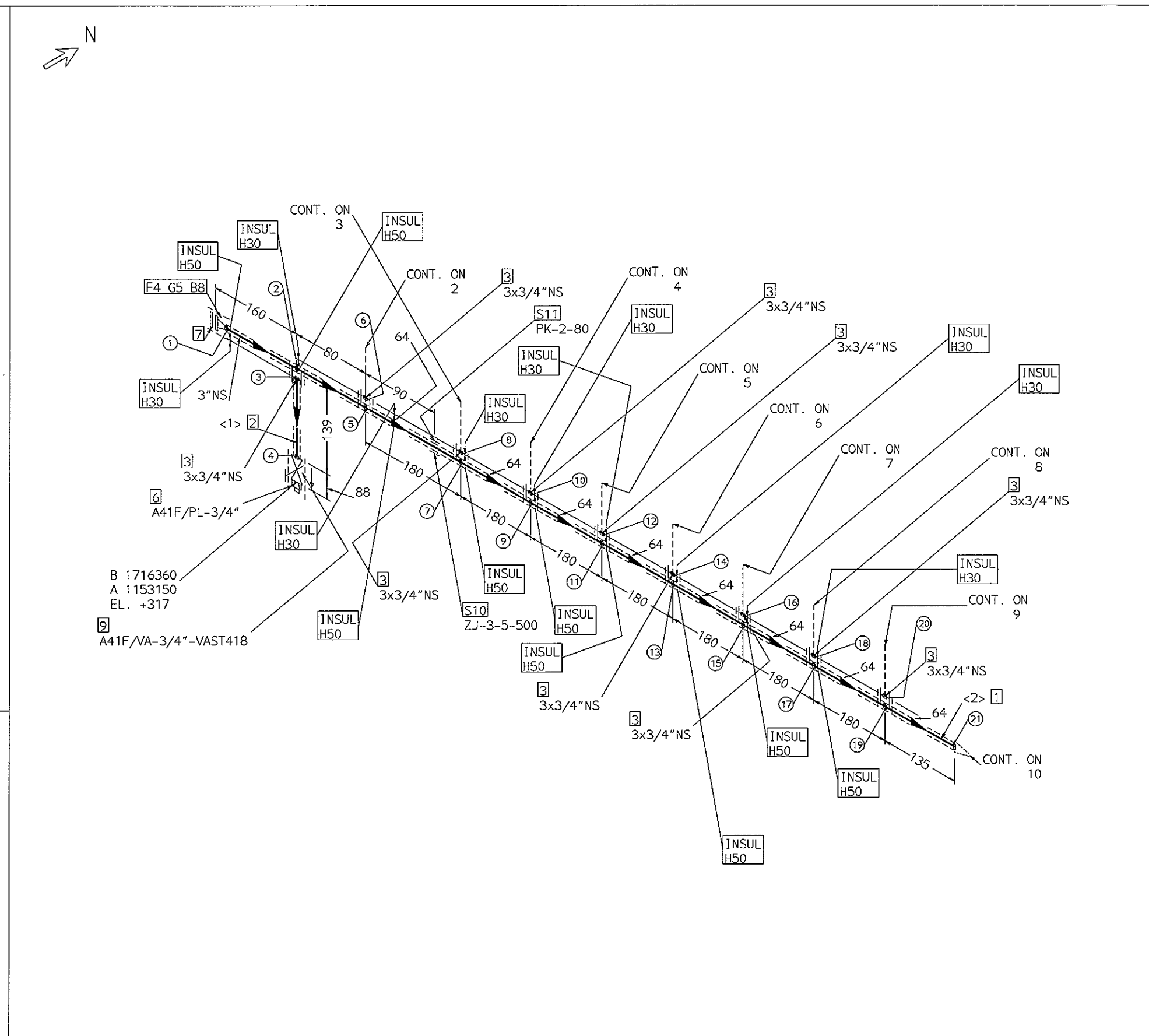


FABRICATION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
PIPE				
1	PIPE A106 GR.B SCH40 SMLS BE ASME B36.10M	3	A41F/P-3"-40	1.6M
2	PIPE A106 GR.B SCH80 SMLS PE ASME B36.10M	3/4	A41F/P-3/4"-80	0.1M
FITTINGS				
3	HALF COUPLING CL3000 SW A105 ASME B16.11	3 x 3/4	A41F/CHS-3"x3/4"	9
FLANGES				
4	FLANGE CL150 RF WN A105 SCH40 BORE ASME B16.5	3	A41F/WFR-3"	1
GASKETS				
5	GASKET CL150 RF 4.5mm 316SS SPIRAL WOUND FILLER FLEXIBLE GRAPHITE INNER RING 316SS OUTER RING LOW CS (G214ACM) ASME B16.20	3	A41F/GR-3"-G214ACM	1
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	3	A41F/FBR-3"	1
BOLTS				
8	100 MM LONG STUD BOLT , M16 A193 GR.B7 W/HEX HEAD HEAVY NUT A194 GR.2H		A41F/BSF-3"-100	4
COMPONENTS				
9	GATE VALVE CL800 SW/SCRD(NPT) A105 BODY #8 TRIM SOLID WEDGE OS&Y BB AP1602 BY MFR (VAST418)	3/4	A41F/VA-3/4"-VAST418	1
SUPPORTS				
10	PIPE SUPPORT (ZJ-3-5-500)	3	SUP/ZJ-3-5-3"	1
11	PIPE SUPPORT (PK-2-80)	3	SUP/PK-2-3"	1

CUT PIPE LENGTH					
PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH
<1>	75	3/4		<2>	1565



