




P&ID FEEDWATER SYSTEM

SHEET	DESCRIPTION	REVISION			REVISION			REVISION			REVISION			REVISION		
		22-07-05			22-08-05			22-11-11			23-04-25			23-07-07		
		PROJECT	ACCIONA	EAI	PROJECT	ACCIONA	EAI	PROJECT	ACCIONA	EAI	PROJECT	ACCIONA	EAI	PROJECT	ACCIONA	EAI
00	P&ID FEEDWATER SYSTEM. INDEX	IFR.P01	IFR.P01	01	IFR.P02	IFR.P02	02	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	IFD.P05	IFD.P05	05
01	P&ID FEEDWATER SYSTEM. DEAERATOR & FEEDWATER TANK	IFR.P01	IFR.P01	01	IFR.P02	IFR.P02	02	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	IFD.P05	IFD.P05	05
02	P&ID FEEDWATER SYSTEM. FEEDWATER PUMPS	IFR.P01	IFR.P01	01	IFR.P02	IFR.P02	02	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	IFD.P05	IFD.P05	05
03	P&ID FEEDWATER SYSTEM. FEEDWATER DISTRIBUTION	IFR.P01	IFR.P01	01	IFR.P02	IFR.P02	02	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	IFD.P05	IFD.P05	05
04	P&ID FEEDWATER SYSTEM. BOILER 1 PRIMARY AIR PREHEATER	IFR.P01	IFR.P01	01	IFR.P02	IFR.P02	02	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	IFD.P05	IFD.P05	05
05	P&ID FEEDWATER SYSTEM. BOILER 2 PRIMARY AIR PREHEATER	-	-	-	-	-	-	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	IFD.P05	IFD.P05	05
06	P&ID FEEDWATER SYSTEM. BOILER 1 SECONDARY AIR PREHEATER	-	-	-	-	-	-	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	IFD.P05	IFD.P05	05
07	P&ID FEEDWATER SYSTEM. BOILER 2 SECONDARY AIR PREHEATER	-	-	-	-	-	-	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	IFD.P05	IFD.P05	05
08	P&ID FEEDWATER SYSTEM. FLUE GAS TREATMENT	-	-	-	-	-	-	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	IFD.P05	IFD.P05	05
09	P&ID FEEDWATER SYSTEM. BOILER CONDENSATE RETURN SYSTEM	-	-	-	-	-	-	IFD.P03	IFD.P03	03	IFD.P04	IFD.P04	04	IFD.P05	IFD.P05	05

BRANCH	DESIGN	
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b	6	149
c	42	150
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e	3.5/-1	215
f	20.3	150
g	6	159
h	66	283
i	4	149
j	10	150
k	12	50

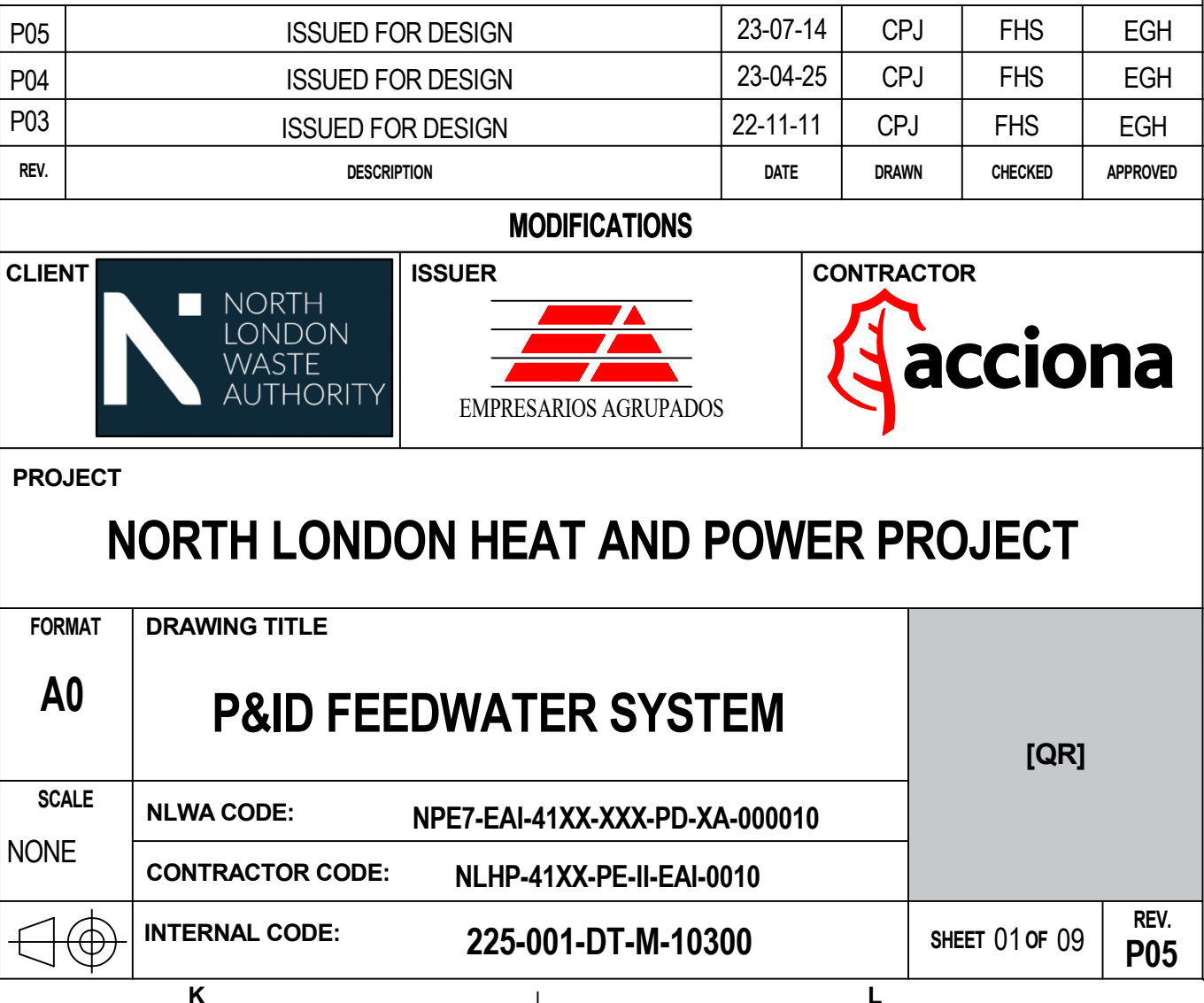
REFERENCE DRAWINGS	CODE	DRAWING Nº
0.- P&ID SYMBOLOGY AND GENERAL NOTES		NPE7-EAI-41XX-XXX-PD-XA-000001
1.- P&ID CONDENSATE SYSTEM	LC	NPE7-EAI-41XX-XXX-PD-XA-000008
2.- P&ID BOILER DRAINS SYSTEM	HAN	NPE7-EAI-41AC-XXX-PD-XA-000005
3.- P&ID BOILER BLOWDOWN		NPE7-HZ1-41AC2-ZZZ-PD-XA-000007
4.- P&ID MAIN STEAM, EXTRACTIONS, AUXILIARY STEAM & BYPASS SYSTEM	LB	NPE7-EAI-41XX-XXX-PD-XA-000002
5.- P&ID SAMPLING SYSTEM	QU	NPE7-EAI-41XX-XXX-PD-XA-000014
6.- P&ID DEMINERALIZED WATER SYSTEM	GHC	NPE7-EAI-41XX-XXX-PD-XA-000018
7.- P&ID CHEMICAL DOSING SYSTEM	QC	NPE7-EAI-41XX-XXX-PD-XA-000017
8.- P&ID PRIMARY AIR PREHEATER		NPE7-HZ1-41AC4-ZZZ-PD-XA-000002
9.- P&ID SECONDARY AIR PREHEATER		NPE7-HZ1-41AC4-ZZZ-PD-XA-000006
10.- P&ID FLUE GAS PATH SCR		NPE7-HZ1-41AE-ZZZ-PD-XA-000001
11.- P&ID CLOSED COOLING WATER SYSTEM	PG	NPE7-EAI-41XX-XXX-PD-XA-000007
12.- P&ID BOILER WATER SIDE DRUM AND ECONOMISER		NPE7-HZ1-41AC2-ZZZ-PD-XA-000003
13.- P&ID WASTE WATER SYSTEM		NPE7-EAI-41MX-XXX-PD-XA-000016
14.- P&ID BOILER REUSED WATER SYSTEM	LCQ	NPE7-EAI-41AX-XXX-PD-XA-000006

