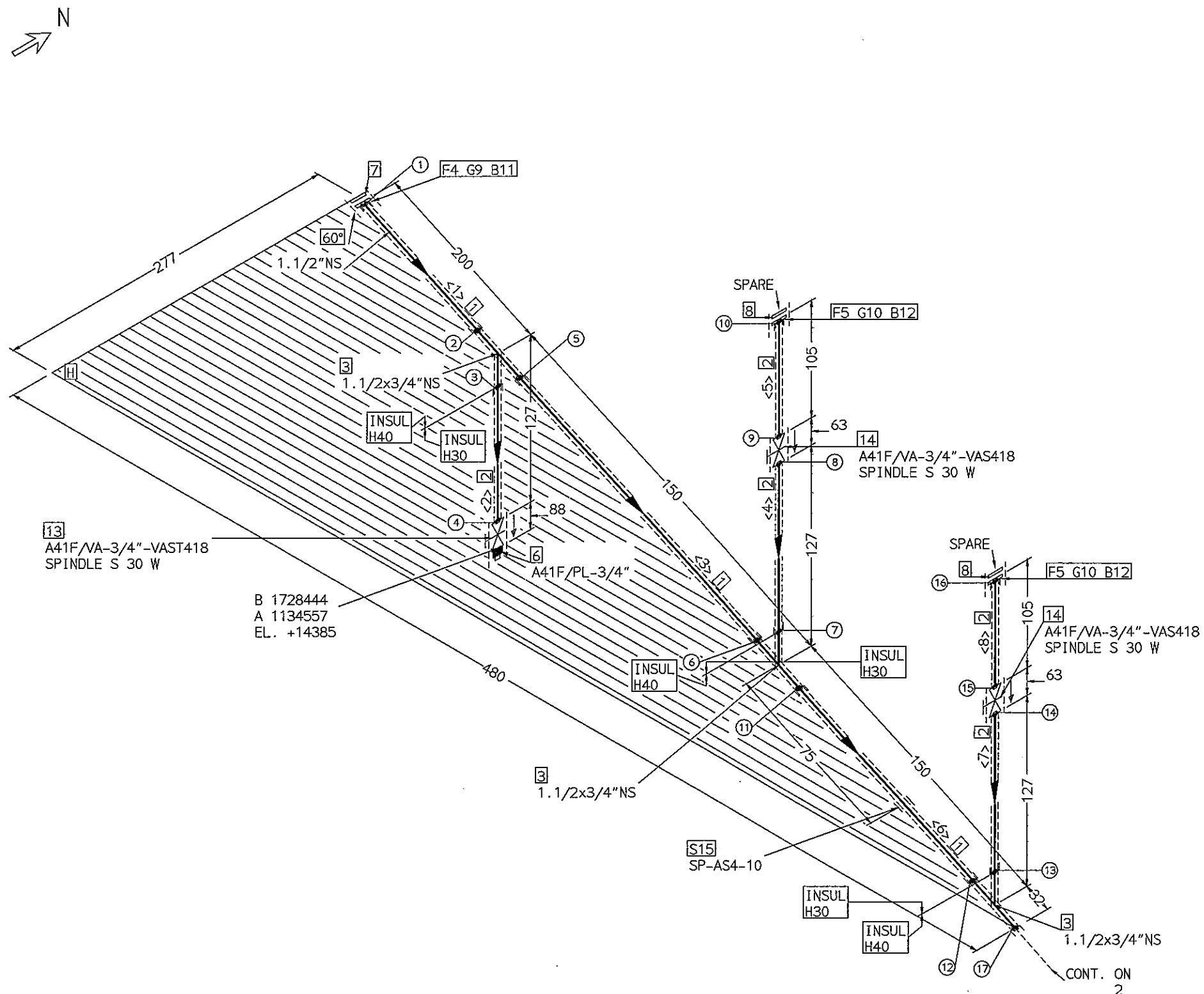


FABRICATION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
PIPE				
1	PIPE A106 GR.B SCH80 SMLS PE ASME B36.10M	1.1/2	A41F/P-1.1/2"-80	0.4M
2	PIPE A106 GR.B SCH80 SMLS PE ASME B36.10M	3/4	A41F/P-3/4"-80	0.5M
FITTINGS				
3	REDU TEE CL3000 SW A105 ASME B16.11	1.1/2 x 3/4	A41F/TS-1.1/2"x3/4"	3
FLANGES				
4	FLANGE CL150 RF SW A105 SCH80 BORE ASME B16.5	1.1/2	A41F/FR-1.1/2"	1
5	FLANGE CL150 RF SW A105 SCH80 BORE ASME B16.5	3/4	A41F/FR-3/4"	2
ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
FITTINGS				
6	PLUG A105 HEXAGONAL TYPE SCRD(M-NPT) ASME B16.11	3/4	A41F/PL-3/4"	1
FLANGES				
7	BLIND FLANGE CL150 RF A105 ASME B16.5	1.1/2	A41F/FBR-1.1/2"	1
8	BLIND FLANGE CL150 RF A105 ASME B16.5	3/4	A41F/FBR-3/4"	2
GASKETS				
9	GASKET CL150 RF 4.5mm 316SS SPIRAL WOUND FILLER FLEXIBLE GRAPHITE INNER RING 316SS OUTER RING LOW CS (G214ACM) ASME B16.20	1.1/2	A41F/GR-1.1/2"-G214ACM	1