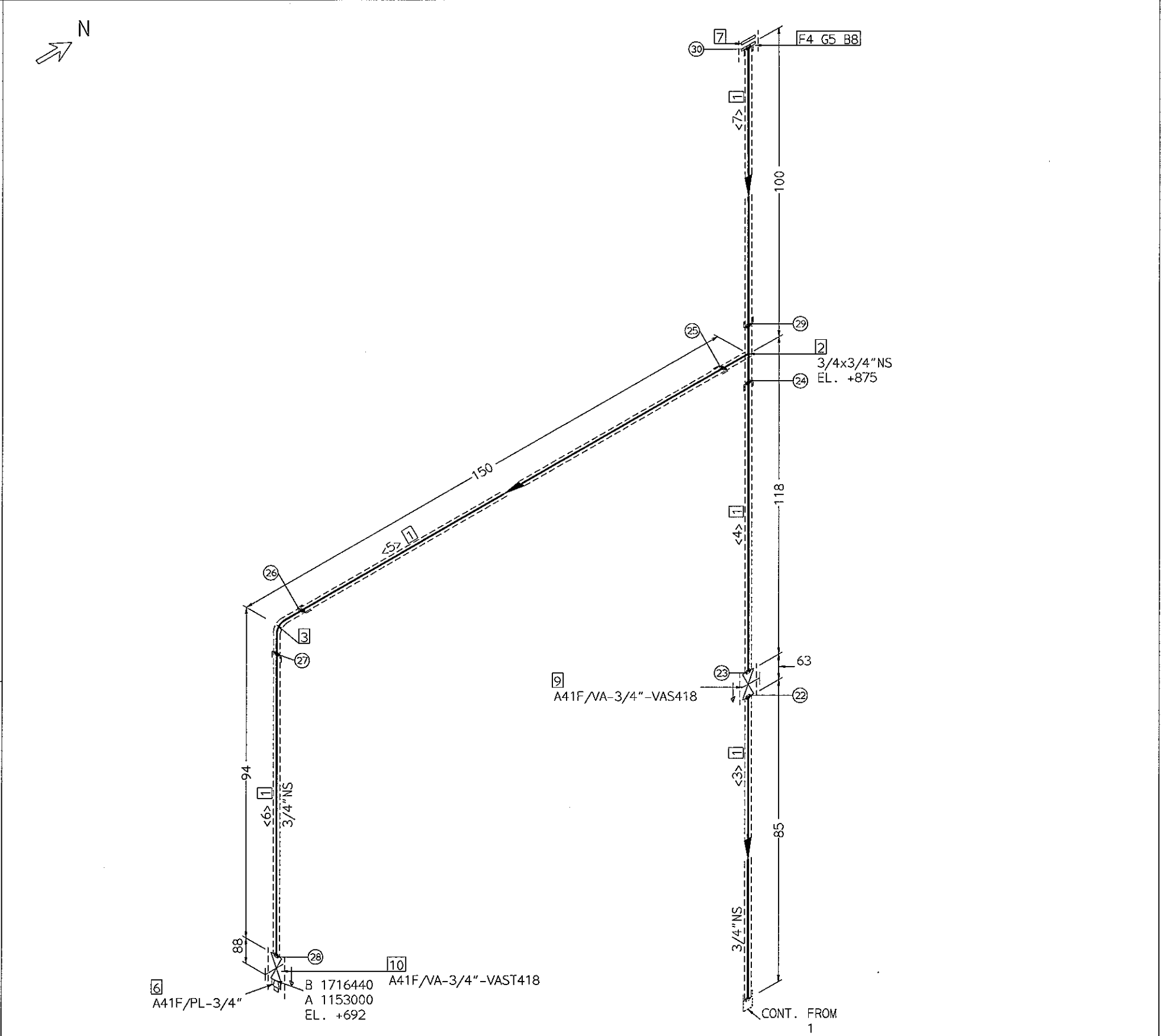
FOR CONSTRUCTION

September,05 2011

△						DPR. PRESS.: 0.17 MPa(G)	DPR. TEMP.: 130 °C	CLASS: A41F	DWN. K.W.TSAI	06/03/2011	REVIEWED	富台工程股份有限公司 FU-TAI ENGINEERING CO., LTD.							
△						DES. PRESS.: 0.35/FV MPa(G)	DES. TEMP.: 148 °C	INSULATION: H50	DESN. K.W.CHIANG	06/03/2011									
△						HYDRD TEST: WATER 0.525 MPa(G)	PWHT: NO	TRACING: ---	CHK. Y.C.CHOU	06/03/2011									
△						PAINTING: PER SPEC.	STEAM OUT: NO	RT: 10 %	APPR. A.F.WU	06/03/2011									
△	08/31/2011	FOR CONSTRUCTION		K.W.TSAI	Y.C.CHOU	A.F.WU	DWG NO.: 313A				CONTRACT: C192502	LINE NO.:	SHT. ISSUE						
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.	WELDED	FIELD WELDED	SOCKET	THREAD	COUPLING	FIELD CONN.	SUPPORT	STEAM TRACE	INSULATION	DIA. NO.: 1208-036/0201-033	FILE NO.: 13-LLCCRM35-1	13-2"-LLC-CRM35-A41F-H	1 OF 10	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	0.5M
FITTINGS				
2	TEE CL3000 SW A105 ASME B16.11	3/4 x 3/4	A41F/TS-3/4"	1
3	90 DEG. ELBOW CL3000 SW A105 ASME B16.11	3/4	A41F/ES-3/4"x90	1
FLANGES				
4	FLANGE CL150 RF SW A105 SCH80 BORE ASME B16.5	3/4	A41F/FR-3/4"	1
GASKETS				
5	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	1
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	3/4	A41F/FBR-3/4"	1
BOLTS				
8	70 MM LONG STUD BOLT . M12 A193 GR.B7 W/HEX HEAD HEAVY NUT A194 GR.2H		A41F/BSF-3/4"-70	4
COMPONENTS				
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
10	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

CUT PIPE LENGTH						
PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH	N.S. (INS)
<3>	85	3/4		<4>	99	3/4
<5>	112	3/4		<6>	75	3/4
<7>	76	3/4				