- NOTES :
- 0.- 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.- ADEQUATE STRAIGHTS DIAMETERS SHALL BE CONSIDERED FOR FLOWMETER TYPOLOGY
  - 2.- VENTS WILL BE DISCHARGED TO A SAFE PLACE
  - 3.- DISMANTLING FLANGES
  - 4.- VALVE SHALL BE PROVIDED BY PUMP SUPPLIER
  - 5.- TERMINAL POINT PENDING FROM HZ1
  - 6.- FW PUMPS ARE REFRIGERATED BY MEANS OF CLOSED COOLING WATER SYSTEM AND IT IS REPRESENTED IN THE REFERENCE 11.
  - 7.- INFORMATION ABOUT BOILER CONDENSATE RETURN IS PRELIMINARY UNTIL FINAL CONFIRMATION OF THE SUPPLIER (HZ1)
  - 8.- VALVES OF DN200 SIZE OR HIGHER SHALL INCLUDE LOCALLY ACTUATED ELECTRICAL PINION
  - 9.- ALL BOILER CONDENSATE COLLECTION SUBSYSTEM DESIGN CONCEPT SHALL TO BE REVIEWED, CONFIRMED AND APPROVED BY BOILER MANUFACTURER (HZ1)
  - 10.- CONTROL VALVES AT RISK OF CRITICAL CONDITIONS OR AT RISK OF FLASHING SHALL BE PROVIDED AT ITS OUTLET WITH A TEE WITH A BLIND FLANGE INSTEAD OF ITS FIRST ELBOW.
  - 11.- CONDENSATE INLET CONNECTION SHALL BE OVER HH LEVEL OF THE TANK TO AVOID A CONDENSATE LEVEL IN THE STEAM-FLUE GAS HEAT EXCHANGER
  - 12.- CONNECTION FOR DISTRICT HEATING FUTURE EXPANSION
  - 13.- IN CASE OF BEING NECESSARY FOR TEMPERATURE MEASUREMENT THE DIAMETER OF THE LINE WILL BE INCREASED ONLY IN THE SECTION REQUIRED FOR THIS PURPOSE.
  - 14.- SPRAY WATER DISTRIBUTION SHALL BE OVER WATER LEVEL.
  - 15.- HIGH PRESSURE NOZZLES SHALL BE PROVIDED WITH IMPINGEMENT PLATES AT THE INLET OF THE TANK.
  - 16.- HIGH PRESSURE CONTROL STATION SHALL BE LOCATED AS CLOSE AS POSSIBLE TO THE TANK NOZZLE.
  - 17.- LOCATE AS CLOSE AS POSSIBLE TO THE DISCHARGE POINT
  - 18.- DIELECTRIC ISOLATION KIT
  - 19.- PERMANENT VALVE TRAVEL POSITION ADJUST TO BE DEFINED DURING COMMISSIONING STAGE.