10	GASKET CL150 RF 4.5mm 316SS SPIRAL WOUND FILLER FLEXIBLE GRAPHITE INNER RING 316SS OUTER RING LOW CS (G214ACM) ASME B16.20	3/4	A41F/GR-3/4"-G214ACM	2
BOLTS				
11	70 MM LONG STUD BOLT . M12 A193 GR.B7 W/HEX HEAD HEAVY NUT A194 GR.2H		A41F/BSF-1.1/2"-70	4
12	70 MM LONG STUD BOLT . M12 A193 GR.B7 W/HEX HEAD HEAVY NUT A194 GR.2H		A41F/BSF-3/4"-70	8
COMPONENTS				
13	GATE VALVE CL800 SW/SCRD(NPT) A105 BODY #8 TRIM SOLID WEDGE OS&Y BB API602 BY MFR (VAST418)	3/4	A41F/VA-3/4"-VAST418	1
14	GATE VALVE CL800 SW A105 BODY #8 TRIM SOLID WEDGE OS&Y BB API602 BY MFR (VAS418)	3/4	A41F/VA-3/4"-VAS418	2
SUPPORTS				
15	SPECIAL SUPPORT (SP-AS4-10)	1.1/2	SUP/AS4-1.1/2"	1

CUT PIPE LENGTH							
PIECE NO	CUT LENGTH (INS)	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH (INS)	N.S. (INS)	REMARKS
<1>	162	1.1/2		<2>	100	3/4	
<3>	86	1.1/2		<4>	100	3/4	
<5>	100	3/4		<6>	86	1.1/2	
<7>	100	3/4		<8>	100	3/4	



