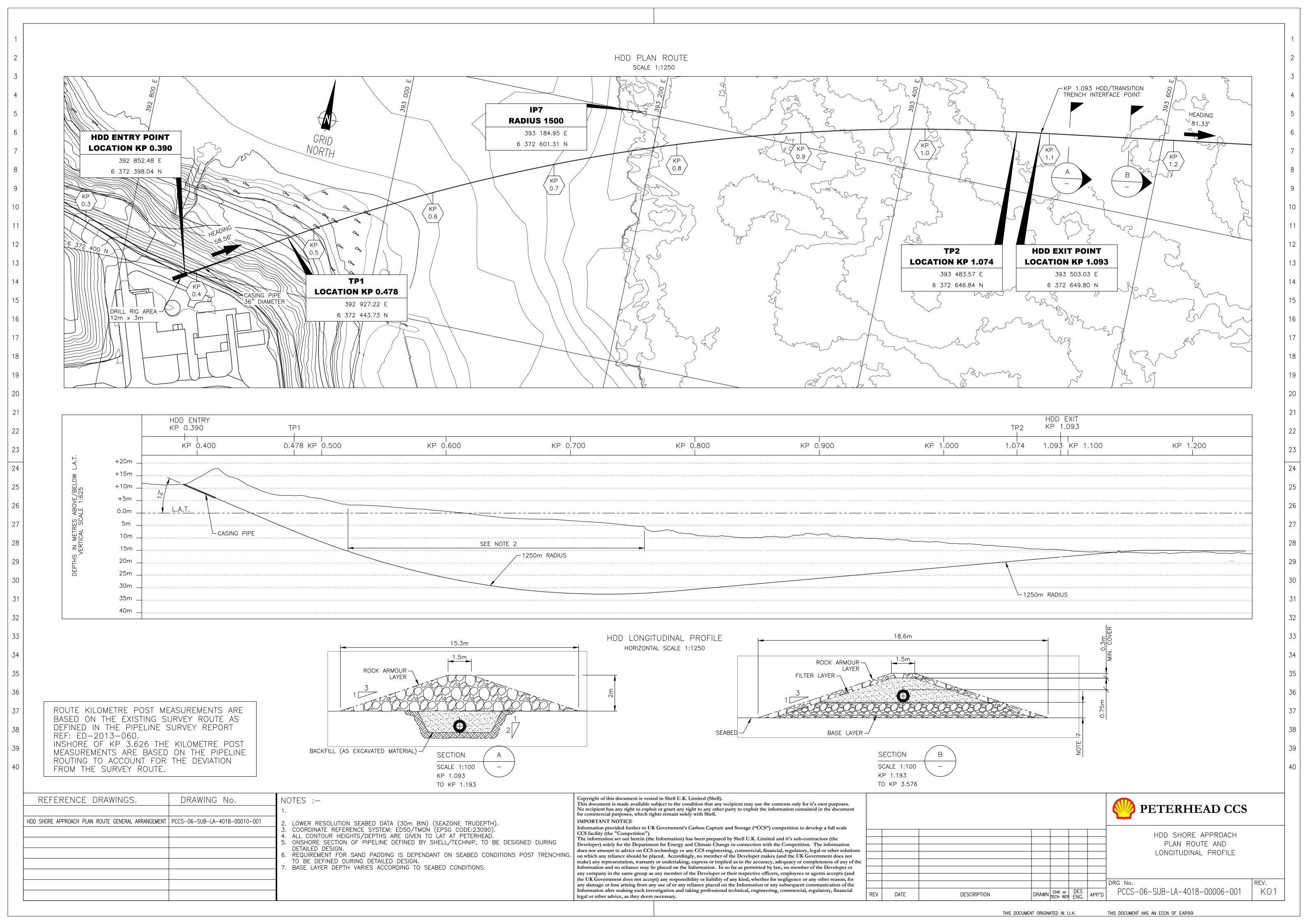
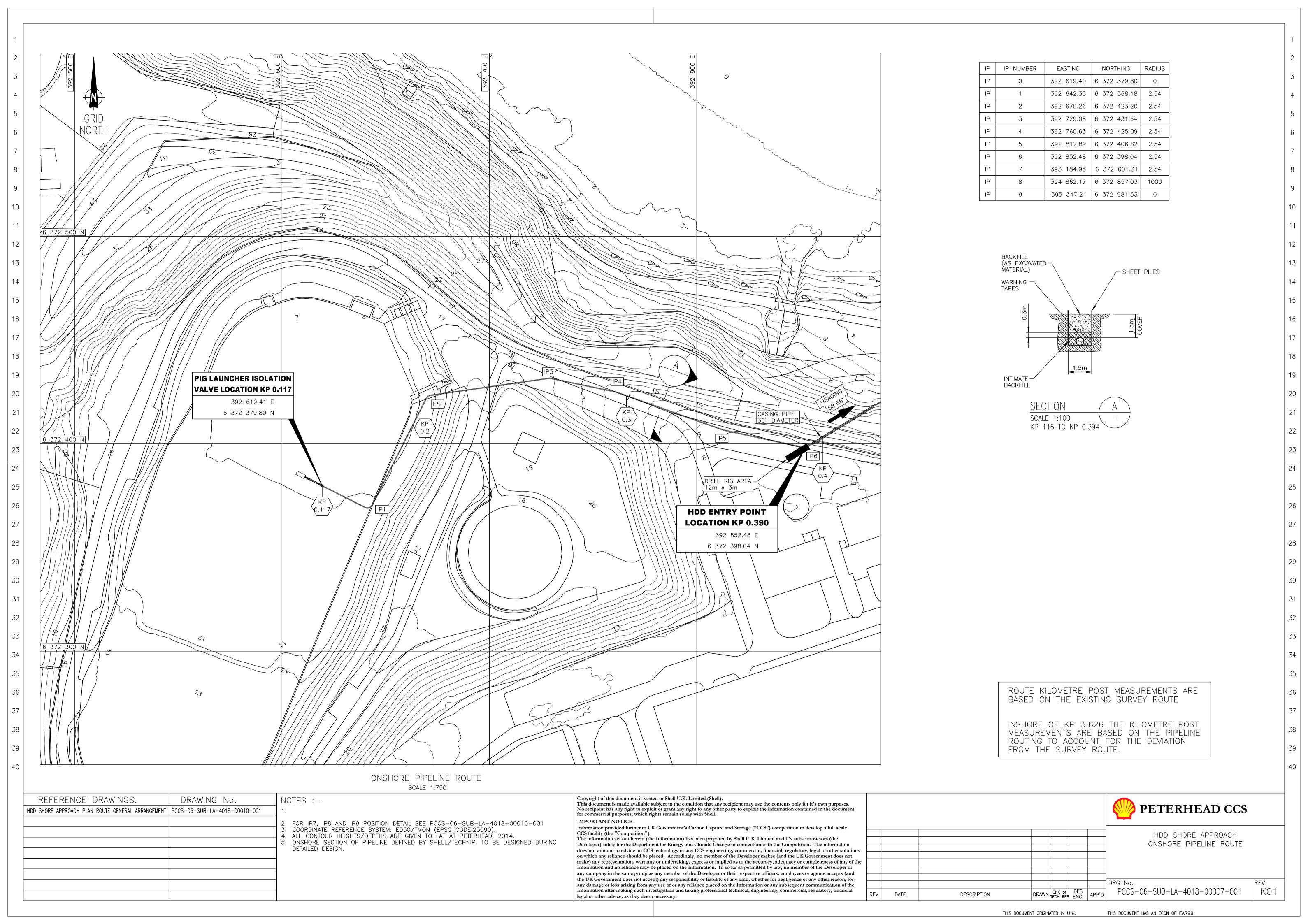
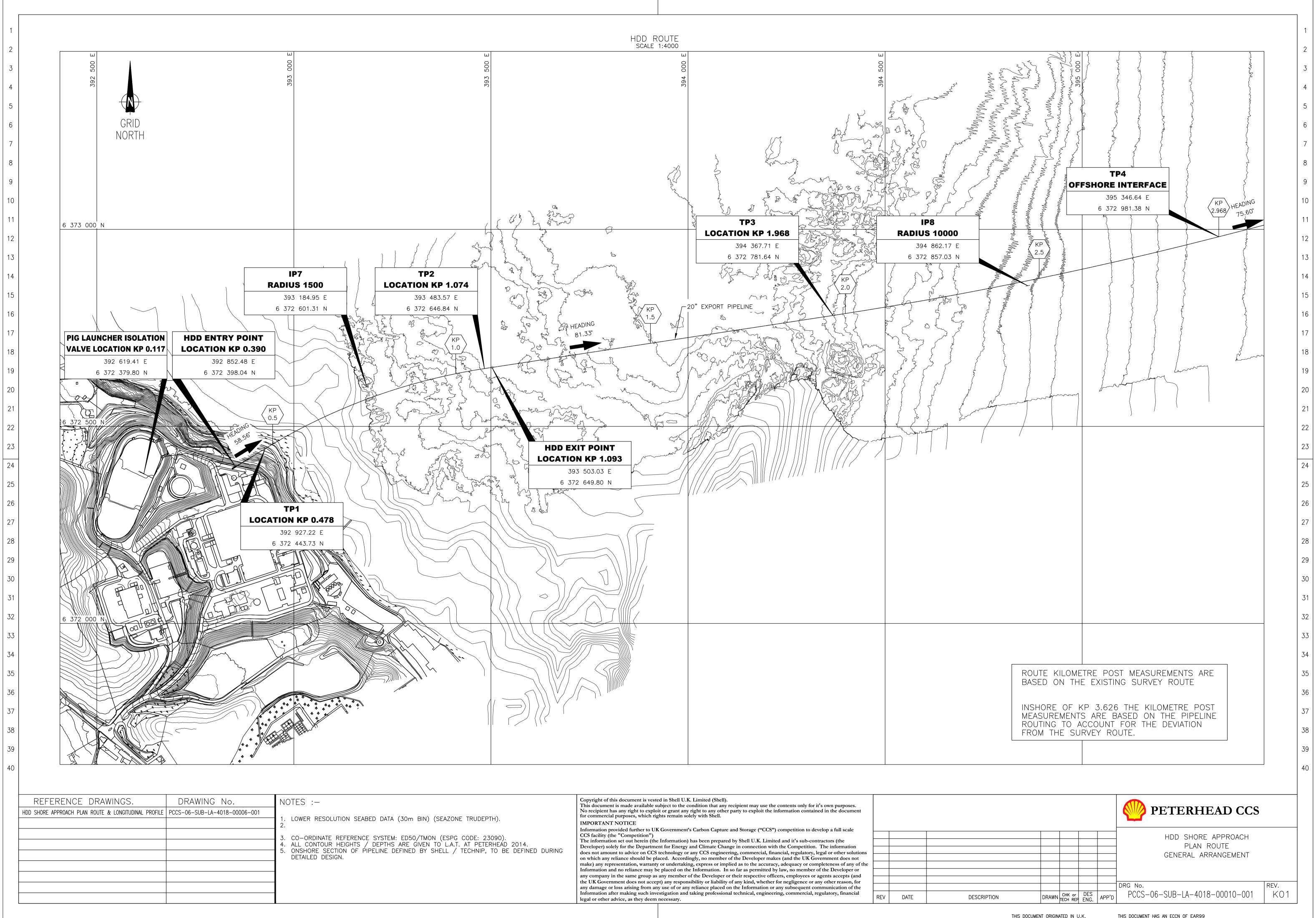