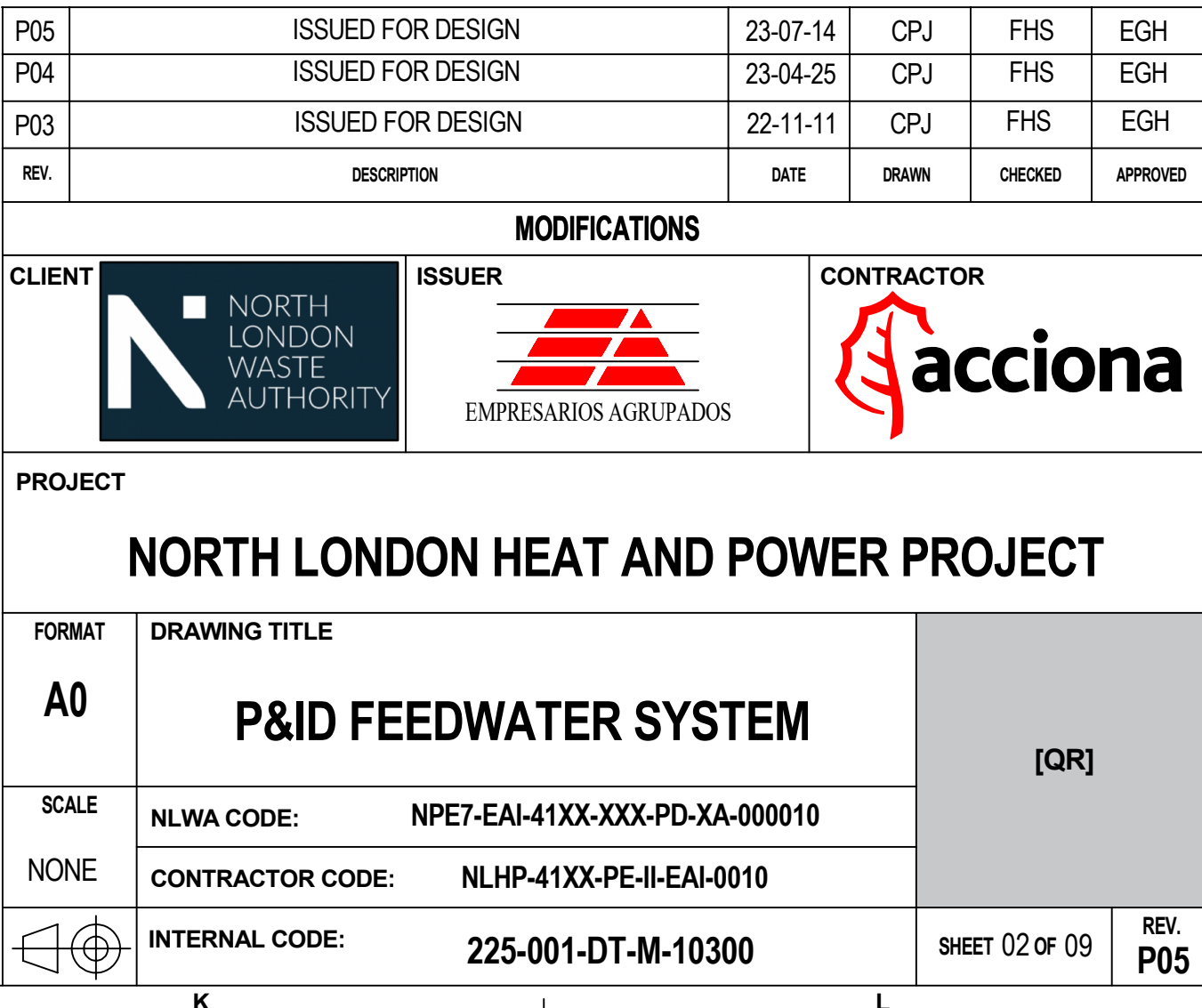
P05	ISSUED FOR DESIGN		23-07-14	CPJ	FHS	EGH
P04	ISSUED FOR DESIGN		23-04-25	CPJ	FHS	EGH
P03	ISSUED FOR DESIGN		22-11-11	CPJ	FHS	EGH
REV.	DESCRIPTION		DATE	DRAWN	CHECKED	APPROVED
MODIFICATIONS						
CLIENT			ISSUER			
			CONTRACTOR			
PROJECT						
NORTH LONDON HEAT AND POWER PROJECT						
FORMAT	DRAWING TITLE					[QR]
A0	P&ID FEEDWATER SYSTEM INDEX					
SCALE						
NONE	NLWA CODE:	NPE7-EAI-41XX-XXX-PD-XA-000010		CONTRACTOR CODE:		NLHP-41XX-PE-II-EAI-0010
	INTERNAL CODE:	225-001-DT-M-10300		SHEET 00 of 09		REV. P05