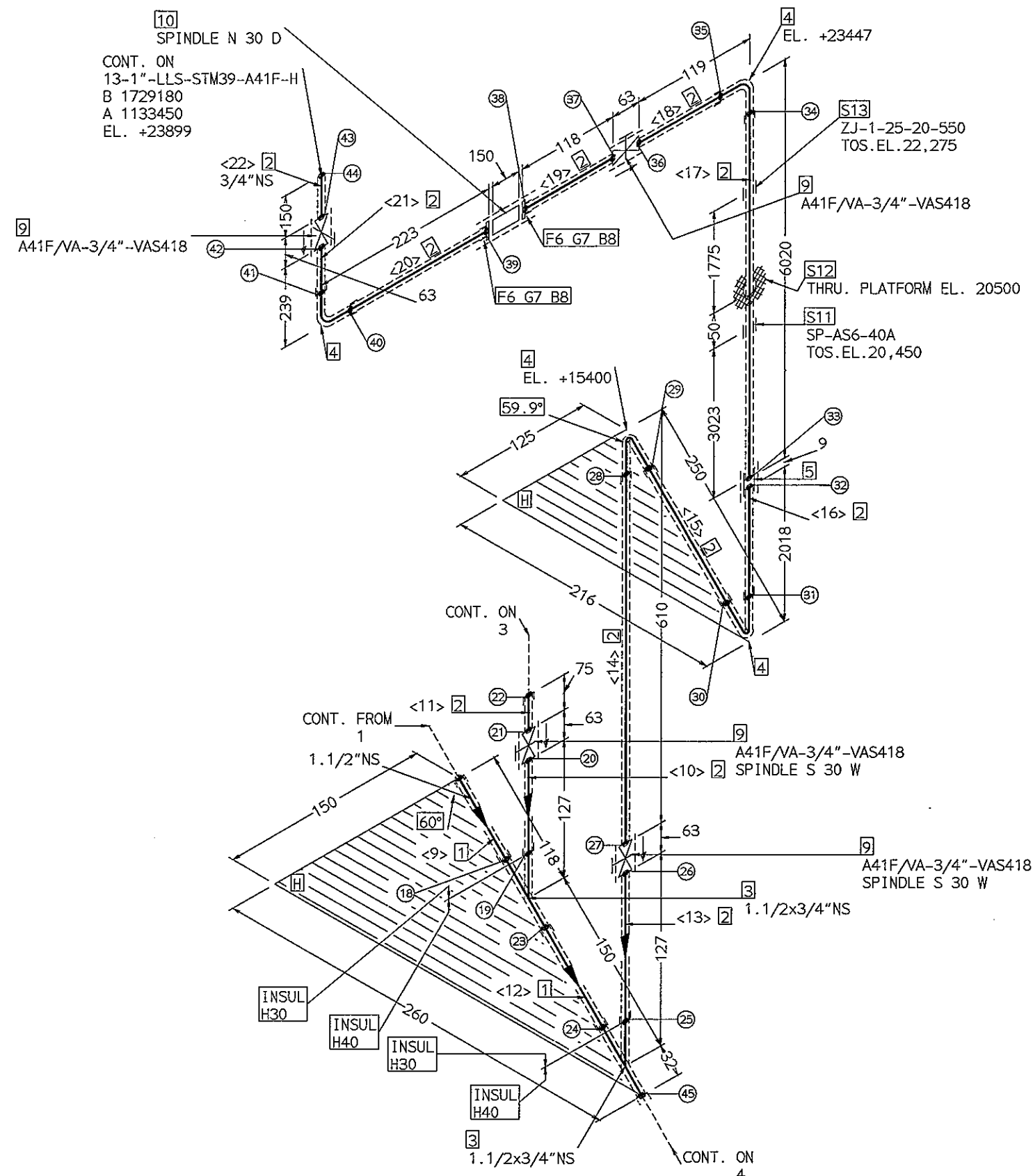
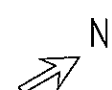
FOR CONSTRUCTION

September,05 2011

△						DPR. PRESS.: 0.17 MPa(G)	DPR. TEMP.: 130 °C	CLASS: A41F	DWN. C.T.LEE	08/31/2011	R E V I E W E D		富台工程股份有限公司 FU-TAI ENGINEERING CO., LTD. 腾龙芳烃(漳州)80万吨/年对二甲苯工程 CSU/VDU 装置		
△						DES. PRESS.: 0.35/FV MPa(G)	DES. TEMP.: 148 °C	INSULATION : H40	DESN. K.W.CHANG	08/31/2011					
△						HYDRO TEST: WATER 0.525 MPa(G)	PWHT : NO	TRACING : ---	CHK. Y.C.CHOU	08/31/2011					
△						PAINTING : PER SPEC.	STEAM OUT: NO	RT : 10	APPR. A.F.WU	08/31/2011					
△	08/31/2011	FOR CONSTRUCTION	C.T.LEE	Y.C.CHOU	A.F.WU	WELDED FIELD WELDED SOCKET THREAD COUPLING FIELD CONN. SUPPORT STEAM TRACE INSULATION				DWG NO.: 1358/D.1368		CONTRACT: C192502	LINE NO.:	SHT.	ISSUE
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.	        				DIA. NO.: 1208-018/036		FILE NO.: 13-LLCCRM39-1	13-1.1/2"-LLC-CRM39-A41F-H	1 OF 5	0