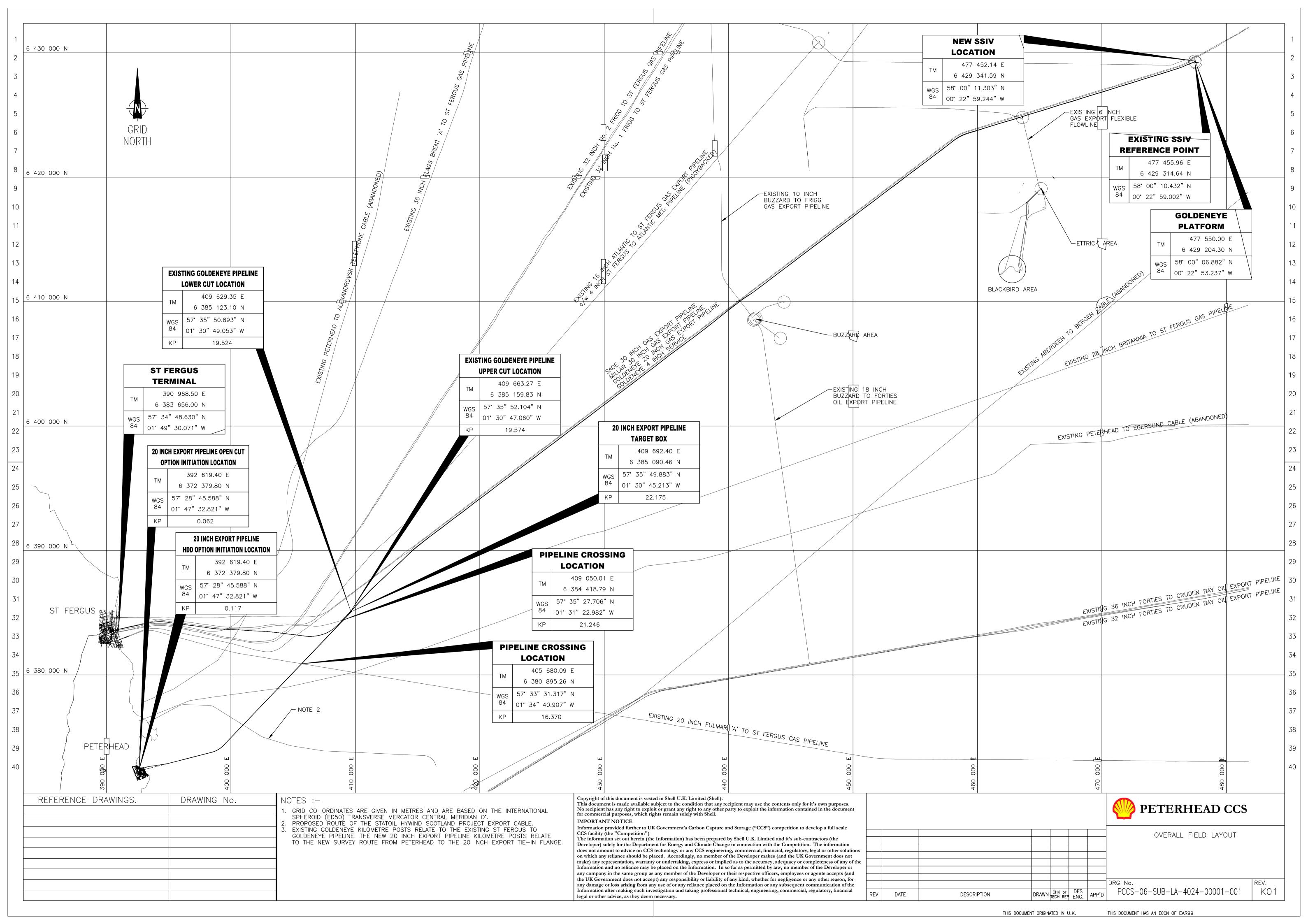
## **APPENDIX 4.** Transport Documents

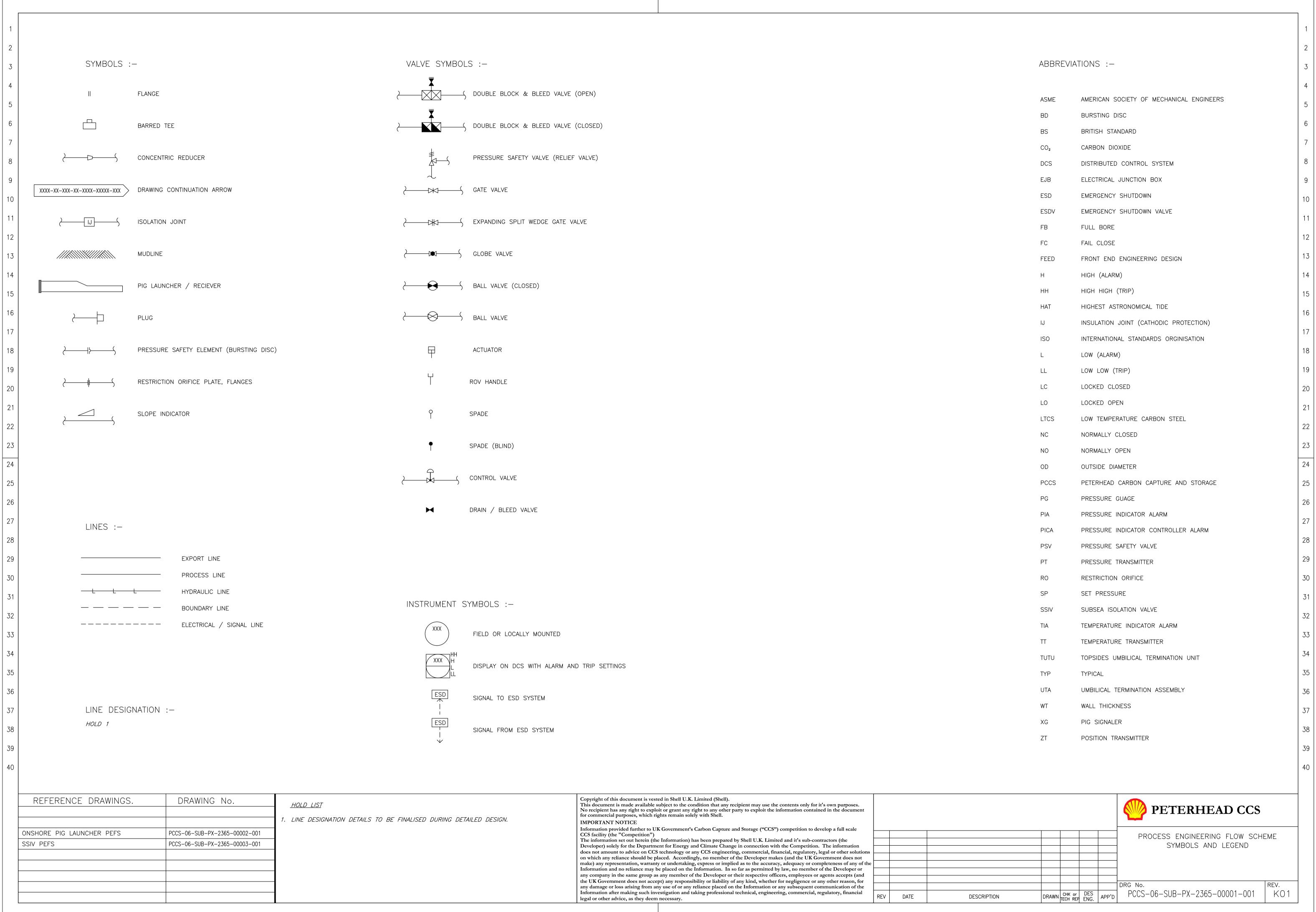
Document Ref.	Document Title	Appendix Page No.
PCCS-06-SUB-LA-4018- 00006-001	HDD SHORE APPROACH PLAN ROUTE AND LONGITUDINAL PROFILE	2
PCCS-06-SUB-LA-4018- 00007-001	HDD SHORE APPROACH ONSHORE PIPELINE ROUTE	3
PCCS-06-SUB-LA-4018- 00010-001	HDD SHORE APPROACH PLAN ROUTE GENERAL ARRANGEMENT	4
PCCS-06-SUB-LA-4024- 00001-001	OVERALL FIELD LAYOUT	5
PCCS-06-SUB-PX-2365- 00001-001	PROCESS ENGINEERING FLOW SCHEME SYMBOLS AND LEGEND	6
PCCS-06-SUB-PX-2365- 00002-001	ONSHORE PIG LAUNCHER/RECEIVER PROCESS ENGINEERING FLOW SCHEME	7
PCCS-06-SUB-PX-2365- 00003-001	SSIV PROCESS ENGINEERING FLOW SCHEME	8
PCCS-06-SUB-PX-2366- 00007-001	OVERALL SYSTEM PROCESS FLOW SCHEME	9
PCCS-07-PTD-MP-4018- 00001-001	MECHANICAL GENERAL ARRANGEMENT NORTH (METHANOL AT ST. FERGUS)	10
PCCS-07-PTD-MP-4018- 00002-001	MECHANICAL GENERAL ARRANGEMENT SOUTH (METHANOL AT ST. FERGUS)	11
PCCS-07-PTD-MP-4363- 00001	TIE-IN LIST AND SCHEDULE (METHANOL AT ST. FERGUS)	12
PCCS-07-PTD-PX-2365- 77000-001	PEFS UNIT 7700 METHANOL STORAGE TANK T-7703 AND REDUNDANT GLYCOL TANKS T-7702, P-7707	14
PCCS-07-PTD-PX-2365- 77000-002	PEFS REDUNDANT UNIT 7700 METHANOL & GLYCOL INJECTION PUMPS P-7704, P-7705, S-7703, V-7704A1, V-7704B1, V-7704A2, V-7704B2	15
PCCS-07-PTD-PX-2365- 77000-003	PEFS UNIT 7700 METHANOL SUMP V-7704, P-7706, P-7708	16
PCCS-07-PTD-PX-2366- 77001-001	UFS METHENOL INJECTION SYSTEM (ST. FERGUS)	17
PCCS-07-PTD-PX-6612- 00001-001	PCCS ST FERGUS METHANOL SUPPLY EQUIPMENT LIST	18

