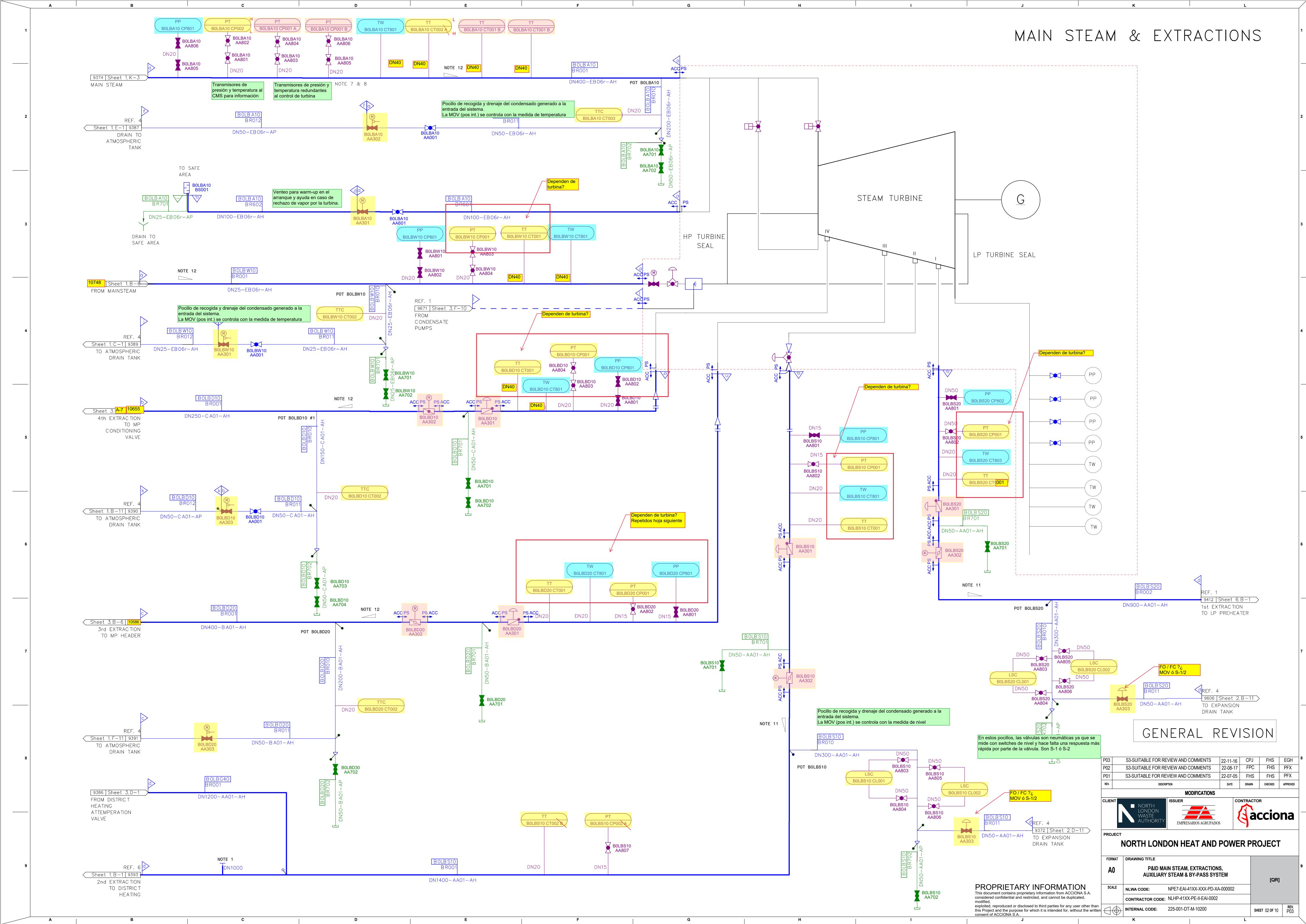
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