FABRICATION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
PIPE				
1	PIPE A106 GR.B SCH80 SMLS PE ASME B36.10M	1.1/2	A41F/P-1.1/2"-80	0.2M
2	PIPE A106 GR.B SCH80 SMLS PE ASME B36.10M	3/4	A41F/P-3/4"-80	9.9M
FITTINGS				
3	REDU TEE CL3000 SW A105 ASME B16.11	1.1/2 x 3/4	A41F/TS-1.1/2"x3/4"	2
4	90 DEG. ELBOW CL3000 SW A105 ASME B16.11	3/4	A41F/ES-3/4"x90	4
5	FULL COUPLING CL3000 SW A105 ASME B16.11	3/4	A41F/CFS-3/4"	1
FLANGES				
6	FLANGE CL150 RF SW A105 SCH80 BORE ASME B16.5	3/4	A41F/FR-3/4"	2
ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
GASKETS				
7	GASKET CL150 RF 4.5mm 316SS SPIRAL WOUND FILLER FLEXIBLE GRAPHITE INNER RING 316SS OUTER RING LOW CS (G214ACM) ASME B16.20	3/4	A41F/GR-3/4"-G214ACM	2
BOLTS				
8	70 MM LONG STUD BOLT . M12 A193 GR.B7 W/HEX HEAD HEAVY NUT A194 GR.2H		A41F/BSF-3/4"-70	8
COMPONENTS				
9	GATE VALVE CL800 SW A105 BODY #8 TRIM SOLID WEDGE OS&Y BB AP1602 BY MFR (VAS418)	3/4	A41F/VA-3/4"-VAS418	4
INSTRUMENTS				
10	TRAP CL150 RF	3/4	A41F/TRAP-3/4"	1
SUPPORTS				
11	SPECIAL SUPPORT (SP-AS6-40A TOS.EL.20,450)	3/4	SUP/AS6-3/4"	1
12	FLOOR HOLE . (THRU. PLATFORM EL. 20500)	3/4	A41F/HOLE-3/4"	1
13	PIPE SUPPORT (ZJ-1-25-20-550 TOS.EL.22,275)	3/4	SUP/ZJ-1-25-3/4"	1

CUT PIPE LENGTH							
PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS
<9>	86	1.1/2		<10>	100	3/4	
<11>	75	3/4		<12>	86	1.1/2	
<13>	100	3/4		<14>	591	3/4	
<15>	212	3/4		<16>	1999	3/4	
<17>	6000	3/4		<18>	100	3/4	
<19>	113	3/4		<20>	199	3/4	
<21>	220	3/4		<22>	150	3/4	