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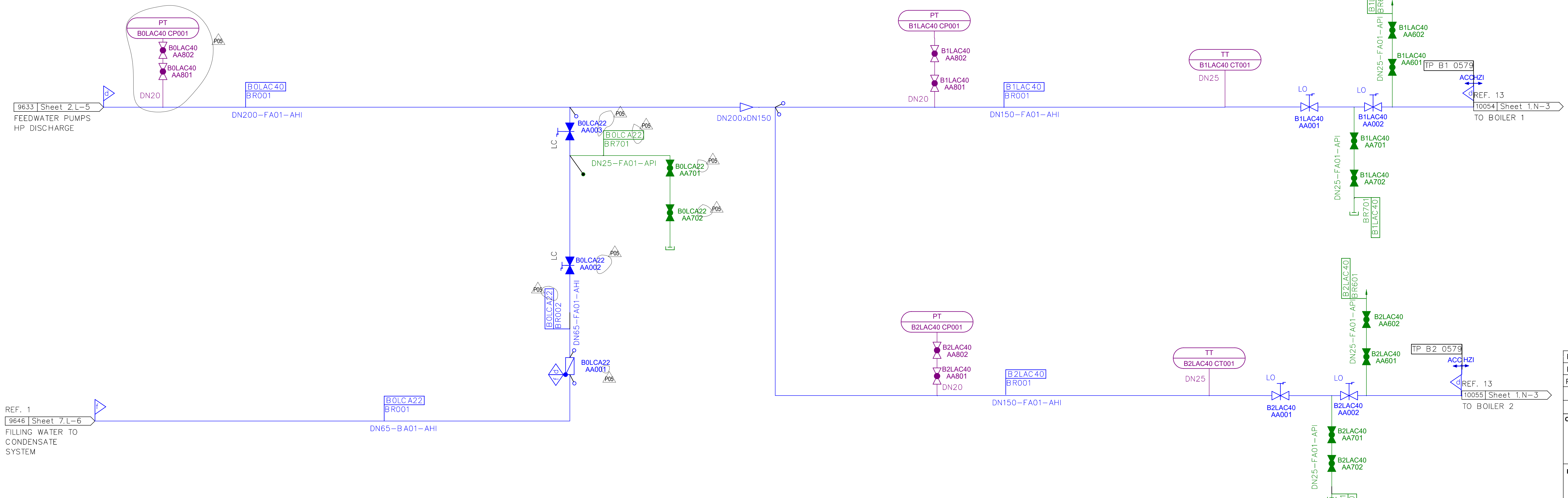
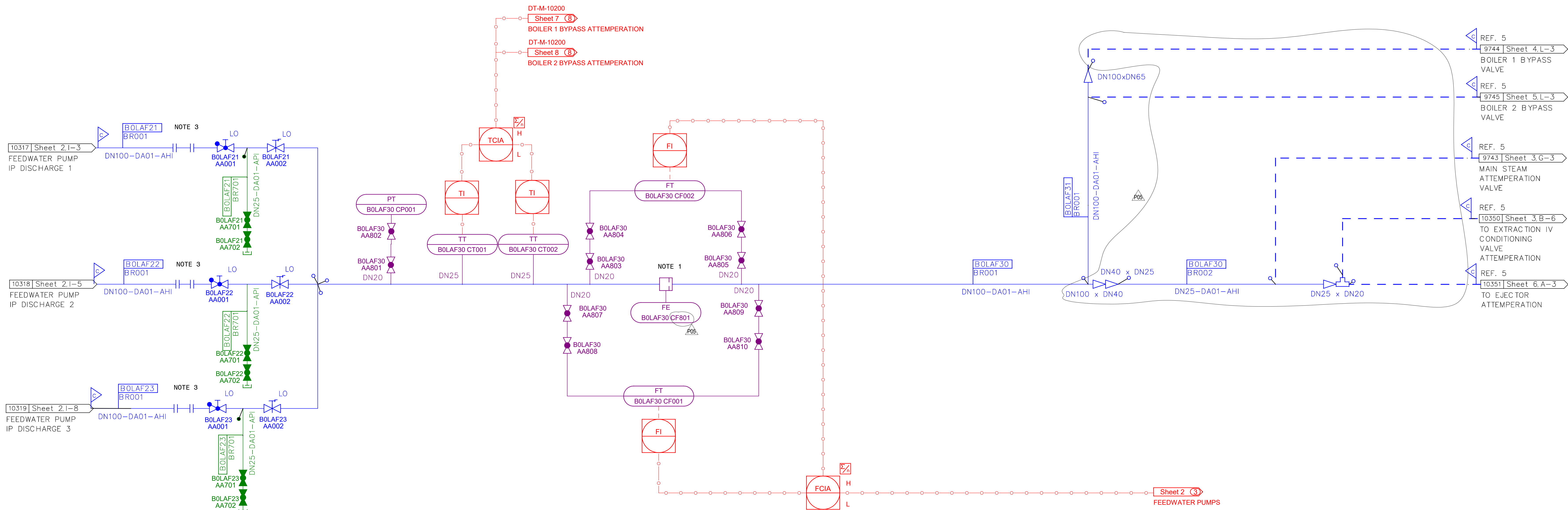









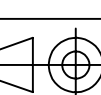
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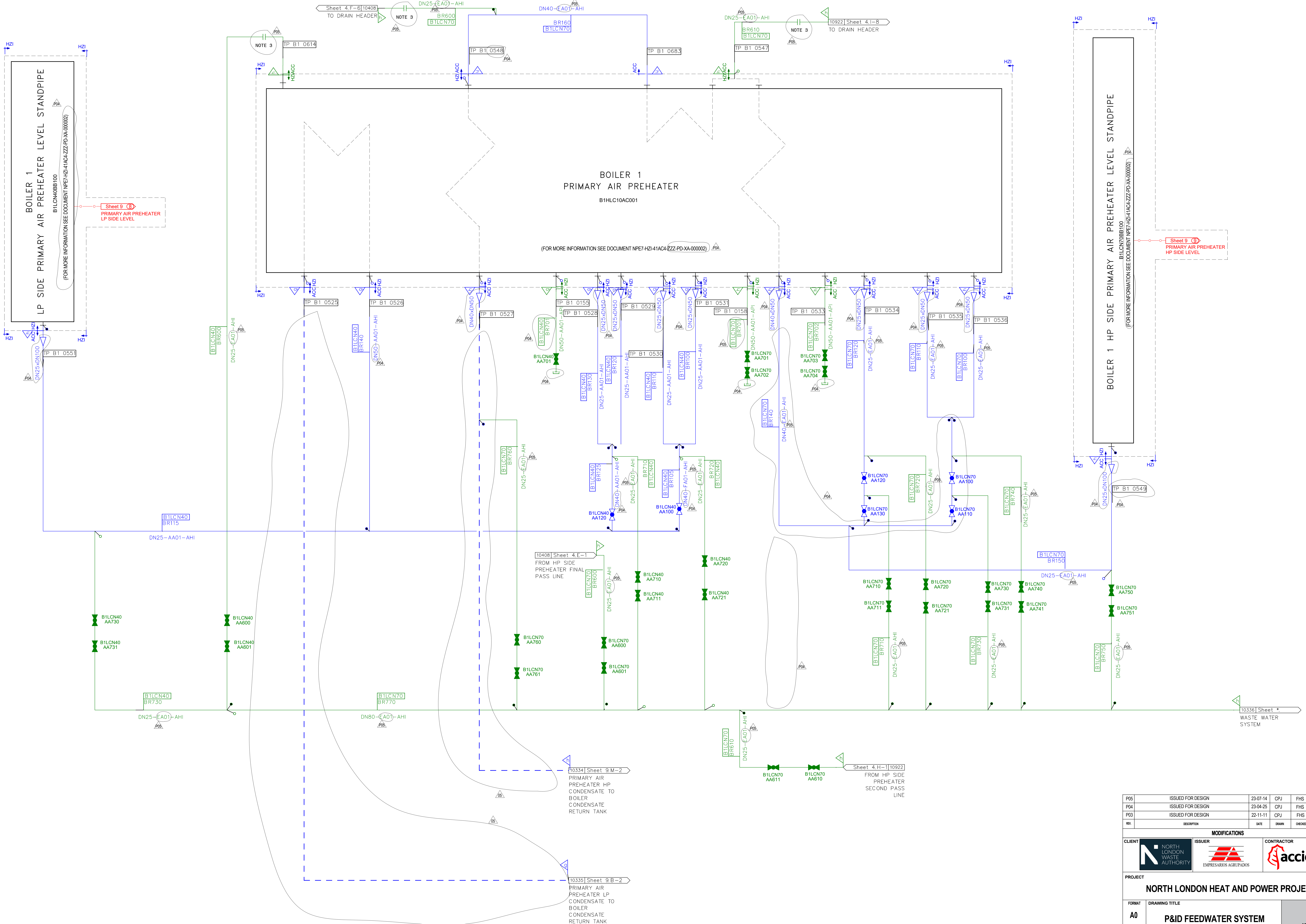