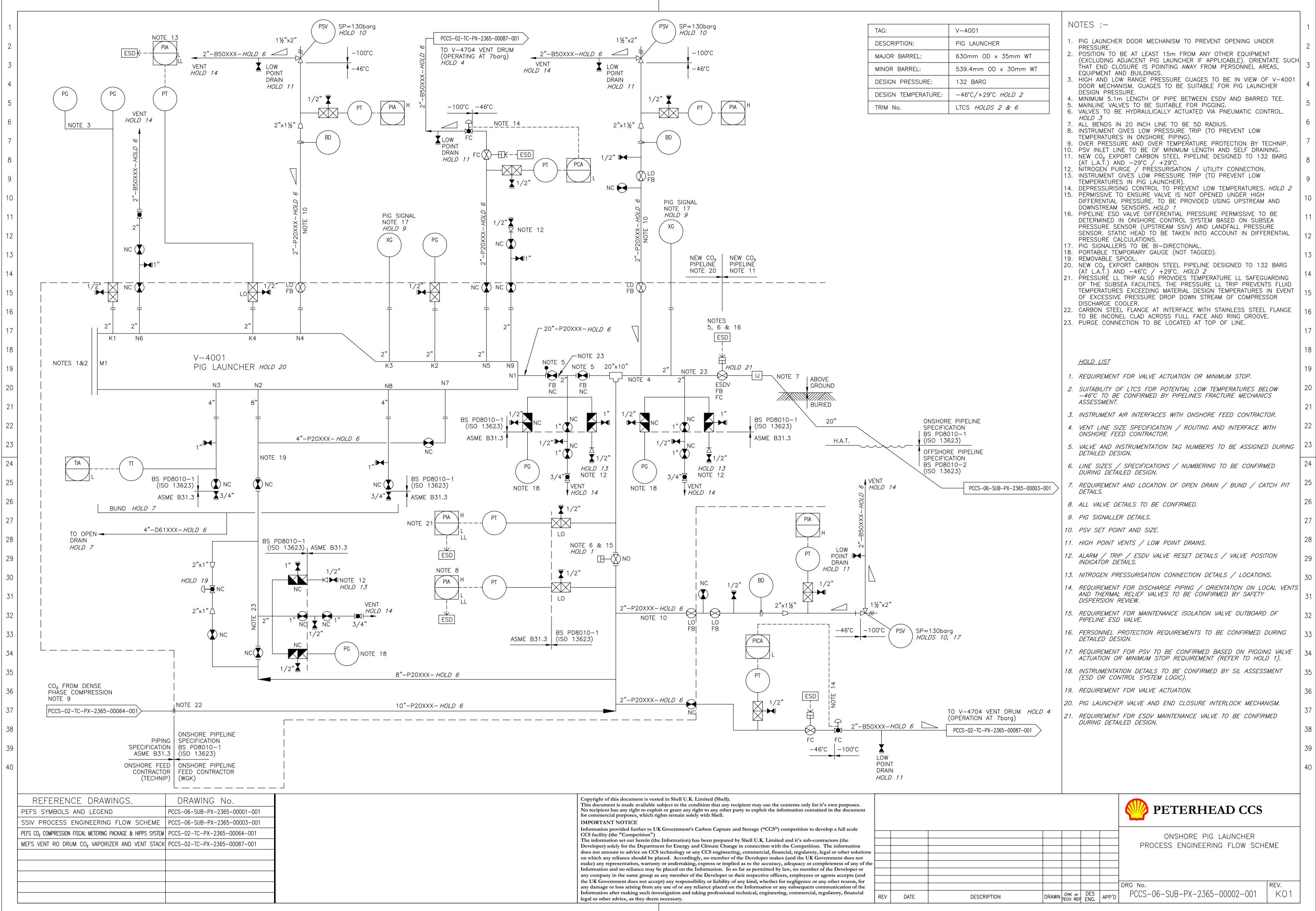


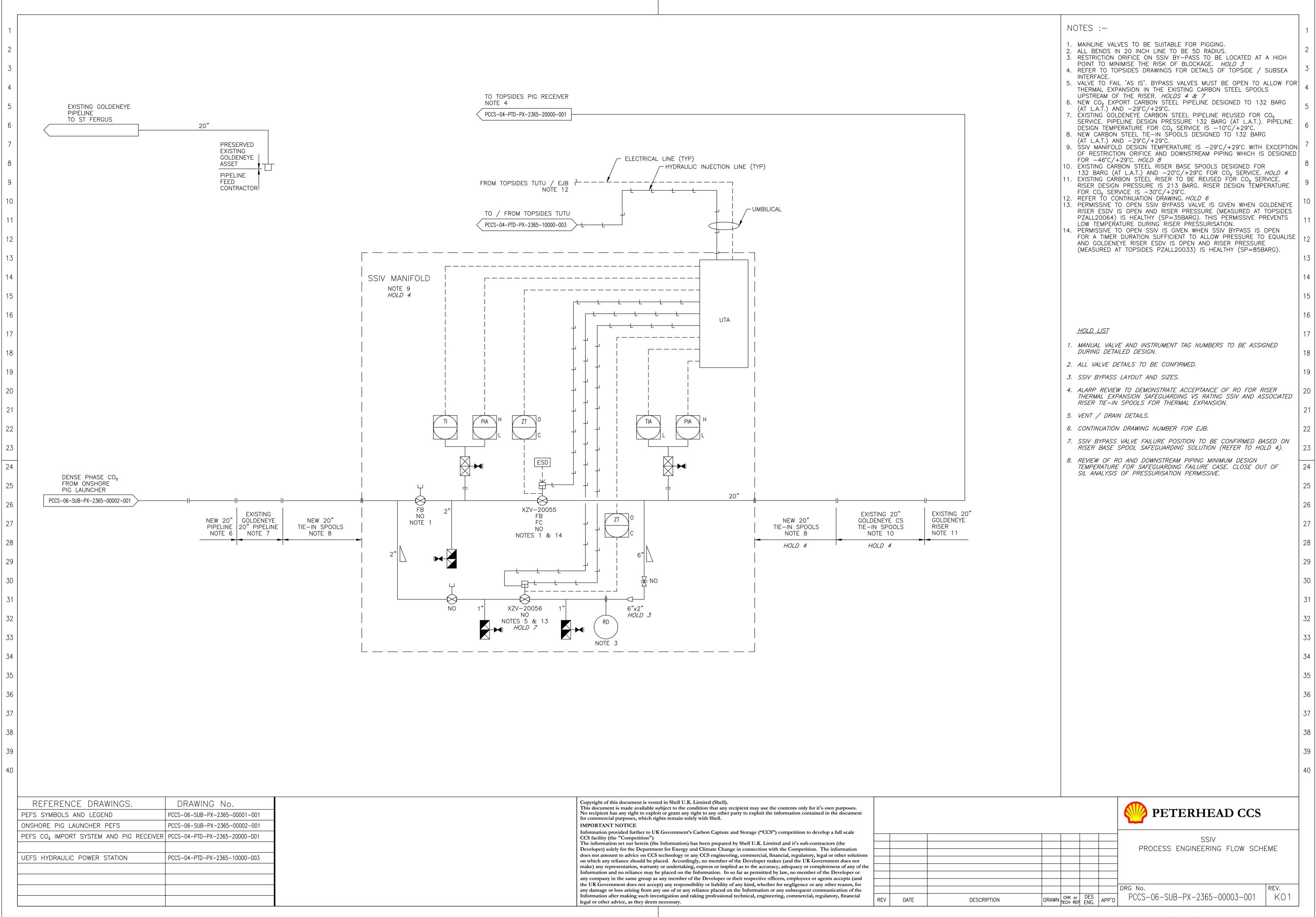


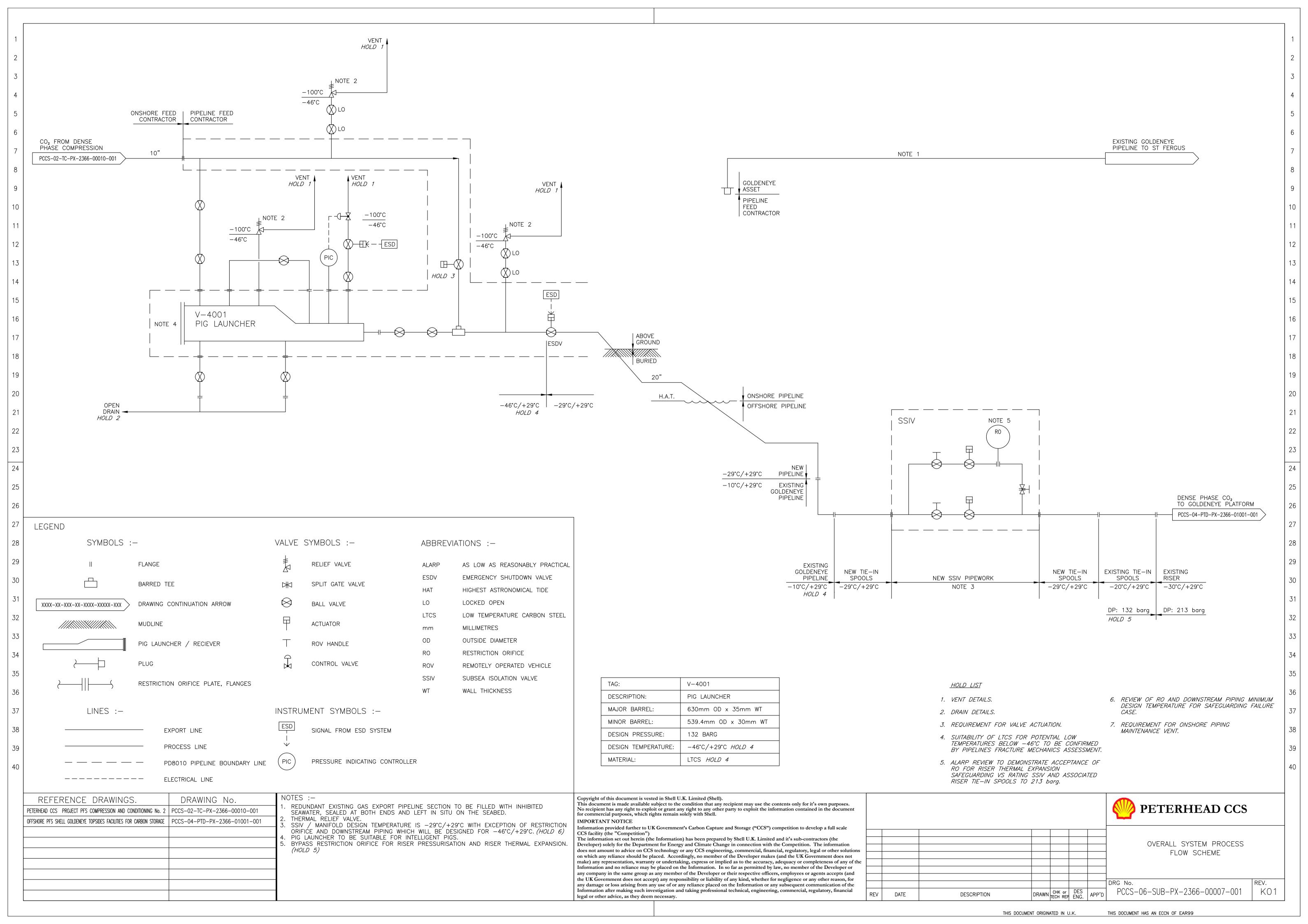


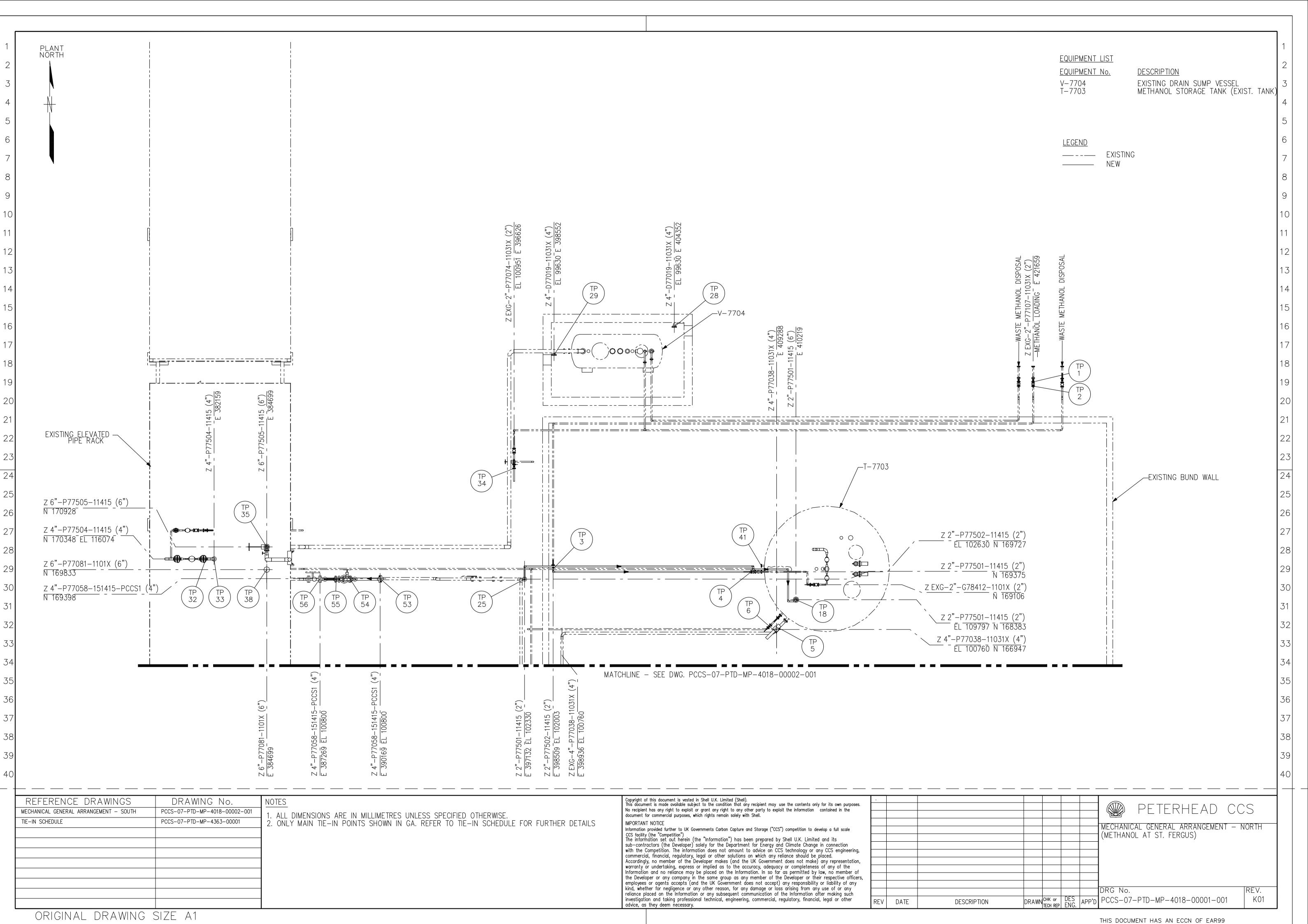


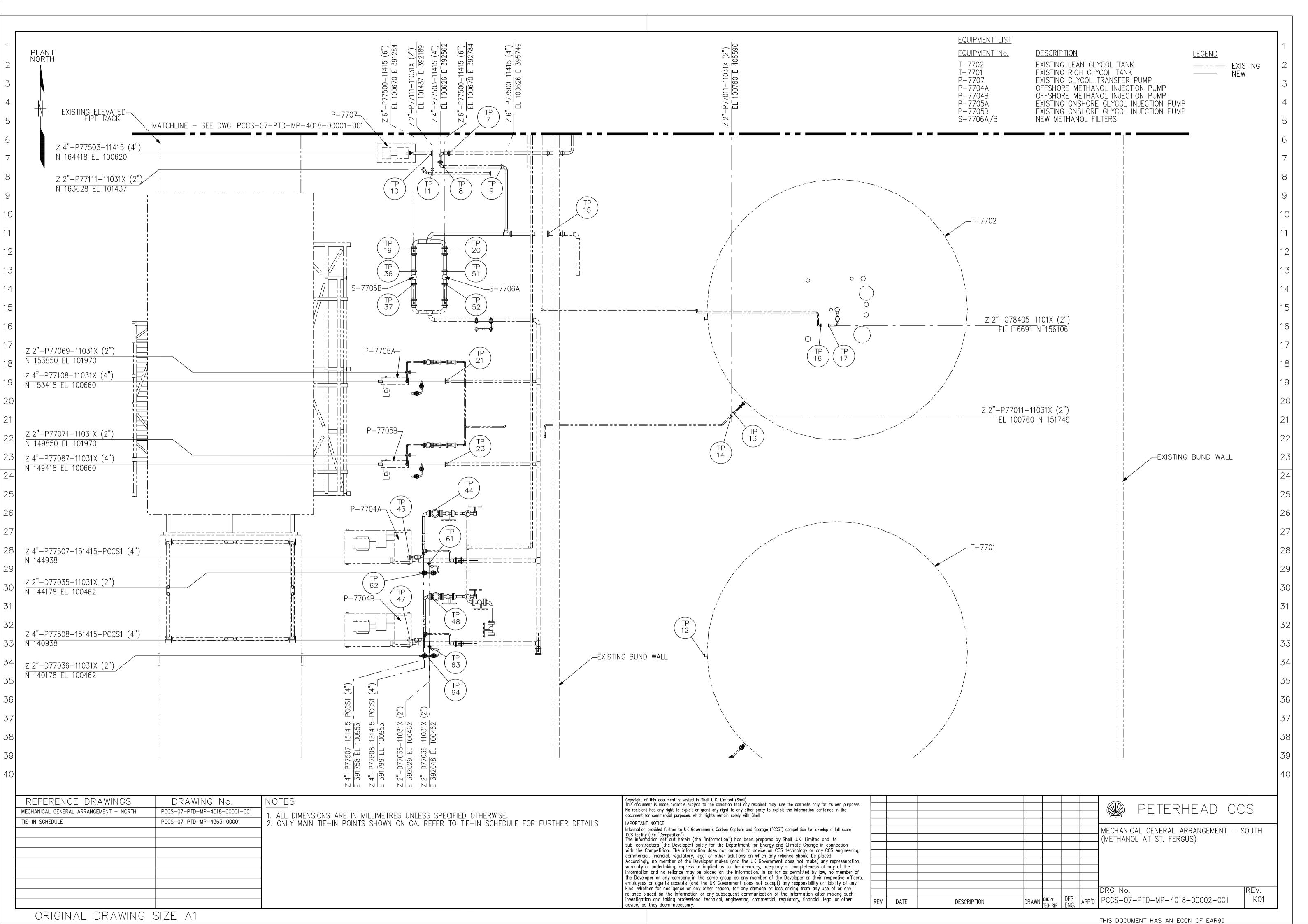


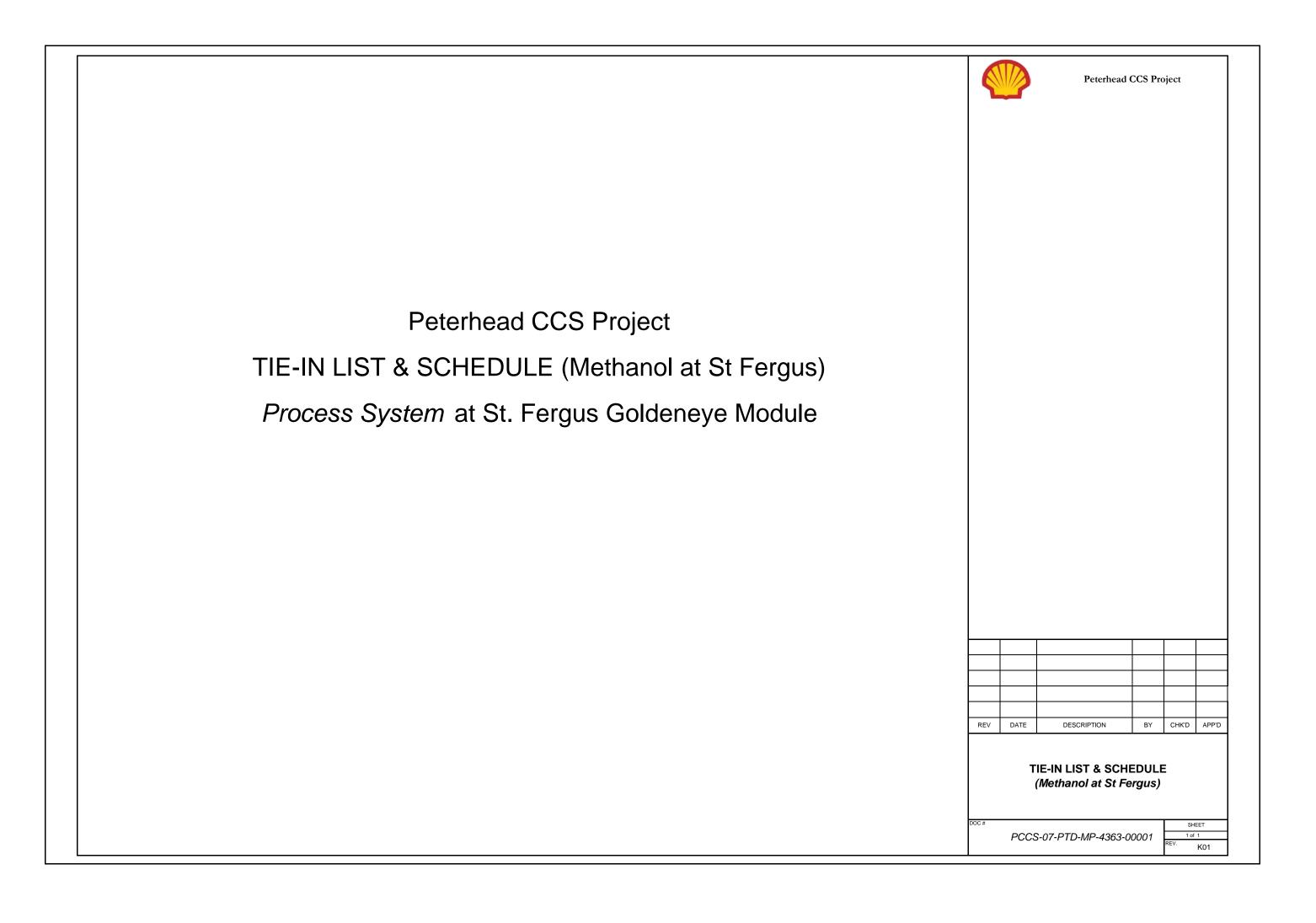






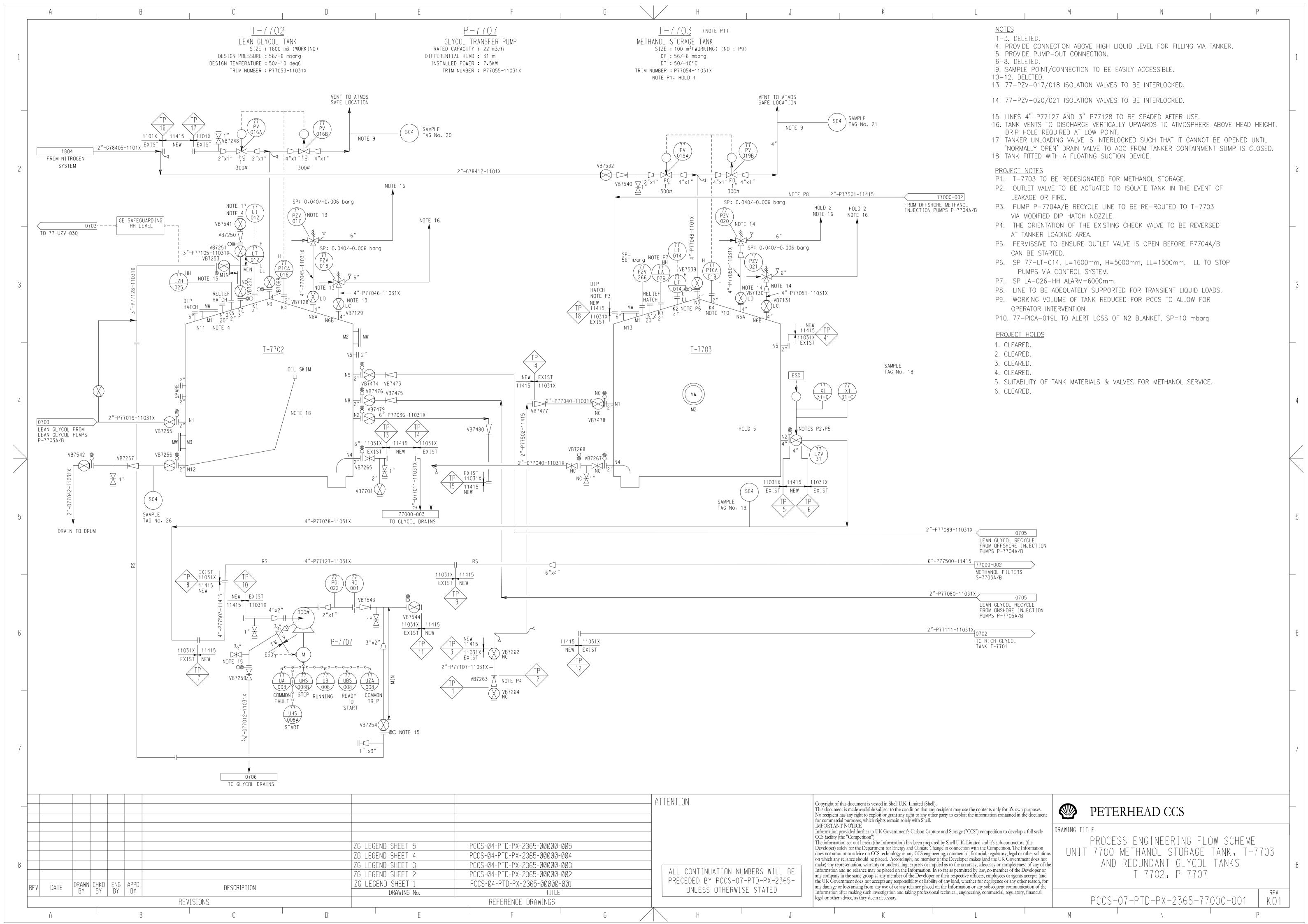


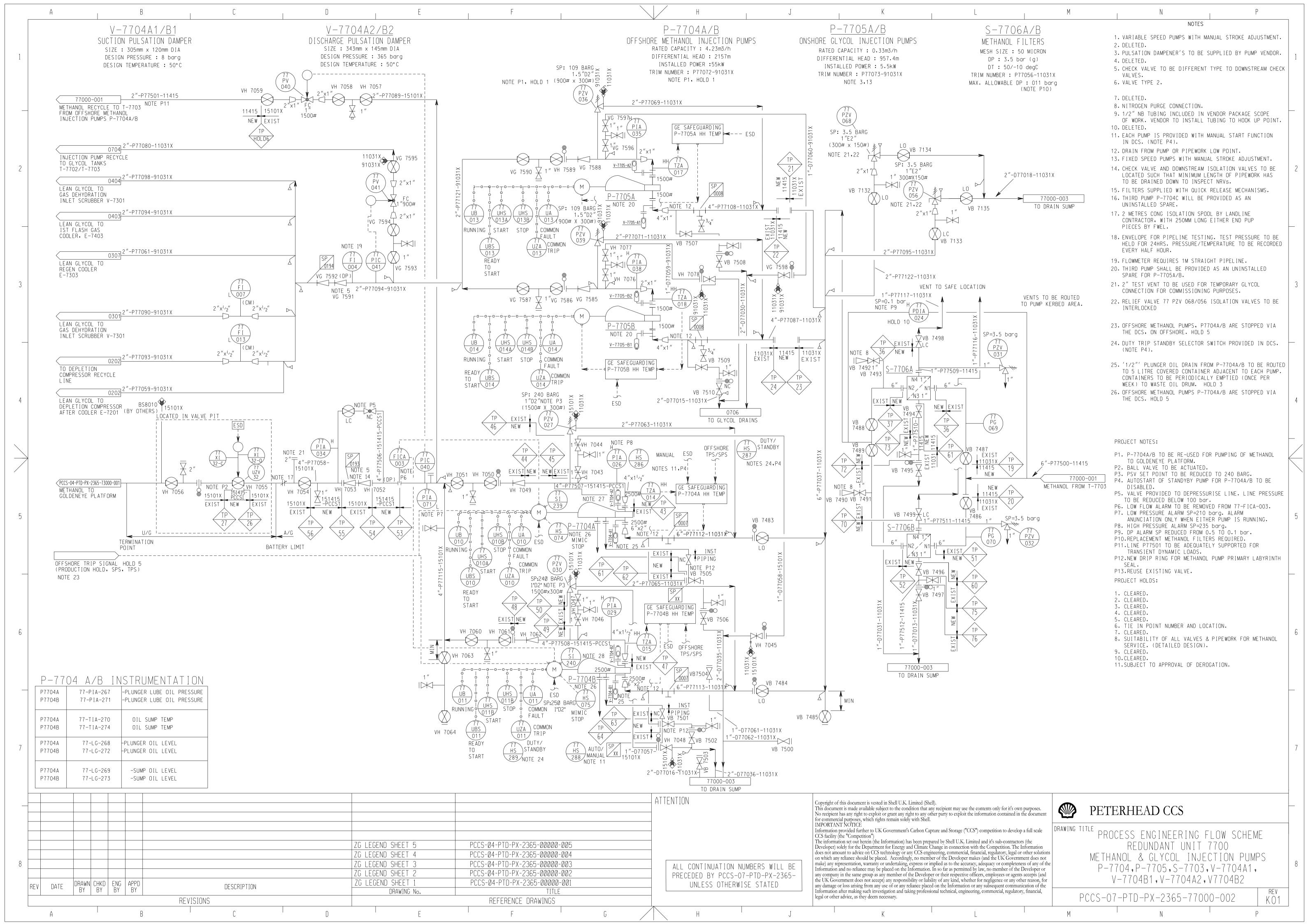


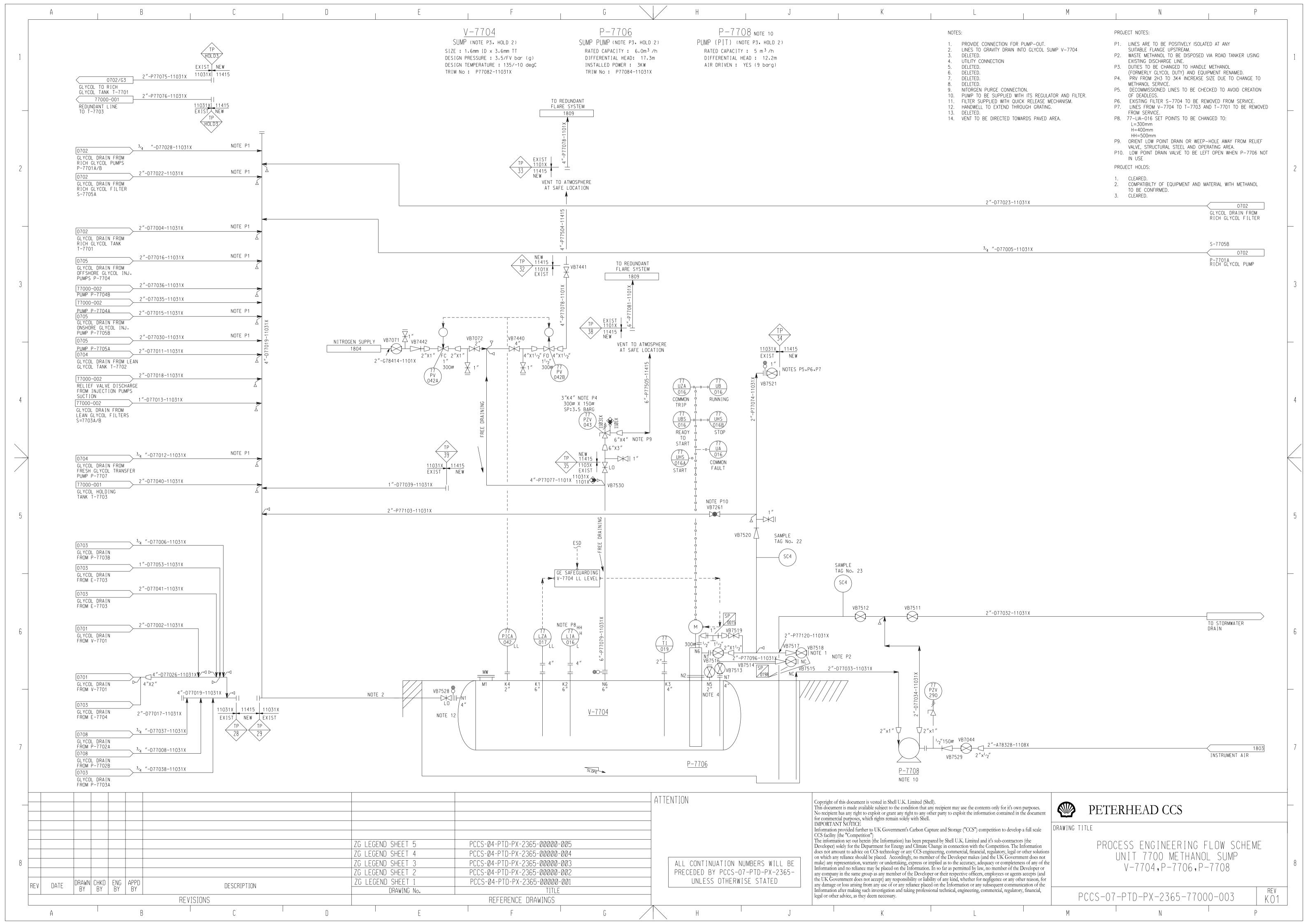


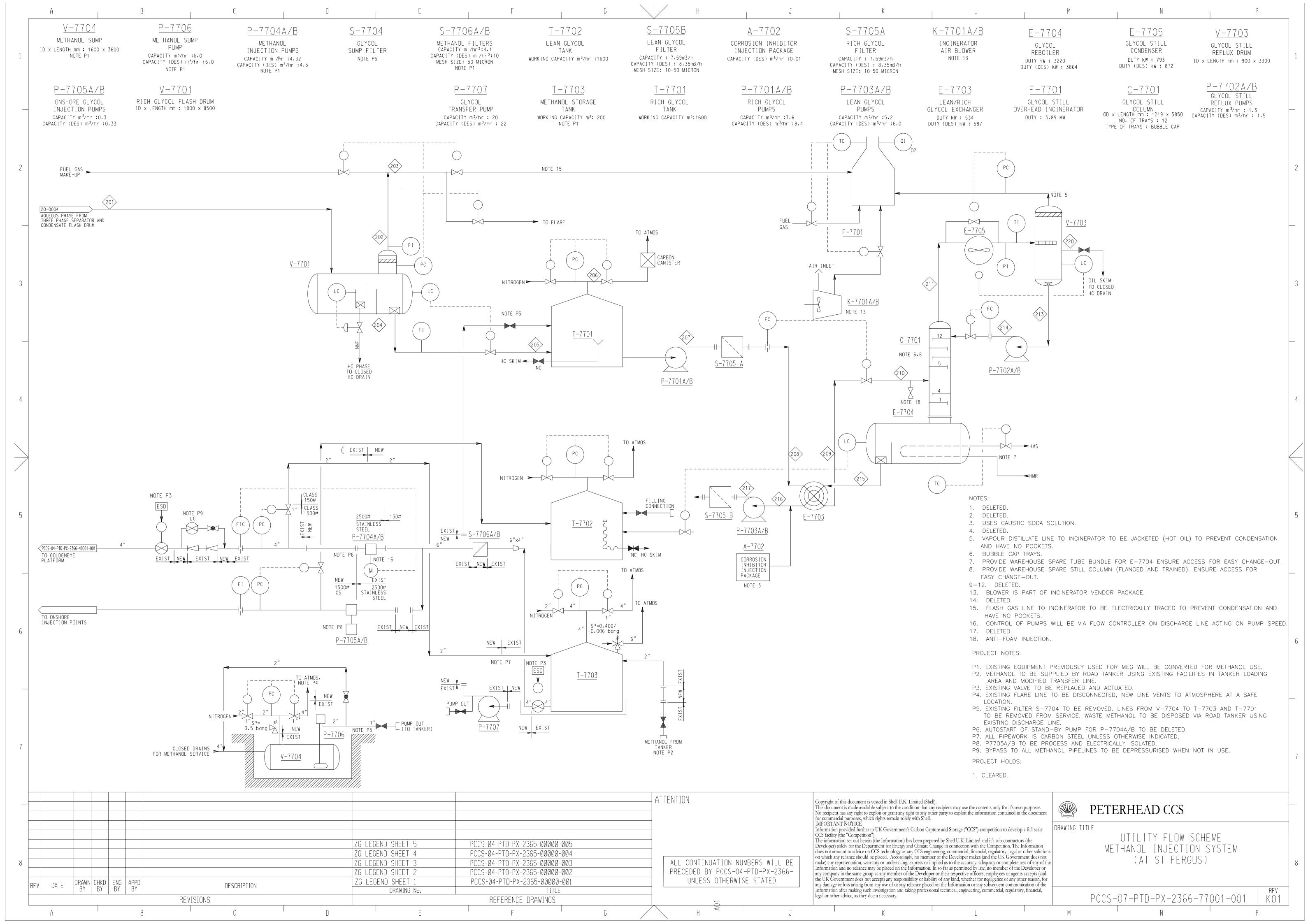


Tio-in list & 9	Schedule (Methanol at St Fergus)																						
320,				Tiein New Line									Existing line										
Docume	nent Number: PCCS-07-PTD-MP-4363-00001	Reference Drawing	Connect.	Elevation of tie in from Ground/Paving Scaffolding	Location Owner Line si	ize Volume I	low (m3/h) Line n	Pipe class	Tracing	Insul. Oper. P.	Design P. Oper.T. Design T. Hydrotest P.	Size Line nr. Pipe class Tracing	Insul. Oper T. Design T	Oper. P	barg)	Design P Hydrotest P.	Unit stop Stop-related	Stop period	Current IF	Reponsible party for execution (NOTE 3)	Process Remarks (NOTE 3)	Mechanical Remarks	Authority Classification required (NOTE 3)
	Priority Description (from/to) Medium	number sheet	Tie-in type	or Foundation (m) Y/N	(dept)	i) norm.	max.		type	(t mm) barg	barg °C °C barg	(mm) type	Y/N °C °C	min. norm	. max.	barg barg	Y/N	start date	Hot	(NOTE 3)	(NOTE 5)	(10123)	required (NOTE 5)
1 18/02/2015	NOTE 3 Methanol bunkering check valve orientation change METHANOL	PCCS-07-PTD-PX-2365-77000 001	FLANGED	0.9 N	PIPING 50	NOTE 7	NOTE 7 N/A	N/A	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	50 2°-P77107-11031X 11031X N/A	N/A 30 0/50	NOTE 4 NOTE	4 3.18	6 NOTE 4							-
2 18/02/2015	NOTE 3 Methanol bunkering check valve orientation change METHANOL	PCCS-07-PTD-PX-2365-77000 001	FLANGED	0.9 N	PIPING 50	NOTE 7	NOTE 7 N/A	N/A	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	50 2°-P77107-11031X 11031X N/A	N/A 30 0/50	NOTE 4 NOTE	4 3.18	6 NOTE 4							
3 18/02/2015	NOTE 3 Methanol bunkering to tank T-7703 METHANOL	PCCS-07-PTD-PX-2365-77000 001	FLANGED	2.0 Y	PIPING 50	NOTE 7	NOTE 7 2*-P77502-	1415 11415	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	50 2*-P77040-11031X 11031X N/A	N/A 30 0/50	NOTE 4 NOTE	4 3.18	6 NOTE 4							
4 18/02/2015	NOTE 3 Methanol bunkering to tank T-7703 METHANOL	PCCS-07-PTD-PX-2365-77000 001	FLANGED	2.7 Y	PIPING 50	NOTE 7	NOTE 7 2"-P77502-	1415 11415	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	50 2°-P77040-11031X 11031X N/A	N/A 30 0/50	NOTE 4 NOTE	4 3.18	6 NOTE 4							
	NOTE 3 Methanol Tank T-7703 outlet valve changeout METHANOL	PCCS-07-PTD-PX-2365-77000 001	FLANGED	0.7 N	PIPING 100		NOTE 7 N/A	11415	N/A	N/A NOTE 6		100 4*-P77038-11031X 11031X N/A	N/A 20 0/50	NOTE 4 NOTE									
	NOTE 3 Methanol Tank T-7703 outlet valve changeout METHANOL	PCCS-07-PTD-PX-2365-77000 001	FLANGED	0.7 N	PIPING 100		NOTE 7 N/A	11415	N/A	N/A NOTE 6		100 4*-P77038-11031X 11031X N/A	N/A 20 0/50	NOTE 4 NOTE									
	NOTE 3 Methanol from tank T-7703 to Methanol Filters METHANOL  NOTE 3 Methanol from tank T-7703 to Methanol Filters METHANOL	PCCS-07-PTD-PX-2365-77000 001  PCCS-07-PTD-PX-2365-77000 001	FLANGED	0.6 N	PIPING 100 PIPING 100		NOTE 7 4'-P77503-		N/A N/A	N/A NOTE 6		100 4'-P77038-11031X 11031X N/A 100 4'-P77127-11031X 11031X N/A	N/A 20 0/50 N/A 20 -1/50	NOTE 4 NOTE									