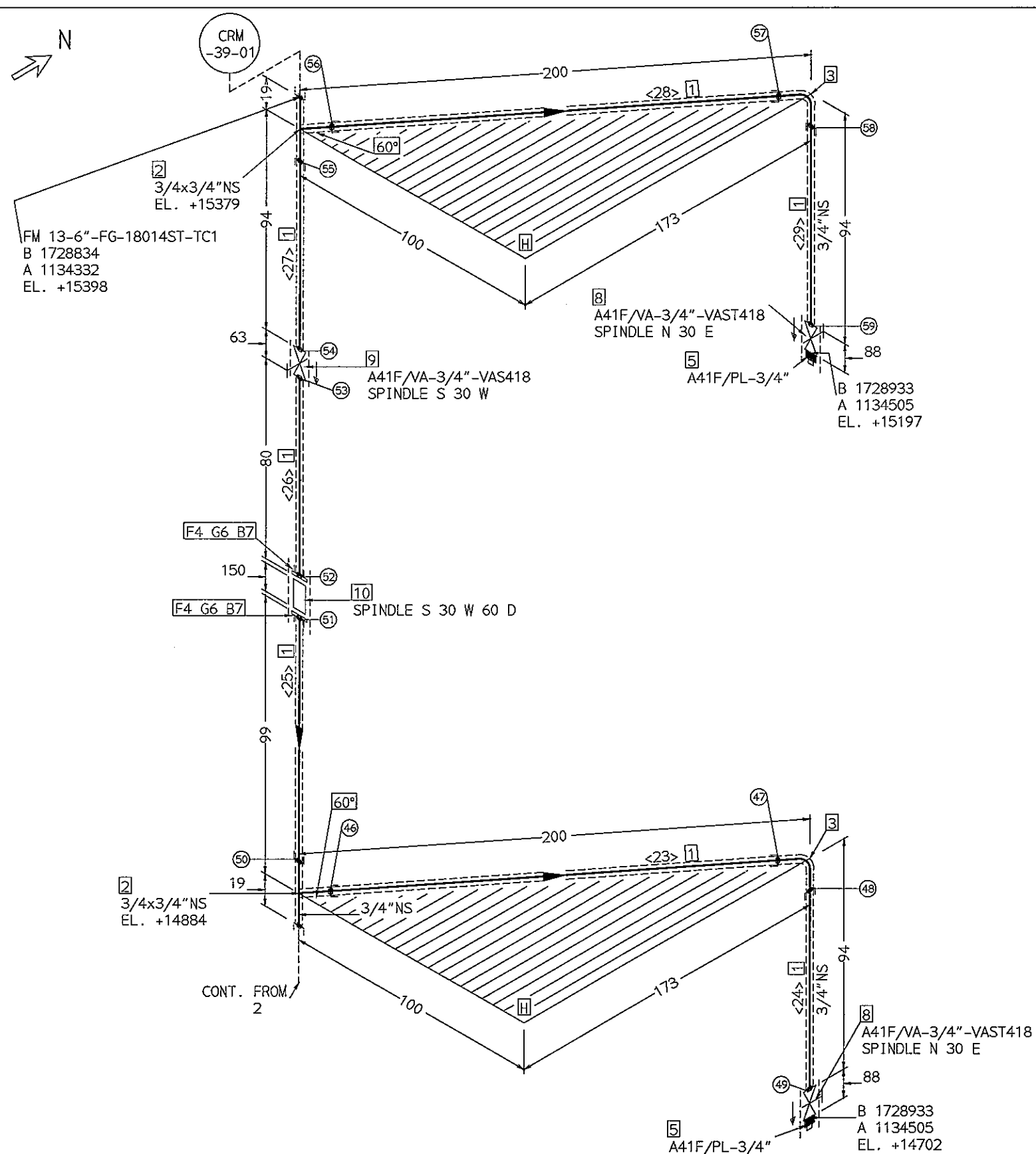
FOR CONSTRUCTION

September,05 2011

△						DPR. PRESS.: 0.17 MPa(G)	DPR. TEMP.: 130 °C	CLASS: A41F	DWN.	C.T.LEE	08/31/2011	REVIEWED	富台工程股份有限公司 FU-TAI ENGINEERING CO., LTD. 腾龙芳烃(漳州)80万吨/年对二甲苯工程 CSU/VDU 装置						
△						DES. PRESS.: 0.35/FV MPa(G)	DES. TEMP.: 148 °C	INSULATION : H40	DESN.	K.W.CHIANG	08/31/2011								
△						HYDRO TEST: WATER 0.525 MPa(G)	PWHT : NO	TRACING : ---	CHK.	Y.C.CHOU	08/31/2011								
△						PAINTING : PER SPEC.	STEAM OUT: NO	RT : 10 %	APPR.	A.F.WU	08/31/2011								
△	08/31/2011	FOR CONSTRUCTION	C.T.LEE	Y.C.CHOU	A.F.WU	WELDED 	FIELD WELDED 	SOCKET 	THREAD 	COUPLING 	FIELD CONN. 	SUPPORT 	STEAM TRACE 	INSULATION 	DWG NO.: 1358/D,1368	CONTRACT: C192502	LINE NO.:	SHT.	ISSUE
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.										DIA. NO.: 1208-018/036	FILE NO.: 13-LLCCRM39-2	13-1.1/2"-LLC-CRM39-A41F-H	2 OF 5	0

