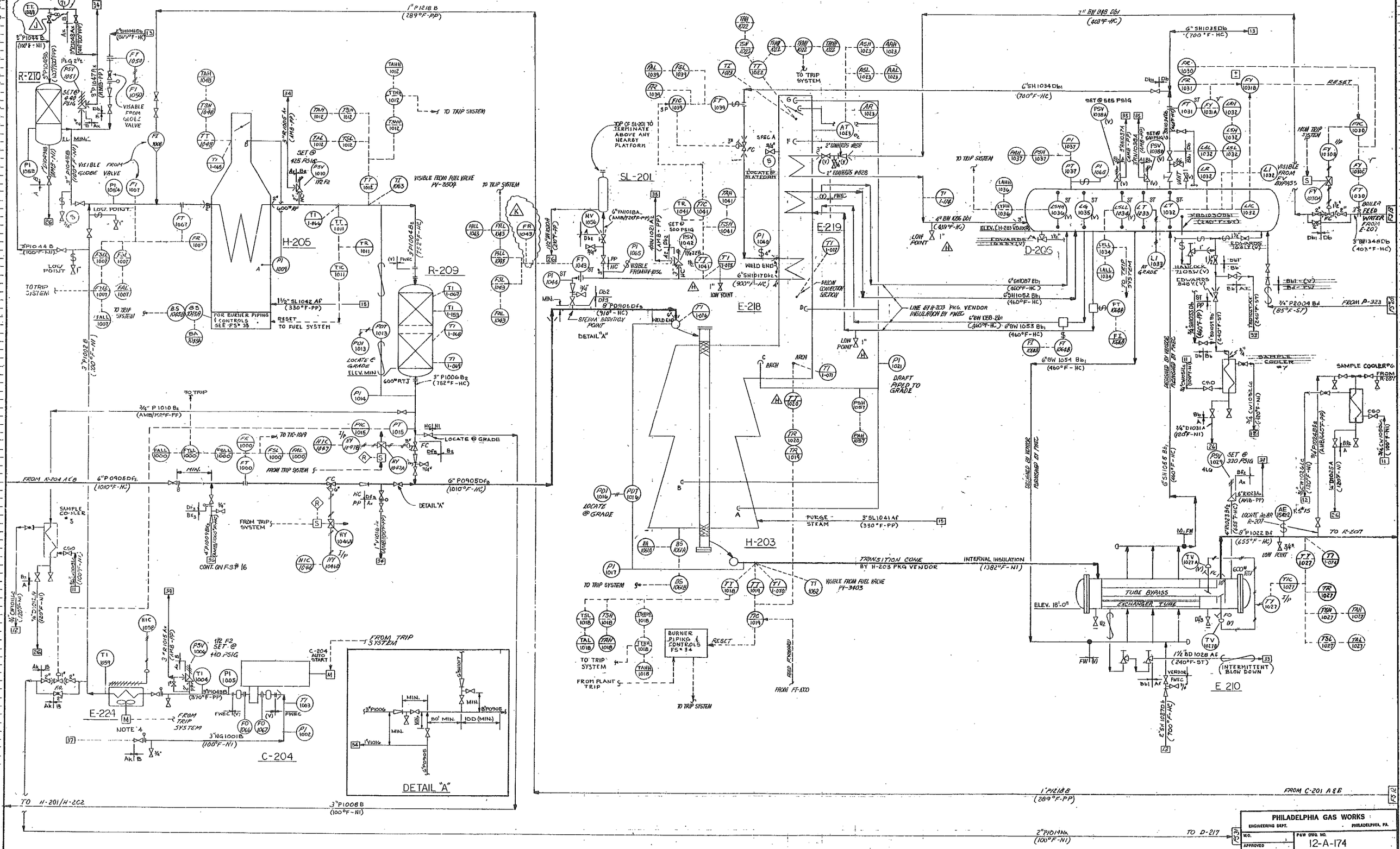

LEGEND			
01 COOLING WATER SUPPLY (GLYCOL-WTR)	15# DESUPERCATED STEAM	STEAM CONDENSATE	OILY OR DIRTY WATER SEWER
02 COOLING WATER RETURN (GLYCOL-WTR)	POTABLE WATER	TREATED WATER	CHEMICAL WATER
03 450# H.P. STEAM	PLANT AIR	FUEL OIL (PARTIAL)	SANITARY SEWER
04 150# DEAERATOR STEAM	INSTRUMENT AIR	FUEL GAS (NATURAL GAS)	FIRE WATER
05 50# L.P. STEAM		CLEAN WATER SEWER	FLUSHING OIL