	NOTE 3 Methanol from tank 1-7/03 to Methanol Filters METHANOL  NOTE 3 Methanol from tank T-7703 to Methanol Filters METHANOL	PCCS-07-PTD-PX-2365-77000 001  PCCS-07-PTD-PX-2365-77000 001	FLANGED	0.6 N	PIPING 100		NOTE 7 4'-P77503-		N/A	N/A NOTE 6		100 4-P77127-11031X 11031X N/A	N/A 20 -1/50	NOTE 4 NOTE									-
	NOTE 3 Pump P-7707 Suction Isolation METHANOL	PCCS-07-PTD-PX-2365-77000 001	FLANGED	0.6 N	PIPING 100		NOTE 7 N/A	11415	N/A	N/A NOTE 6		100 4°-P77038-11031X 11031X N/A	N/A 20 0/50	NOTE 4 NOTE									
11 18/02/2015	NOTE 3 Pump P-7707 Discharge Isolation METHANOL	PCCS-07-PTD-PX-2365-77000 001	FLANGED	1.5 N	PIPING 50	NOTE 7	NOTE 7 N/A	11415	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	50 2°-P77111-11031X 11031X N/A	N/A NOTE4 NOTE4	NOTE 4 NOTE	4 NOTE4	NOTE4 NOTE 4							
12 18/02/2015	NOTE 3 Pump P-7707 Discharge to tank T-7701 Isolation METHANOL	PCCS-07-PTD-PX-2365-77000 001	FLANGED	1.3 N	PIPING 50	NOTE 7	NOTE 7 N/A	11415	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 6 NOTE 5	50 2'-P77111-11031X 11031X N/A	N/A NOTE4 NOTE4	NOTE 4 NOTE	4 NOTE4	NOTE4 NOTE 4							
13 18/02/2015	NOTE 3 Tank T-7702 Drain Isolation GLYCOL	PCCS-07-PTD-PX-2365-77000 001	FLANGED	0.8 N	PIPING 50	NOTE 7	NOTE 7 N/A	11415	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	50 2*-D77011-11031X 11031X N/A	N/A 20 0/50	NOTE 4 NOTE	4 0.04	56/-6 mbarg NOTE 4							
14 18/02/2015	NOTE 3 Tank T-7702 Drain Isolation GLYCOL	PCCS-07-PTD-PX-2365-77000 001	FLANGED	0.8 N	PIPING 50	NOTE 7	NOTE 7 N/A	11415	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	50 2°-D77011-11031X 11031X N/A	N/A 20 0/50	NOTE 4 NOTE	4 0.04	56/-6 mbarg NOTE 4							
15 18/02/2015	NOTE 3 Tank T-7702 outlet to filters isolation GLYCOL	PCCS-07-PTD-PX-2365-77000 001	FLANGED	0.7 N	PIPING 150	NOTE 7	NOTE 7 N/A	11415	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	150 6"-P77036-11031X 11031X N/A	N/A 20 0/50	NOTE 4 NOTE	4 0.04	3.5 NOTE 4							
16 18/02/2015	NOTE 3 Tank T-7702 Nitrogen Blanket Isolation NITROGEN	PCCS-07-PTD-PX-2365-77000 001	FLANGED		Tank Platform PIPING 50	NOTE 7	NOTE 7 N/A	11415	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	50 2"-G78405-1101X 1101X N/A	N/A NOTE4 NOTE4	NOTE 4 NOTE	4 NOTE4	NOTE4 NOTE 4							
		PCCS-07-PTD-PX-2365-77000 001	FLANGED		Tank Platform PIPING 50		NOTE 7 N/A		N/A	N/A NOTE 6		50 2"-G78405-1101X 1101X N/A	N/A NOTE4 NOTE4										
	NOTE 3 Recycle line from Pumps P-7704A/B to tank T7703 METHANOL	PCCS-07-PTD-PX-2365-77000 001	FLANGED		Tank Platform PIPING 50		NOTE 7 2*-P77501-		N/A	N/A NOTE 6		150 N/A 11031X N/A	N/A NOTE4 NOTE4										
	NOTE 3 Methanol from tank T-7703 to Methanol Filters inlet METHANOL	PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.7 N	PIPING 150		NOTE 7 6'-P77500-		N/A	N/A NOTE 6		150 6°-P77036-11031X 11031X N/A	N/A 20 0/50	NOTE 4 NOTE	_								
	NOTE 3 Methanol from tank T-7703 to Methanol Filters inlet METHANOL	PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.7 N	PIPING 150		NOTE 7 6'-P77500-		N/A	N/A NOTE 6		150 6°-P77036-11031X 11031X N/A	N/A 20 0/50	NOTE 4 NOTE									
	NOTE 3 Pump P-7705A Suction Isolation METHANOL	PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.7 N	PIPING 100		NOTE 7 N/A	11415	N/A	N/A NOTE 6		100 4*-P77108-11031X 11031X N/A	N/A NOTE4 NOTE4		_								