FABRICATION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
PIPE				
1	PIPE A106 GR.B SCH80 SMLS PE ASME B36.10M	3/4	A41F/P-3/4"-80	0.7M
FITTINGS				
2	TEE CL3000 SW A105 ASME B16.11	3/4 x 3/4	A41F/TS-3/4"	2
3	90 DEG. ELBOW CL3000 SW A105 ASME B16.11	3/4	A41F/ES-3/4"X90	2
FLANGES				
4	FLANGE CL150 RF SW A105 SCH80 BORE ASME B16.5	3/4	A41F/FR-3/4"	2
ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
FITTINGS				
5	PLUG A105 HEXAGONAL TYPE SCRD(M-NPT) ASME B16.11	3/4	A41F/PL-3/4"	2
GASKETS				
6	GASKET CL150 RF 4.5mm 316SS SPIRAL WOUND FILLER FLEXIBLE GRAPHITE INNER RING 316SS OUTER RING LOW CS (G214ACM) ASME B16.20	3/4	A41F/GR-3/4"-G214ACM	2
BOLTS				
7	70 MM LONG STUD BOLT . M12 A193 GR.B7 W/HEX HEAD HEAVY NUT A194 GR.2H		A41F/BSF-3/4"-70	8
COMPONENTS				
8	GATE VALVE CL800 SW/SCRD(NPT) A105 BODY #8 TRIM SOLID WEDGE OS&Y BB API602 BY MFR (VAST418)	3/4	A41F/VA-3/4"-VAST418	2
9	GATE VALVE CL800 SW A105 BODY #8 TRIM SOLID WEDGE OS&Y BB API602 BY MFR (VAS418)	3/4	A41F/VA-3/4"-VAS418	1
INSTRUMENTS				
10	TRAP CL150 RF	3/4	A41F/TRAP-3/4"	1

CUT PIPE LENGTH						
PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH	N.S. (INS)
<23>	162	3/4		<24>	75	3/4
<25>	75	3/4		<26>	75	3/4
<27>	75	3/4		<28>	162	3/4
<29>	75	3/4				