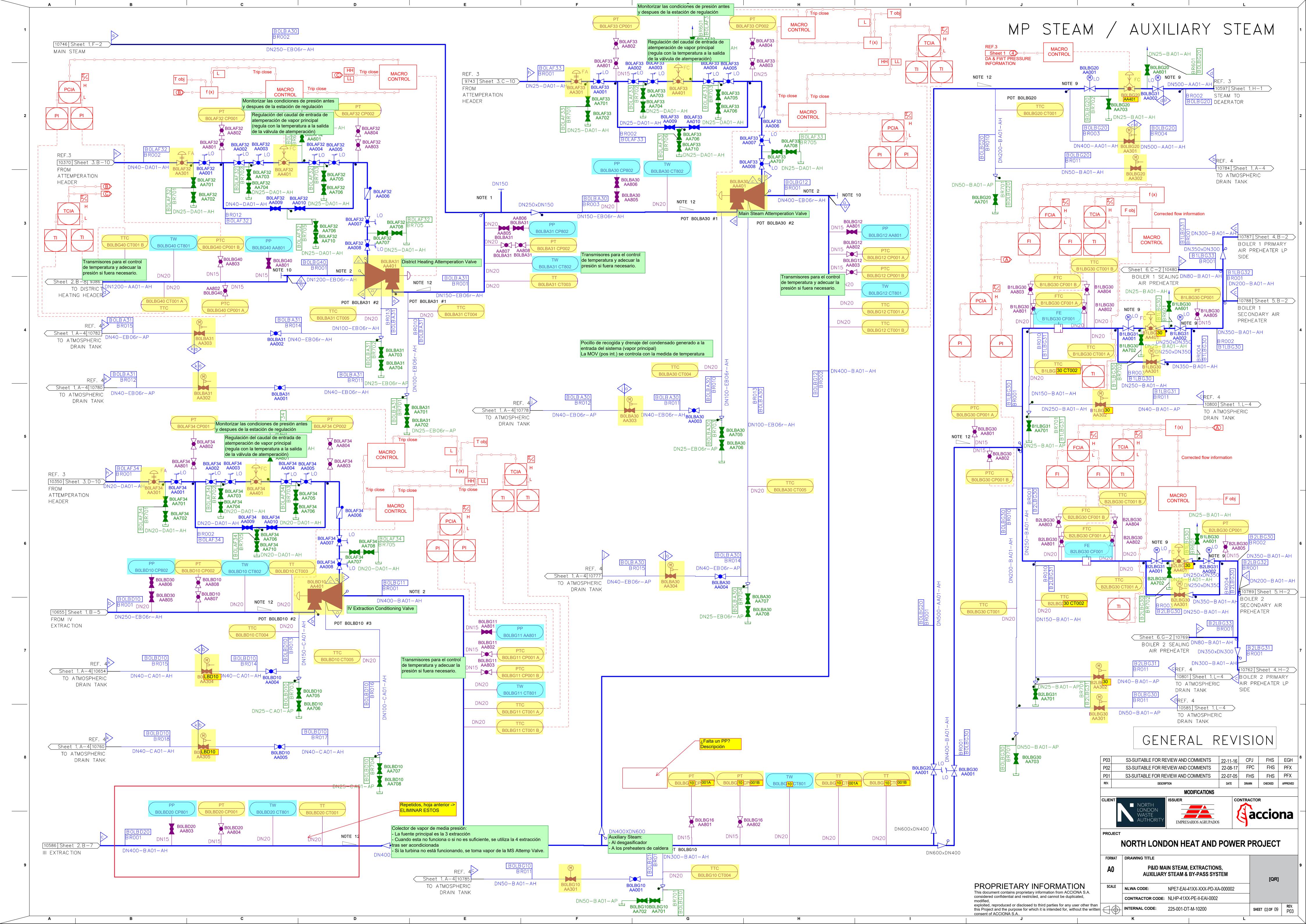
**AUXILIARY STEAM & BY-PASS SYSTEM** 