		PCCS-07-PTD-PX-2365-77000 002  PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.7 N	<del>                                     </del>		NOTE 7 N/A		N/A N/A	N/A NOTE 6		100 4'-P77108-11031X 11031X N/A 100 4'-P77087-11031X 11031X N/A	N/A NOTE4 NOTE4										
	NOTE 3         Pump P-7705B Suction Isolation         METHANOL           NOTE 3         Pump P-7705B Suction Isolation         METHANOL	PCCS-07-PTD-PX-2365-77000 002 PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.7 N 0.7 N	PIPING 100 PIPING 100		NOTE 7 N/A	11415	N/A N/A	N/A NOTE 6		100 4'-P77087-11031X 11031X N/A 100 4'-P77087-11031X 11031X N/A	N/A NOTE4 NOTE4  N/A NOTE4 NOTE4										
	NOTE 3 Pump P-7/USB Suction isolation METHANOL  NOTE 3 Recycle line from Pumps P-7704A/B to tank T7703 METHANOL	PCCS-07-PTD-PX-2365-77000 002  PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.7 N	PIPING 100		NOTE 7 N/A		N/A N/A	N/A NOTE 6		100 4'-P77087-11031X 11031X N/A 50 2'-P77089-15101X 15101X N/A	N/A NOTE4 NOTE4	NOTE 4 NOTE		7 NOTE 4				_			
	NOTE 3 Methanol export valve changeout METHANOL	PCCS-07-PTD-PX-2365-77000 002	FLANGED		Valve Pit PIPING 100		NOTE 7 NA	151415-	N/A	N/A NOTE 6		100 4°-P77058-15101X 1510X N/A	N/A Amb 0/50	NOTE 4 NOTE									
		PCCS-07-PTD-PX-2365-77000 002	FLANGED		Valve Pit PIPING 100		NOTE 7 N/A	PCCS1 151415-	N/A	N/A NOTE 6		100 4*-P77058-15101X 1510X N/A	N/A Amb 0/50	NOTE 4 NOTE									
28 18/02/2015	NOTE 3 Drain header to Drains Sump Vessel V-7704 isolation DRAIN	PCCS-07-PTD-PX-2365-77000 003	FLANGED	1.9 Y	Sump Pit PIPING 100	NOTE 7	NOTE 7 N/A	11415	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	100 4°-D77019-11031X 11031X N/A	N/A Amb 0/150	NOTE 4 NOTE	4 0.2								
29 18/02/2015	NOTE 3 Drain header to Drains Sump Vessel V-7704 isolation DRAIN	PCCS-07-PTD-PX-2365-77000 003	FLANGED	1.9 Y	Sump Pit PIPING 100	NOTE 7	NOTE 7 N/A	11415	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	100 4"-D77019-11031X 11031X N/A	N/A Amb 0/150	NOTE 4 NOTE	4 0.2	3.5 NOTE 4							
30 18/02/2015	NOTE 3 Glycol Line to tank T-7701 from S-7704 GLYCOL	PCCS-07-PTD-PX-2365-77000 003	FLANGED	1.3 N	PIPING 50	NOTE 7	NOTE 7 N/A	11415	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	50 2*-P77075-11031X 11031X N/A	N/A NOTE 4 NOTE 4	NOTE 4 NOTE	4 NOTE	NOTE 4 NOTE 4							
32 18/02/2015	NOTE 3 Nitrogen vent to safe location after destruct of nitrogen purge line to existing flare header NITROGEN	PCCS-07-PTD-PX-2365-77000 003	FLANGED	0.5 N	Pipe Rack Platform PIPING 100	NOTE 7	NOTE 7 4"-P77504-	1415 11415	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	100 4'-P77078-1101X 1101X N/A	N/A Amb 0/135	NOTE 4 NOTE	4 0.02	3.5 NOTE 4							
33 18/02/2015	NOTE 3 Low pressure flare isolation BLOWDOWN/RELIE F VALVE	PCCS-07-PTD-PX-2365-77000 003	Site Weld for WN Flange	0.5 N	Pipe Rack Platform PIPING 100	NOTE 7	NOTE 7 N/A	11415	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	100 4°-P77078-1101X 11011X N/A	N/A Amb 0/135	NOTE 4 NOTE	4 0.02	3.5 NOTE 4							
34 18/02/2015	NOTE 3 Vessel V-7704 outlet isolation METHANOL	PCCS-07-PTD-PX-2365-77000 003	FLANGED	1.0 N	PIPING 50	NOTE 7	NOTE 7 N/A	11415	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	50 2*-P77074-11031X 11031X N/A	N/A 10 0/135	NOTE 4 NOTE	4 0.84	7 NOTE 4							