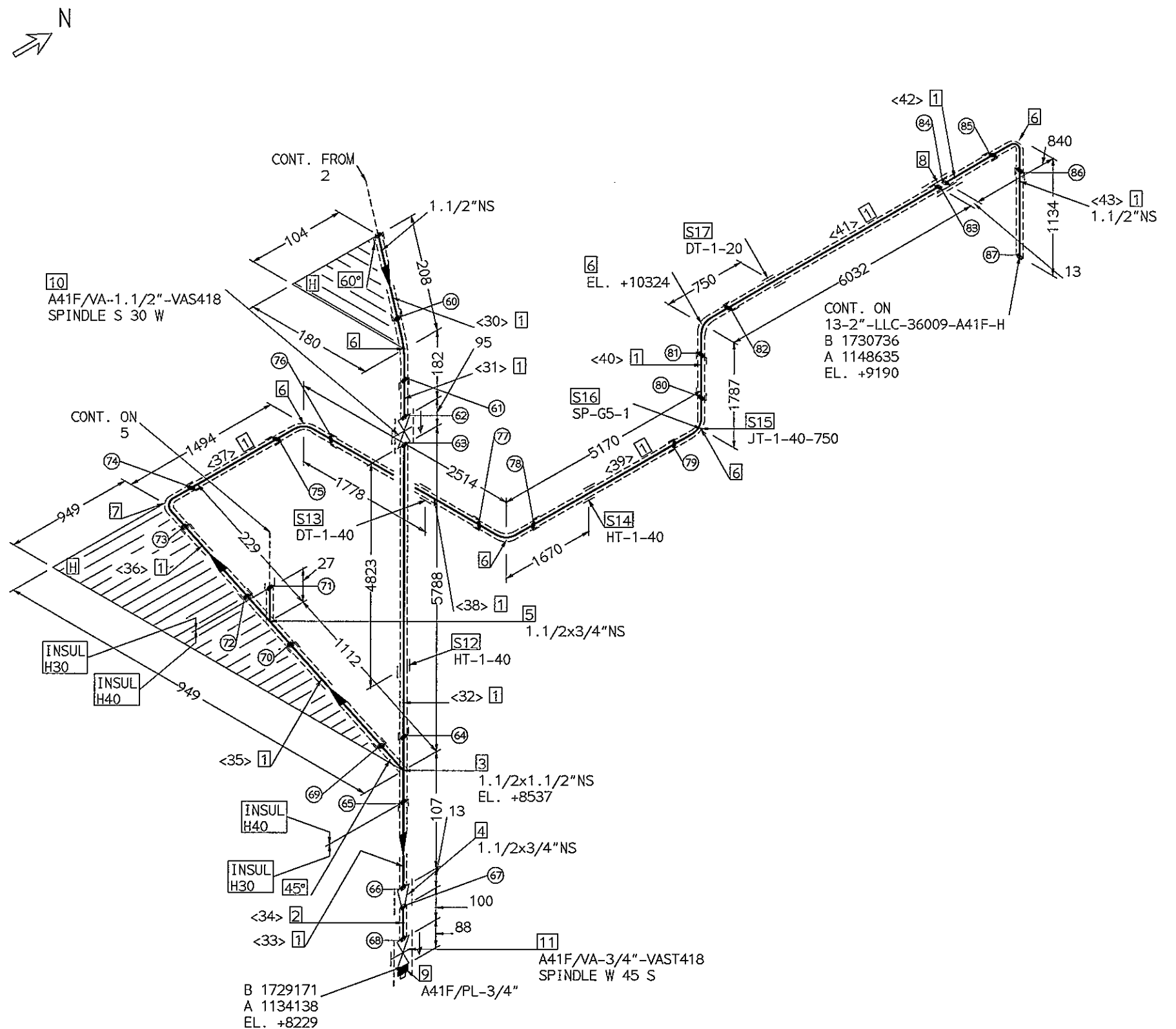
FOR CONSTRUCTION

September,05 2011

△						DPR. PRESS.: 0.17 MPa(G)	DPR. TEMP.: 130 °C	CLASS: A41F	DWN. C.T.LEE	08/31/2011	REVIEWED	富台工程股份有限公司 FU-TAI ENGINEERING CO., LTD. 腾龙芳烃(漳州)80万吨/年对二甲苯工程 CSU/VDU 装置							
△						DES. PRESS.: 0.35/FV MPa(G)	DES. TEMP.: 148 °C	INSULATION : H40	DESN. K.W.CHIANG	08/31/2011									
△						HYDRO TEST: WATER 0.525 MPa(G)	PWHT : NO	TRACING : ---	CHK. Y.C.CHOU	08/31/2011									
△						PAINTING : PER SPEC.	STEAM OUT: NO	RT : 10	APPR. A.F.WU	08/31/2011									
△	08/31/2011	FOR CONSTRUCTION	C.T.LEE	Y.C.CHOU	A.F.WU	WELDED	FIELD WELDED	SOCKET	THREAD	COUPLING	FIELD CONN.	SUPPORT	STEAM TRACE	INSULATION	DWG NO.: 1358/D,1368	CONTRACT: C192502	LINE NO.:	SHT.	ISSUE
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.										DIA. NO.: 1208-018/036	FILE NO.: 13-LLCCRM39-3	13-1.1/2"-LLC-CRM39-A41F-H	3 OF 5	0