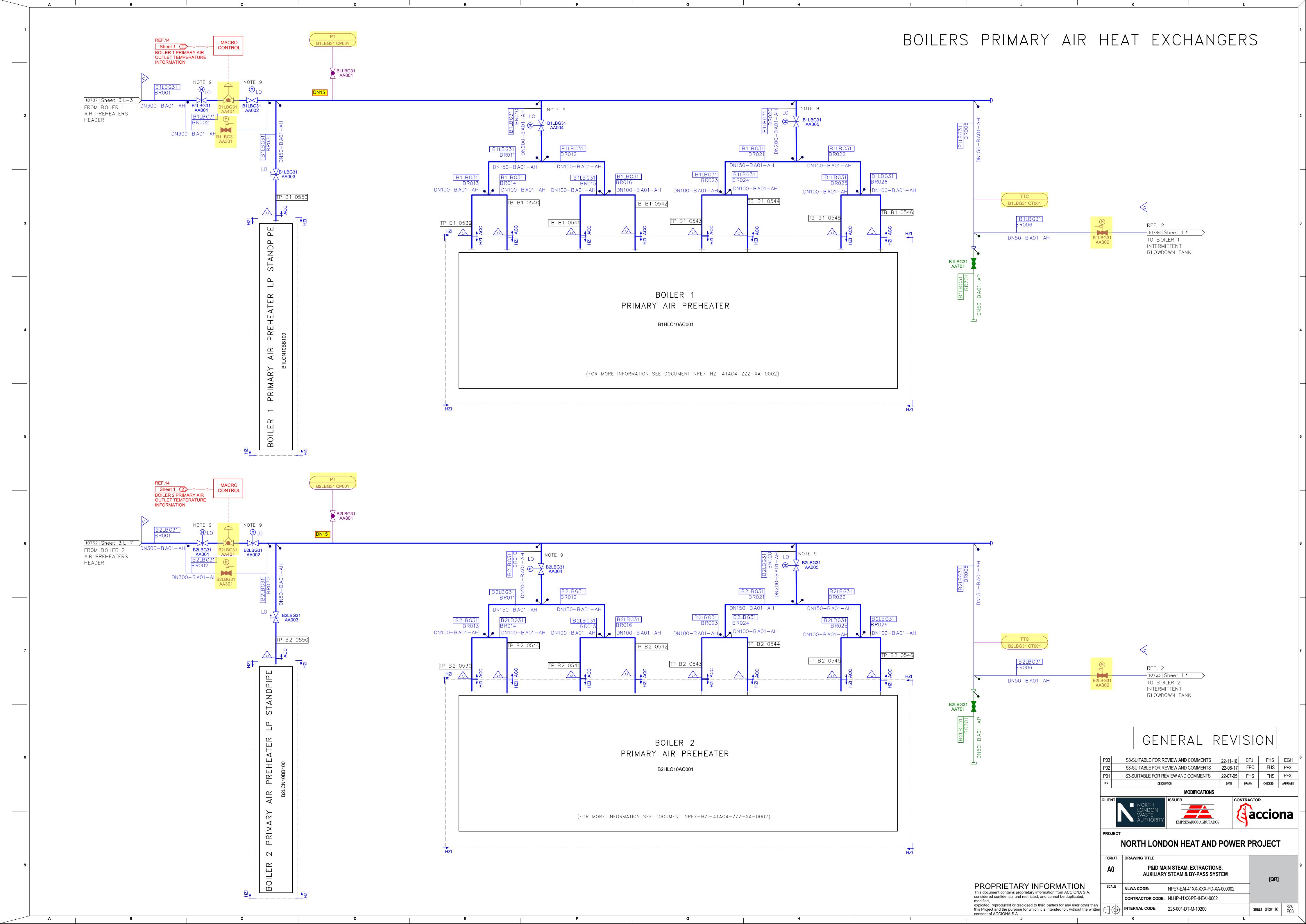
225-001-DT-M-10200

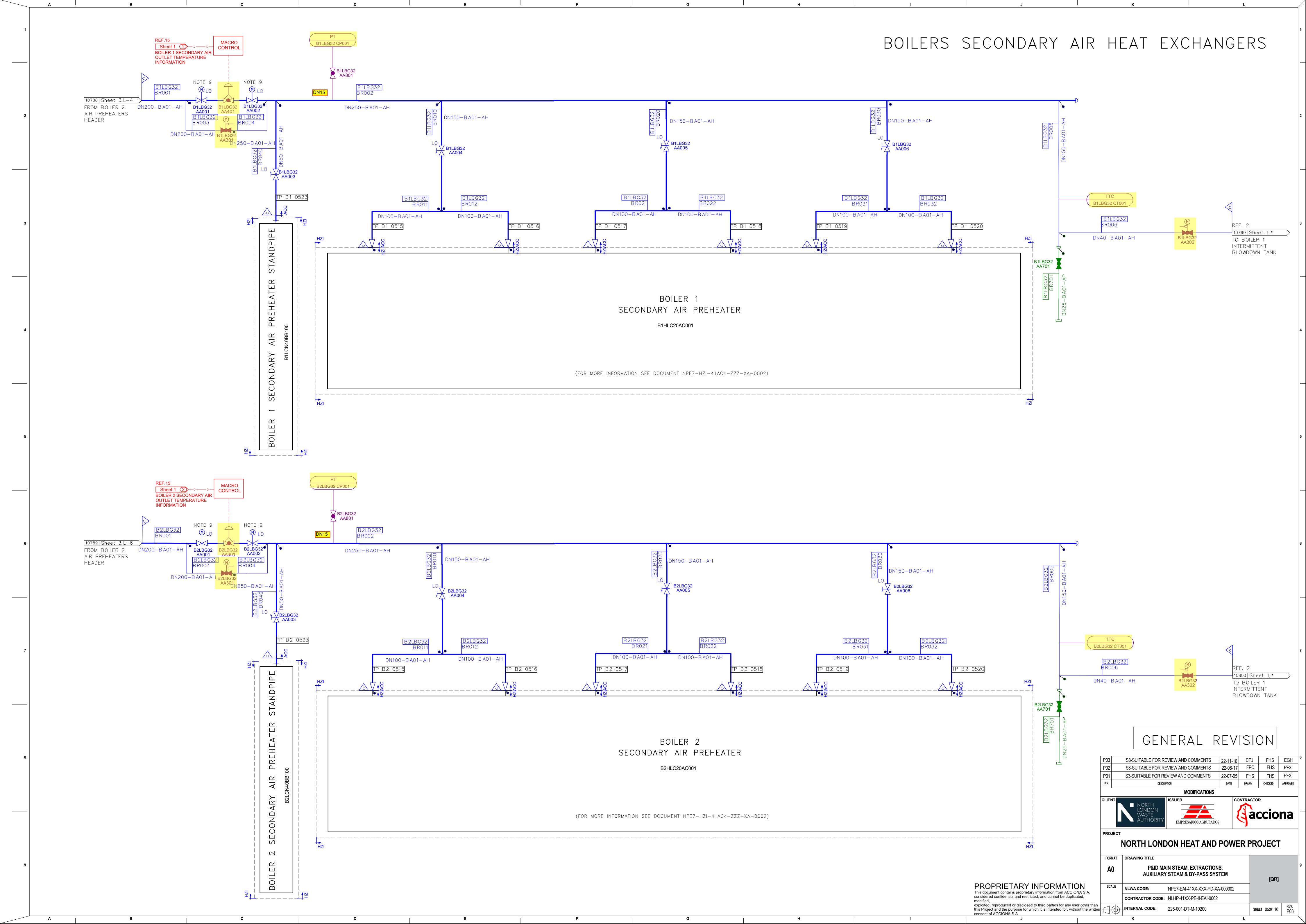
CONTRACTOR CODE: NLHP-41XX-PE-II-EAI-0002











## BOILERS SEALING AIR HEAT EXCHANGERS