35 18/02/2015	NOTE 3 Vessel V-7704 relief BLOWDOWN/RELIE F VALVE	PCCS-07-PTD-PX-2365-77000 003	FLANGED	0.7 N	Pipe Rack Platform PIPING 150	NOTE 7	NOTE 7 6"-P77505-	1415 11415	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	100 6°-P77079-11031X 11031X N/A	N/A Amb 0/135	NOTE 4 NOTE	4 0.02	3.5 NOTE 4							
36 18/02/2015	NOTE 3 Filter S7703A Changeout with new filter S-7706A METHANOL	PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.7 N	PIPING 150	NOTE 7	NOTE 7 N/A	11415	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	150 6°-P77036-11031X 11031X N/A	N/A 20 0/50	NOTE 4 NOTE	4 0.04	3.5 NOTE 4							
	NOTE 3 New filter S-7706A to relief valve METHANOL	PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.7 N	PIPING 25		NOTE 7 1"-P77509-		N/A	N/A NOTE 6		25 1°-P77117-11031X 11031X N/A	N/A Amb -10/50	NOTE4 NOTE									
	DI OUDOUNIDEUE	PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.7 N			NOTE 7 N/A		N/A	N/A NOTE 6		150 6"-P77037-11031X 11031X N/A	N/A 20 0/50	NOTE 4 NOTE									
	NOTE 3 Isolation of sump vessel (V-7704) relief line from Flare F VALVE	PCCS-07-P1D-PX-2365-77000 003	FLANGED		Pipe Rack Platform PIPING 150		NOTE 7 N/A 4*-P77507-1		N/A	N/A NOTE 6		150 6°-P77081-1101X 11415 N/A	N/A NOTE4 NOTE4										
<del>                                     </del>	NOTE 3         Pump P-7704A Discharge Spool         METHANOL           NOTE 3         Pump P-7704A Discharge Spool         METHANOL	PCCS-07-PTD-PX-2365-77000 002  PCCS-07-PTD-PX-2365-77000 002	FLANGED	1.0 N	PIPING 40 PIPING 100	_	NOTE 7 4"-P77507-1 PCCS" NOTE 7 4"-P77507-1	1415- 151415-	N/A N/A	N/A NOTE 6		40 4"-P77058-15101X 15101X N/A 100 4"-P77058-15101X 1510X N/A	N/A Amb 0/50 N/A Amb 0/50	NOTE 4 NOTE		213 NOTE4 213 NOTE 4							
		PCCS-07-PTD-PX-2365-77000 002  PCCS-07-PTD-PX-2365-77000 002	FLANGED	1.0 N	PIPING 100		NOTE 7 4"-P77507-1	1415- 151415-	N/A	N/A NOTE 6		25 1°-D77058-15101X 1510X N/A	N/A 15.9 0/50	NOTE 4 NOTE	_								
		PCCS-07-PTD-PX-2365-77000 002	FLANGED	1.3 N	PIPING 25		NOTE 7 PCCS: NOTE 7 4"-P77507-1 PCCS:		N/A	N/A NOTE 6		25 4°-P77058-15101X 1510X N/A	N/A Amb 0/50	NOTE 4 NOTE	_								
		PCCS-07-PTD-PX-2365-77000 002	FLANGED	1.0 N			NOTE 7 4"-P77508-1	1415- 151415-	N/A	N/A NOTE 6		40 4°-P77115-15101X 15101X N/A	N/A Amb 0/50	NOTE 4 NOTE									
	NOTE 3 Pump P-77048 Discharge Spool METHANOL	PCCS-07-PTD-PX-2365-77000 002	FLANGED	1.0 N	PIPING 100		NOTE 7 PCCS <sup>-</sup> PCCS <sup>-</sup>	1415- 151415-	N/A	N/A NOTE 6		100 4°-P77115-15101X 15101X N/A	N/A Amb 0/50	NOTE4 NOTE		213 NOTE4							
	NOTE 3 Pump P-7704B Discharge Spool METHANOL	PCCS-07-PTD-PX-2365-77000 002	FLANGED	1.5 N	PIPING 25		NOTE 7 4"-P77508-11 PCCS	1415- 151415-	N/A	N/A NOTE 6		25 1°-D77057-15101X 15101X N/A	N/A 15.9 0/50	NOTE4 NOTE									
50 18/02/2015	NOTE 3 Pump P-77048 Discharge Spool METHANOL	PCCS-07-PTD-PX-2365-77000 002	FLANGED	1.3 N	PIPING 25	NOTE 7	NOTE 7 4"-P77508-1 PCCS"	1415- 151415-	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	25 4'-P77115-15101X 15101X N/A	N/A Amb 0/50	NOTE4 NOTE	4 150	213 NOTE4							
51 18/02/2015	NOTE 3 Filter \$7703B Changeout with new filter \$-7706B METHANOL	PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.7 N	PIPING 150	NOTE 7	NOTE 7 N/A	11451	N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	150 6"-P77036-11031X 11031X N/A	N/A 20 0/50	NOTE 4 NOTE	4 0.04	3.5 NOTE 4							