REF. 1  
9646 Sheet 7.L-6  
FILLING WATER TO  
CONDENSATE  
SYSTEM

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P04	ISSUED FOR DESIGN	23-04-25	CPJ	FHS	EGH
P03	ISSUED FOR DESIGN	22-11-11	CPJ	FHS	EGH
REV.	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
MODIFICATIONS					
CLIENT			ISSUER		
			CONTRACTOR		
PROJECT					
NORTH LONDON HEAT AND POWER PROJECT					
FORMAT	DRAWING TITLE				
A0	P&ID FEEDWATER SYSTEM				
SCALE	NLWA CODE:	NPET-EAI-41XX-XXX-PD-XA-000010			
NONE	CONTRACTOR CODE:	NLHP-41XX-PE-II-EAI-0010			
	INTERNAL CODE:	225-001-DT-M-10300			
				SHEET 03 OF 09	REV P05





P05	ISSUED FOR DESIGN	23-07-14	CPJ	FHS	EGH
P04	ISSUED FOR DESIGN	23-04-25	CPJ	FHS	EGH
P03	ISSUED FOR DESIGN	22-11-11	CPJ	FHS	EGH
REV.	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
MODIFICATIONS					
CLIENT	ISSUER		CONTRACTOR		
	 EMPRESARIOS AGRUPADOS				
PROJECT					
NORTH LONDON HEAT AND POWER PROJECT					
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	INTERNAL CODE:	225-001-DT-M-10300			
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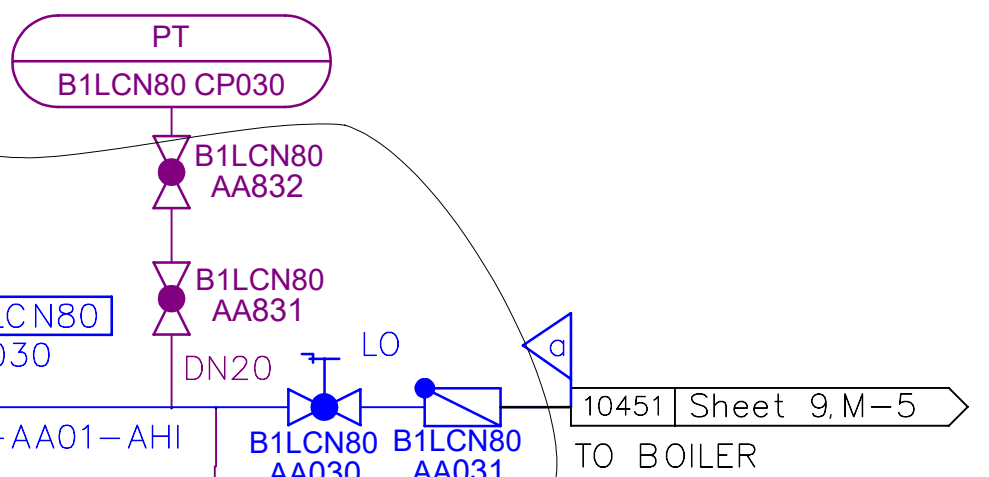
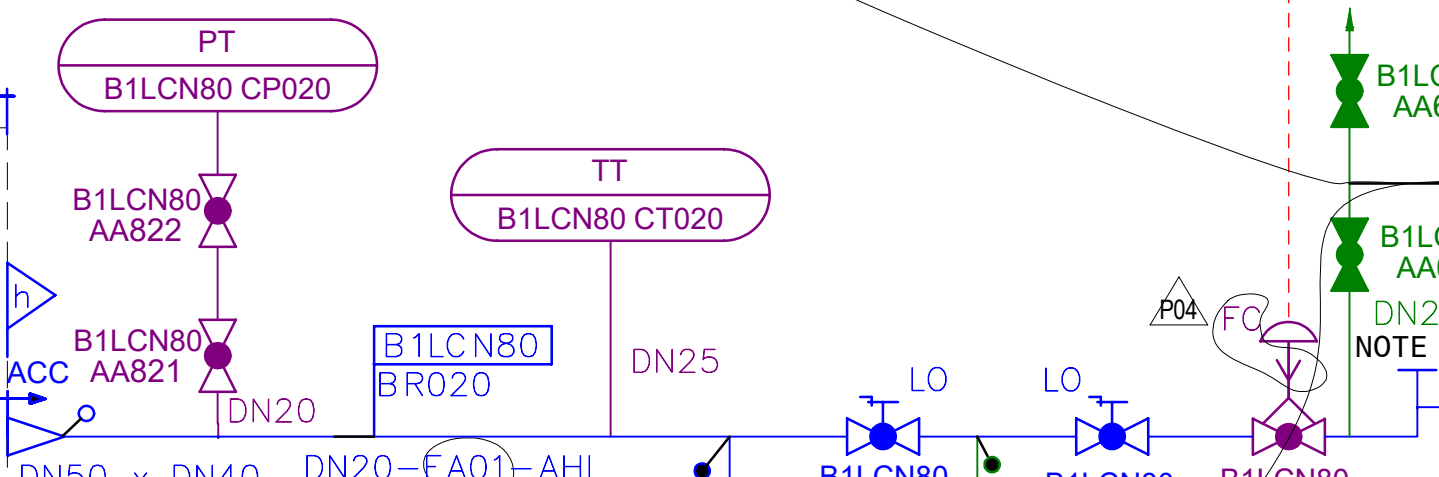
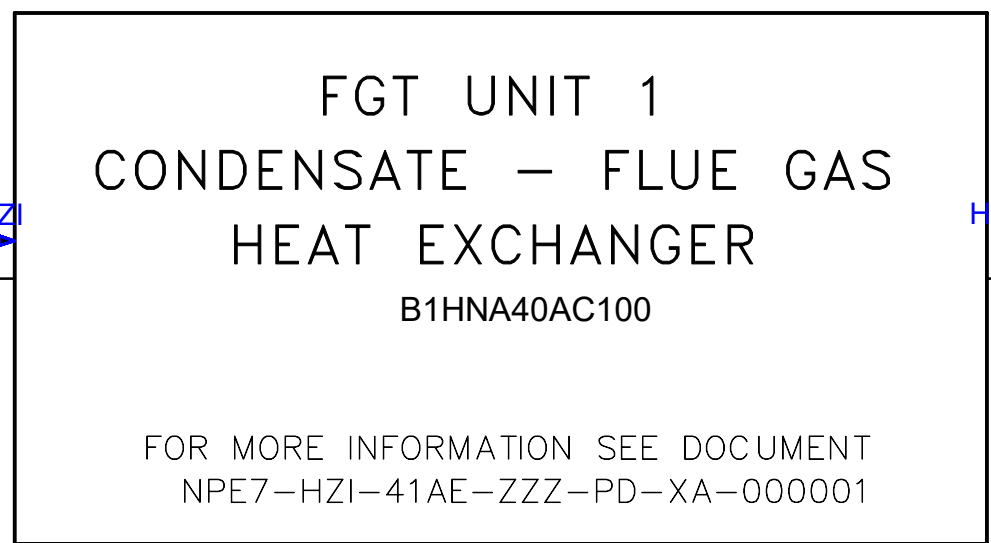
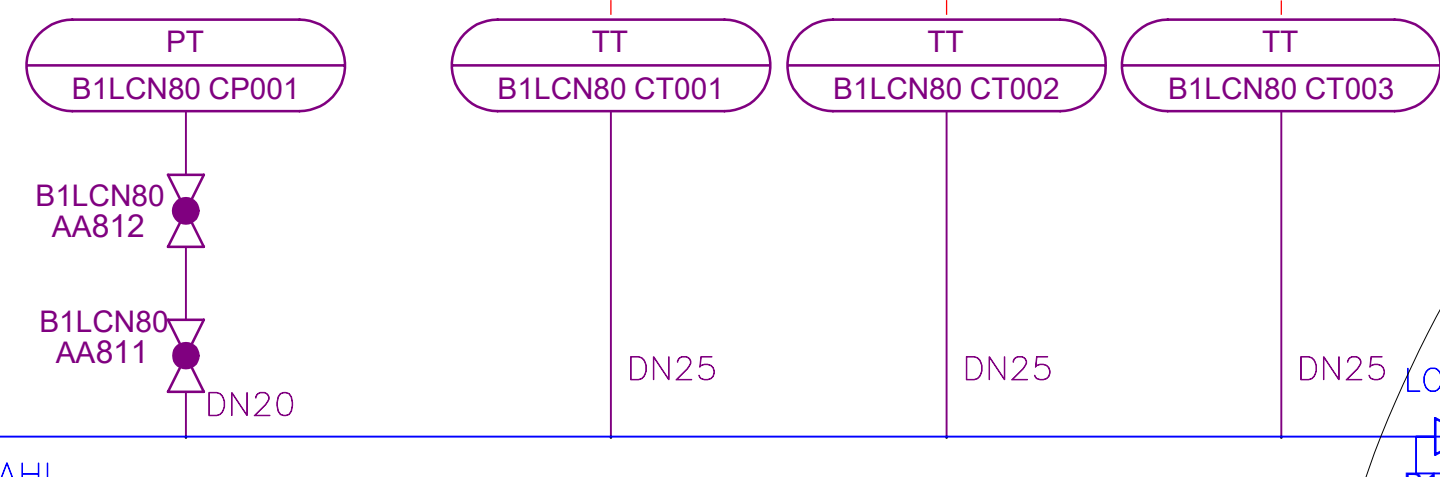
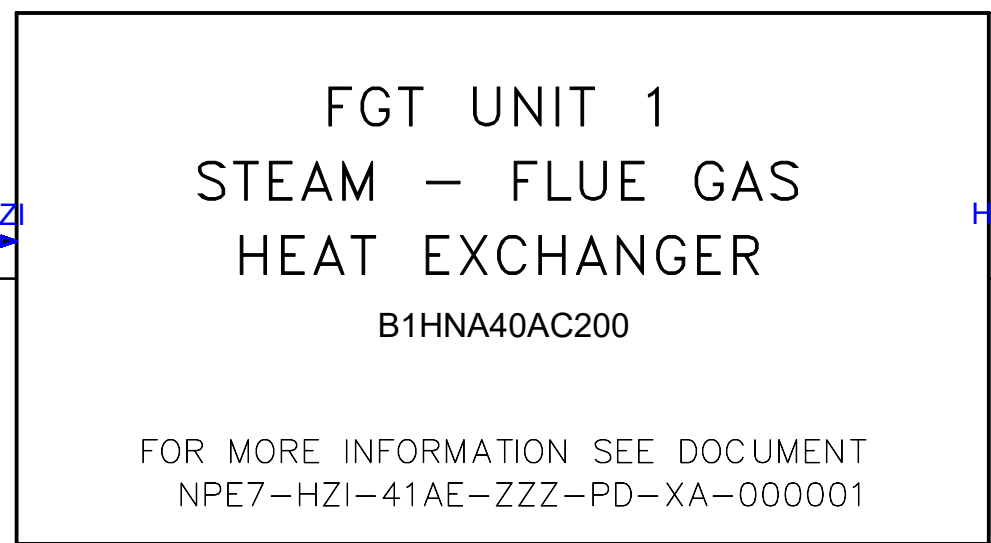