FABRICATION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
PIPE				
1	PIPE A106 GR.B SCH80 SMLS PE ASME B36.10M	1.1/2	A41F/P-1.1/2"-80	26.1M
2	PIPE A106 GR.B SCH80 SMLS PE ASME B36.10M	3/4	A41F/P-3/4"-80	0.1M
FITTINGS				
3	TEE CL3000 SW A105 ASME B16.11	1.1/2 x 1.1/2	A41F/TS-1.1/2"	1
4	REDU COUPLING CONC CL3000 SW A105 ASME B16.11	1.1/2 x 3/4	A41F/RCS-1.1/2"x3/4"	1
5	REDU TEE CL3000 SW A105 ASME B16.11	1.1/2 x 3/4	A41F/TS-1.1/2"x3/4"	1
6	90 DEG. ELBOW CL3000 SW A105 ASME B16.11	1.1/2	A41F/ES-1.1/2"x90	6
7	45 DEG. ELBOW CL3000 SW A105 ASME B16.11	1.1/2	A41F/ES-1.1/2"x45	1
8	FULL COUPLING CL3000 SW A105 ASME B16.11	1.1/2	A41F/CFS-1.1/2"	1
ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
FITTINGS				
9	PLUG A105 HEXAGONAL TYPE SCRD(W-NPT) ASME B16.11	3/4	A41F/PL-3/4"	1
COMPONENTS				
10	GATE VALVE CL800 SW A105 BODY #8 TRIM SOLID WEDGE OS&Y BB API602 BY MFR (VAS418)	1.1/2	A41F/VA-1.1/2"-VAS418	1
11	GATE VALVE CL800 SW/SCRD(NPT) A105 BODY #8 TRIM SOLID WEDGE OS&Y BB API602 BY MFR (VAST418)	3/4	A41F/VA-3/4"-VAST418	1
SUPPORTS				
12	PIPE SUPPORT (HT-1-40)	1.1/2	SUP/DT-1-1.1/2"	1
13	PIPE SUPPORT (DT-1-40)	1.1/2	SUP/DT-1-1.1/2"	1
14	PIPE SUPPORT (HT-1-40)	1.1/2	SUP/HT-1-1.1/2"	1
15	PIPE SUPPORT (JT-1-40-750)	1.1/2	SUP/JT-1-1.1/2"	1
16	SPECIAL SUPPORT (SP-G5-1)	1.1/2	SUP/G5-1-1.1/2"N	1
17	PIPE SUPPORT (DT-1-20)	1.1/2	SUP/DT-1-1.1/2"	1

CUT PIPE LENGTH							
PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS
<30>	176	1.1/2		<31>	150	1.1/2	
<32>	5754	1.1/2		<33>	75	1.1/2	
<34>	100	3/4		<35>	1049	1.1/2	
<36>	176	1.1/2		<37>	1441	1.1/2	
<38>	2450	1.1/2		<39>	5106	1.1/2	
<40>	1723	1.1/2		<41>	6000	1.1/2	
<42>	808	1.1/2		<43>	1102	1.1/2	



FOR CONSTRUCTION

September,05 2011

△						OPR. PRESS.: 0.17 MPa(G)	OPR. TEMP.: 130 °C	CLASS: A41F	DWN.	C.T.LEE	08/31/2011	REVIEWED	富台工程股份有限公司 FU-TAI ENGINEERING CO., LTD. 腾龙芳烃(漳州)80万吨/年对二甲苯工程 CSU/VDU 装置						
△						DES. PRESS.: 0.35/FV MPa(G)	DES. TEMP.: 148 °C	INSULATION: H40	DESN.	K.W.CHIANG	08/31/2011								
△						HYDRO TEST: WATER 0.525 MPa(G)	PWHT: NO	TRACING: ---	CHK.	Y.C.CHOU	08/31/2011								
△						PAINTING: PER SPEC.	STEAM OUT: NO	RT: 10 %	APPR.	A.F.WU	08/31/2011								
△	08/31/2011	FOR CONSTRUCTION	C.T.LEE	Y.C.CHOU	A.F.WU	WELDED	FIELD WELDED	SOCKET	THREAD	COUPLING	FIELD CONN.	SUPPORT	STEAM TRACE	INSULATION	DWG NO.: 1358/D,1368	CONTRACT: C192502	LINE NO.:	SHT.	ISSUE
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.										DIA. NO.: 1208-018/036	FILE NO.: 13-LLCCRM39-4	13-1.1/2"-LLC-CRM39-A41F-H	4 OF 5	0