52 18/02/2015	NOTE 3 Filter S7703B Changeout with new filter S-7706B METHANOL	PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.7 N	PIPING 150	NOTE 7			N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5		N/A 20 0/50	NOTE 4 NOTE	4 0.04	3.5 NOTE 4							
		PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.8 N	PIPING 100	NOTE 7	NOTE 7 4"-P77058-1 PCCS	15415-PCCS	1 N/A	N/A NOTE 6	NOTE 6 NOTE 6 NOTE 5	100 4*-P77058-15101X 1510X N/A	N/A Amb 0/50	NOTE 4 NOTE	4 150	213 NOTE 4							
	NOTE 3 Valve Bypass around check valves VH-7052/53 METHANOL	PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.8 N	PIPING 100		NOTE 7 4"-P77058-1 PCCS				NOTE 6 NOTE 6 NOTE 5		N/A Amb 0/50										
		PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.8 N	PIPING 100		NOTE 7 4"-P77058-1 PCCS			+ + + + + + + + + + + + + + + + + + + +	NOTE 6 NOTE 6 NOTE 5			NOTE 4 NOTE									
		PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.8 N			1000		<b>+</b>	+	NOTE 6 NOTE 6 NOTE 5			NOTE 4 NOTE	_								
		PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.7 N					N/A		NOTE 6 NOTE 6 NOTE 5		N/A 20 0/50		_								
	NOTE 3 Filter \$7703A Changeout with new filter \$-7706A METHANOL  NOTE 3 Plunger drain from new nozzle on pump P-7704A METHANOL	PCCS-07-PTD-PX-2365-77000 002  PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.7 N 0.5 N	PIPING 25 PIPING 50		NOTE 7 N/A		N/A N/A	+	NOTE 6         NOTE 6         NOTE 6         NOTE 5           NOTE 6         NOTE 6         NOTE 6         NOTE 5		N/A Amb 50	NOTE4 NOTE		3.5 NOTE4							
		PCCS-07-PTD-PX-2365-77000 002 PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.5 N 0.5 N	PIPING 50 PIPING 50		NOTE 7 N/A		N/A N/A		NOTE 6         NOTE 6         NOTE 6         NOTE 5           NOTE 6         NOTE 6         NOTE 6         NOTE 5		N/A Amb 50 N/A Amb 50	NOTE4 NOTE	_								
		PCCS-07-PTD-PX-2365-77000 002  PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.5 N	PIPING 50				N/A	+ + + + + + + + + + + + + + + + + + + +	NOTE 6 NOTE 6 NOTE 6 NOTE 5		N/A Amb 50	NOTE4 NOTE	_					+			
		PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.5 N	PIPING 50				N/A	+	NOTE 6 NOTE 6 NOTE 6 NOTE 5		N/A Amb 50	NOTE4 NOTE									
		PCCS-07-PTD-PX-2365-77000 002	FLANGED	0.7 N	PIPING 25		NOTE 7 1'-P77511-		_	+	NOTE 6 NOTE 6 NOTE 5		N/A Amb -10/50										
NOTES:																							
NOTE 1: This document is based on PEFS.																							
NOTE 2 Duplicated Tie-in nos. specified in Pl	PEFS are listed with suffix '-1'e.g 36-1, 61-1																						
NOTE 3: To be confirmed in detail design																							
NOTE 4: Covered in exisiting design docume	ments																						
	tie-in points. Hydrotest pressure of individual lines will be specified in project line list.																						
NOTE 6: Refere to project line list.																							
	etailed by process deparment during detail design phase.				+		<del>                                     </del>																
NOTE 8: Tie-ins TP-72, TP-73, TP-75 & TP-76 these Tie-ins.	76 are not listed as new Methanol filters GA does not require modifications associated with																						
1						-		<u> </u>							'						I		