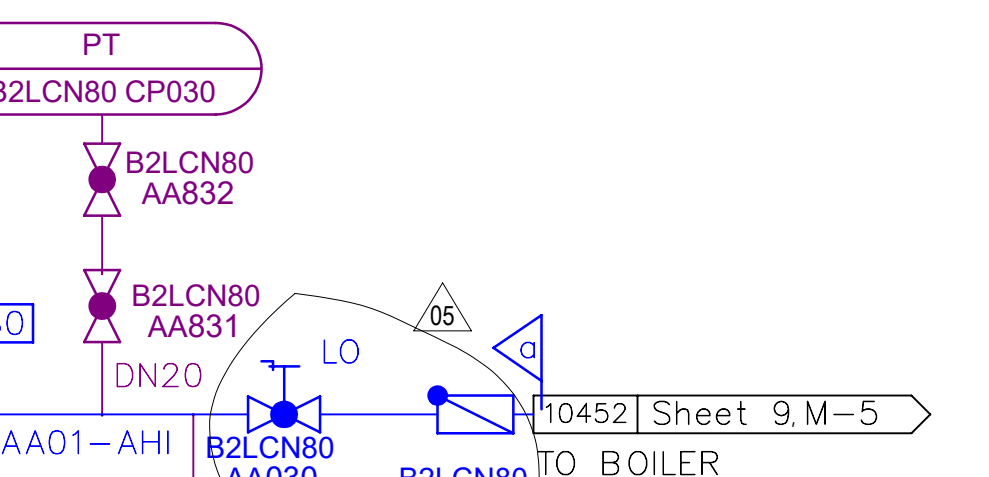
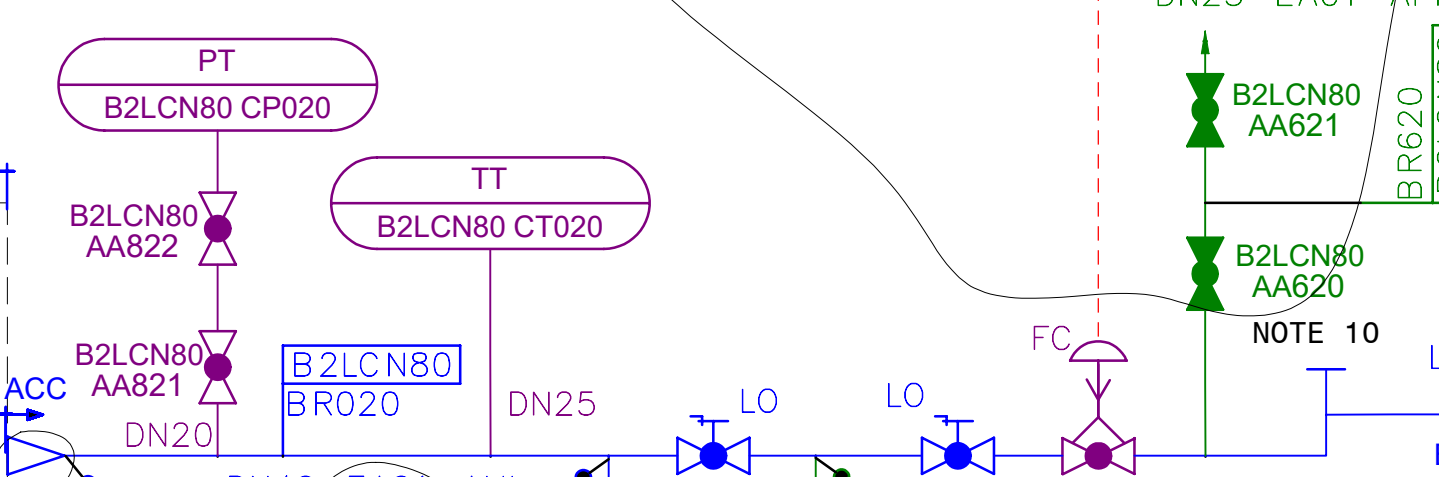
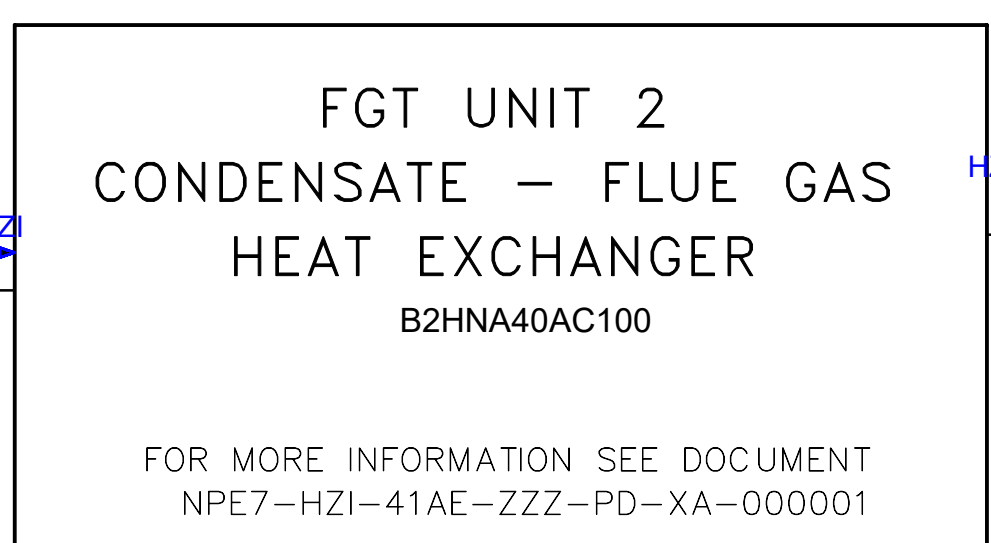
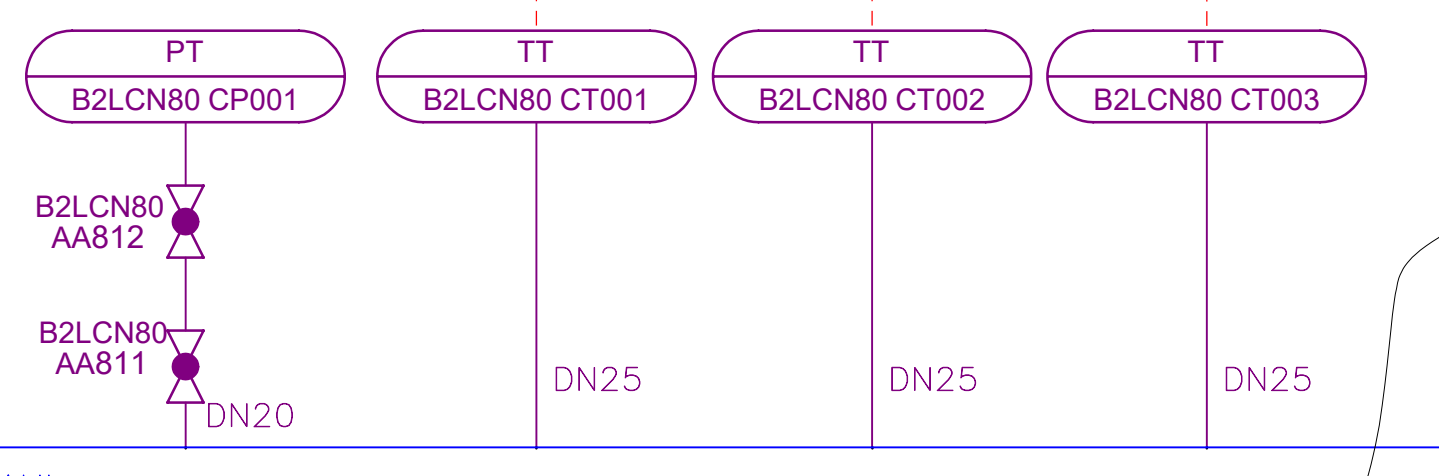
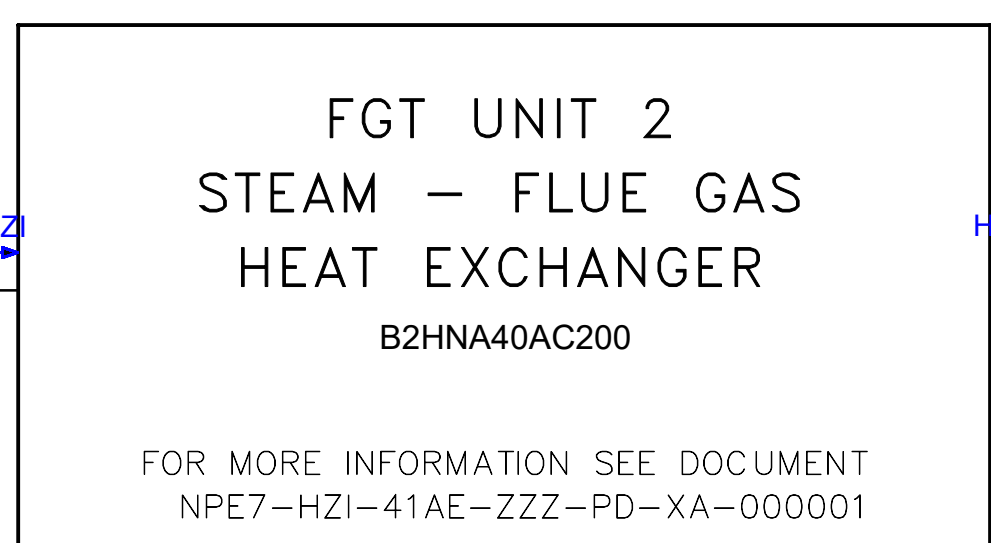




REF.5  
10412] Sheet 8.B-7  
SATURATED STEAM  
FROM BOILER  
DRUM 1



REF. 5  
10412] Sheet 8.B-4  
SATURATED STEAM  
FROM BOILER  
DRUM 2



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P04	ISSUED FOR DESIGN	23-04-25	CPJ	FHS	EGH
P03	ISSUED FOR DESIGN	22-11-11	CPJ	FHS	EGH
REV.	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED

CLIENT	ISSUER	CONTRACTOR
NORTH LONDON WASTE AUTHORITY	EMPRESARIOS AGRUADOS	acciona

PROJECT	NORTH LONDON HEAT AND POWER PROJECT				
FORMAT	DRAWING TITLE				
A0	P&ID FEEDWATER SYSTEM				
SCALE	NLWA CODE:	NPE7-EAI-41XX-XXX-PD-XA-000010			
NONE	CONTRACTOR CODE:	NLHP-41XX-PE-II-EAI-0010			
	INTERNAL CODE:	225-001-DT-M-10300			
		SHEET 08 of 09		REV.	P05