PUMPOUT	CRG START UP GAS	PROCESS CONDENSATE	15# STEAM CONDENSATE
PURGE GAS (INTROGEN)	PIPELINE GAS (NATURAL GAS)	RAW WATER	
BLOWDOWN		DRAIN WATER	
FLARE		PRESSURIZATION AIR	
TO ATMOSPHERE	BOILER FEED WATER		

NOTES

1. INLET CHANNEL OF E-210 SHALL NOT BE FIELD INSULATED. THIS CHANNEL IS REFRACTORY LINED, EXPANDED METAL SCREEN SHALL BE PROVIDED WHERE REQUIRED FOR PERSONNEL PROTECTION.
2. H-203 INLET MANIFOLD REQUIRES HC INSULATION
3. FOR GENERAL NOTES, ETC, SEE F.S. #1
4. COMMON MOTOR WITH E-106

ITEM NO.	C-204											
SERVICE	PIPELINE GAS COMPRESSOR											
S.G. AT P.T.	139											
DES. G.P.M. AT P.T.	CFM (INLET)											
DES. DIFF. P.S.I.	310											
MAX. DISCH. P.S.I.G.	405											
MATERIAL	CS											
INSULATION	NI											

ITEM NO.	E-210	E-218	E-219	E-224	H-203	H-205	SL-201
SERVICE	AGGRESSIVE WASTE HEAT EXCHANGER	REFORMER STEAM SUPER-HEAT COIL	REFORMER STEAM GENER-ATION UNIT	PIPELINE GAS COMPRESSOR AFTERCOOLER	HYDROGEN REFORMER	PRE-LINE GAS HEATER	REFORMER FEED VENT KNOCK OUT
SHELL DES. P. & T.	650PSIG/600°F	—	—	—	—	—	—
TUBE DES. P. & T.	550PSIG/150°F	525PSIG/950°F	525PSIG/610°F	440PSIG/650°F	375PSIG/1150°F	445PSIG/800°F	—
SURFACE	454 FT²	1046 FT²	471 FT²	2479 FT²	27.9 mm BTU/HR	1.25 mm BTU/HR	—
MATL. SHELL	C.S.	—	—	—	—	—	C.S.
MATL. TUBE	C-½ MO	INCOLLOY-800	C.S.	C.S.	TUBE MAT'L 25Cr-20Ni	1¼ Cr-½ MO	—
INSULATION	HC/HI TUNNEL	NI	NI	NI	NI	NI	PP

ITEM NO.	D-204	R-207	R-210
SERVICE	REFORMER STEAM DRUM	PIPELINE GAS SURGE BREAKER	CARBON DRUM
SIZE	18'-0" I.D. x 80'-2"	3'-6" x 10'-6"	
DES. PRESS-TEMP.	525PSIG/500°F	425PSIG/800°F	440PSIG/100°F
OPER. PRESS-TEMP.	450PSIG/450°F	385PSIG/752°F	409PSIG/650°F
MATERIAL	C.S.	C.S.	C.S.
INSULATION	HC	HC	HC

REVISIONS																				
K	ADDED FR 1043	J	9-5-80	FIELD CHANGE	H	10-31-79	AS-BUILT	G	3-16-79	FINAL	F	OP. MAN. ISSUE	7/20/78	E	12-28-77	RELEASE FOR ERECTION	D	8-10-77	PGW COMMENTS/MODEL REVIEW	C	5-27-77	GENERAL REVISION	B	2-14-77	PROCESS ISSUE	A	1-15-77	DEFINITIVE ESTIMATE

ITEM NOS. THIS DWG.

R-209
D-205
E-210
E-218
E-219
H-203
H-205

C-204
SL-201
E-224
R-210

PHILADELPHIA GAS WORKS
ENGINEERING DEPT. PHILADELPHIA, PA.
W.O. | PGW DWG. NO. 12-A-174
APPROVED

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ENGINEERING FLOW DIAGRAM
RECYCLE GAS GENERATION
SECTION 200 CATALYTIC RICH GAS UNIT
60 MM SCFD SNG PLANT
PHILADELPHIA GAS WORKS
PHILADELPHIA PENNSYLVANIA

EST. NO. | DRAWN BY: LCS | 11-15-78 | SHT. 15 OF 17
CONTRACT NUMBER 15-1779 | DWG. NO. 1779-1-50-10