## **Peterhead CCS Project**

**Doc Title: Onshore Methanol Equipment List** 

Doc No: PCCS-07-PTD-PX-6612-00001-001

Revision: K01

## **KEYWORDS**

Equipment List.

			Design	Dooign	Operating	Operating			F	Physical S	ize		Material	s / Interna	ls						
Number of Units	Tag Number	Service Description  Note 1	Temp (°C)	Design Pressure (barg)	Temp (°C)	Operating Pressure (barg)	Design Flowrate am <sup>3</sup> /hr	Diff Head (bar)	Duty (kW)	Installed Power (kW)	Length t/t (m)	Dia (ID) /width (m)	Height (m)	Volume (m³)	Heat Transfer Area (m²)	Type of internals	Shell	Internals	Reference to Notes / Holds	PEFS No.	Remarks
1	T-7703	Methanol Storage Tank	-10/50	56/-6 (mbarg)	20	0.04	n/a	n/a	n/a	n/a	n/a	6.0	8	200	n/a	n/a	CS	n/a	NOTE 1	PCCS-07-PTD-PX-2365-77000-001	Existing Equipment
2	P-7704A/B	Methanol Injection Pumps	-10/50	350.0	Amb	250	4.32	296.2	69	75	3.2	1.0	n/a	n/a	n/a	n/a	n/a	SS	NOTE 1	PCCS-07-PTD-PX-2365-77000-002	Existing Equipment
2	S-7706A/B	Methanol Filters	-15/50	3.5	15.9	0.2	4.23	n/a	n/a	n/a	0.6	0.168 (OD)	n/a	n/a	n/a	Mesh (50 micron)	LTCS	LTCS	-	PCCS-07-PTD-PX-2365-77000-002	New Equipment
1	V-7704	Drain Sump	-10/135	3.5/FV	<30	Atm	n/a	n/a	n/a	n/a	3.6	1.6	n/a	n/a	n/a	n/a	CS	n/a	NOTE 1	PCCS-07-PTD-PX-2365-77000-003	Existing Equipment
1	P-7706	Sump Pump	-10/135	7.0	20	0.04	6	1.84	1.48	3	1.9	n/a	n/a	n/a	n/a	n/a	LTCS	LTCS	NOTE 1	PCCS-07-PTD-PX-2365-77000-003	Existing Equipment
1	P-7708	Pump (Pit - Rainwater)	-15/29	7.2	Amb	Atm	5	1.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	NOTE 1	PCCS-07-PTD-PX-2365-77000-003	Existing Equipment
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			+																		

NOTES HOLDS

<sup>1.</sup> This Equipment List shows existing equipment which will be used for the Methanol Supply at St Fergus to Goldeneye Platform, as part of the Peterhead CCS Project. This equipment was previously used for MEG service and will be converted for methanol use. Methanol is more flammable and hence represents a higher fire risk.