FOR CONSTRUCTION

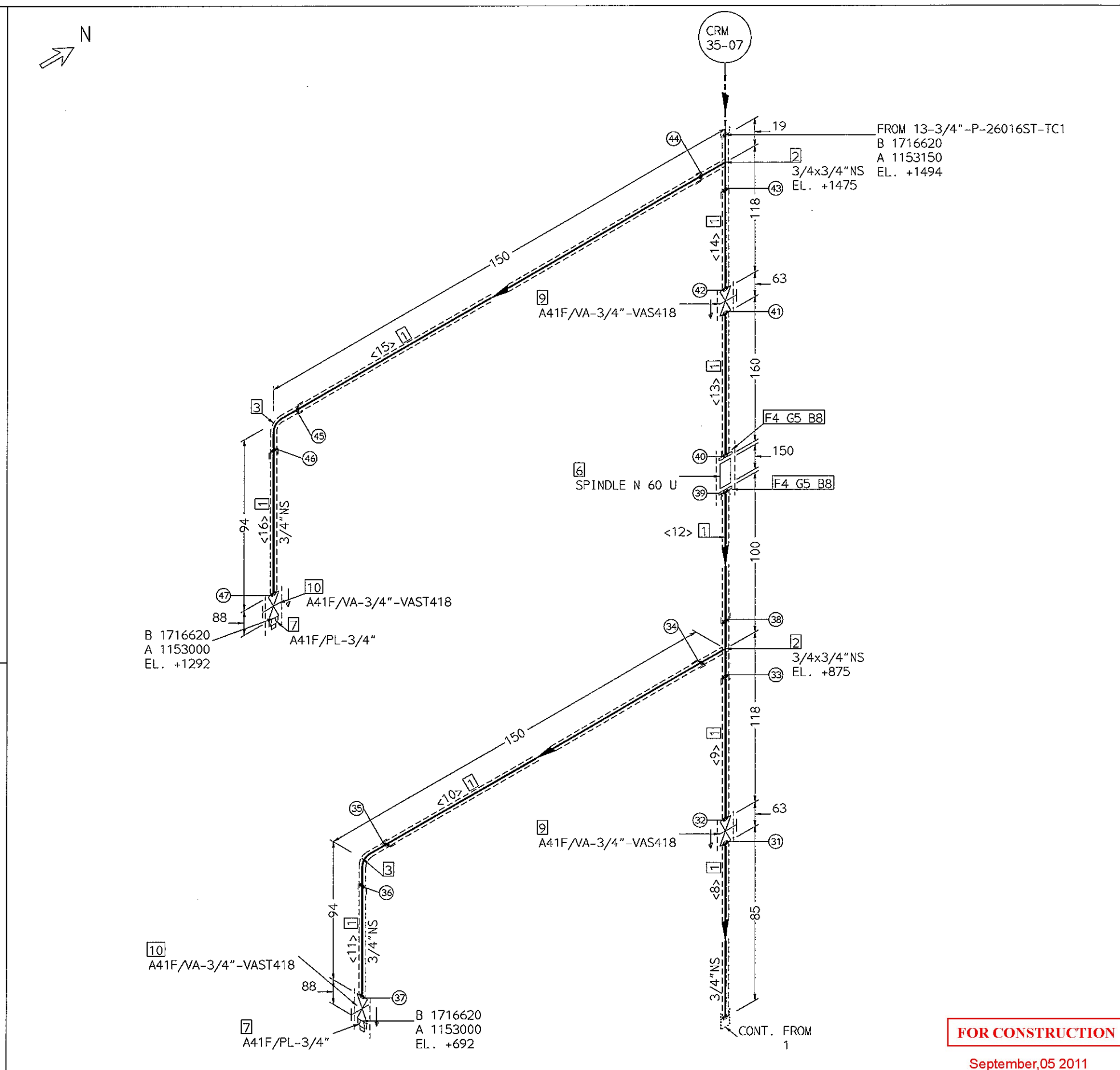
September,05 2011

△						OPR. PRESS.: 0.17 MPa(G)	OPR. TEMP.: 130 °C	CLASS: A41F	DWN. K.W.TSAI	06/03/2011	REVIEWED	 富台工程股份有限公司 FU-TAI ENGINEERING CO., LTD.							
△						DES. PRESS.: 0.35/FV MPa(G)	DES. TEMP.: 148 °C	INSULATION : H50	DESN. K.W.CHANG	06/03/2011									
△						HYDRD TEST: WATER 0.525 MPa(G)	PWHT : NO	TRACING : ---	CHK. Y.C.CHOU	06/03/2011									
△						PAINTING : PER SPEC.	STEAM OUT: NO	RT : 10	APPR. A.F.WU	06/03/2011									
△	08/31/2011	FOR CONSTRUCTION	K.W.TSAI	Y.C.CHOU	A.F.WU	WELDED	FIELD WELDED	SOCKET	THREAD	COUPLING	FIELD CONN.	SUPPORT	STEAM TRACE	INSULATION	DWG NO.: 313A	CONTRACT: C192502	LINE NO.:	SHT.	ISSUE
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.										DIA. NO.: 1208-036/0201-033	FILE NO.: 13-LLCCRM35-2	13-2"-LLC-CRM35-A41F-H	2 OF 10	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	0.9M
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
GASKETS				
5	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
INSTRUMENTS				
6	TRAP CL150 RF	3/4	A41F/TRAP-3/4"	1

ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
FITTINGS				
7	PLUG A105 HEXAGONAL TYPE SCRD(M-NPT) ASME B16.11	3/4	A41F/PL-3/4"	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 API602 BY MFR (VAS418)	3/4	A41F/VA-3/4"-VAS418	2
10	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

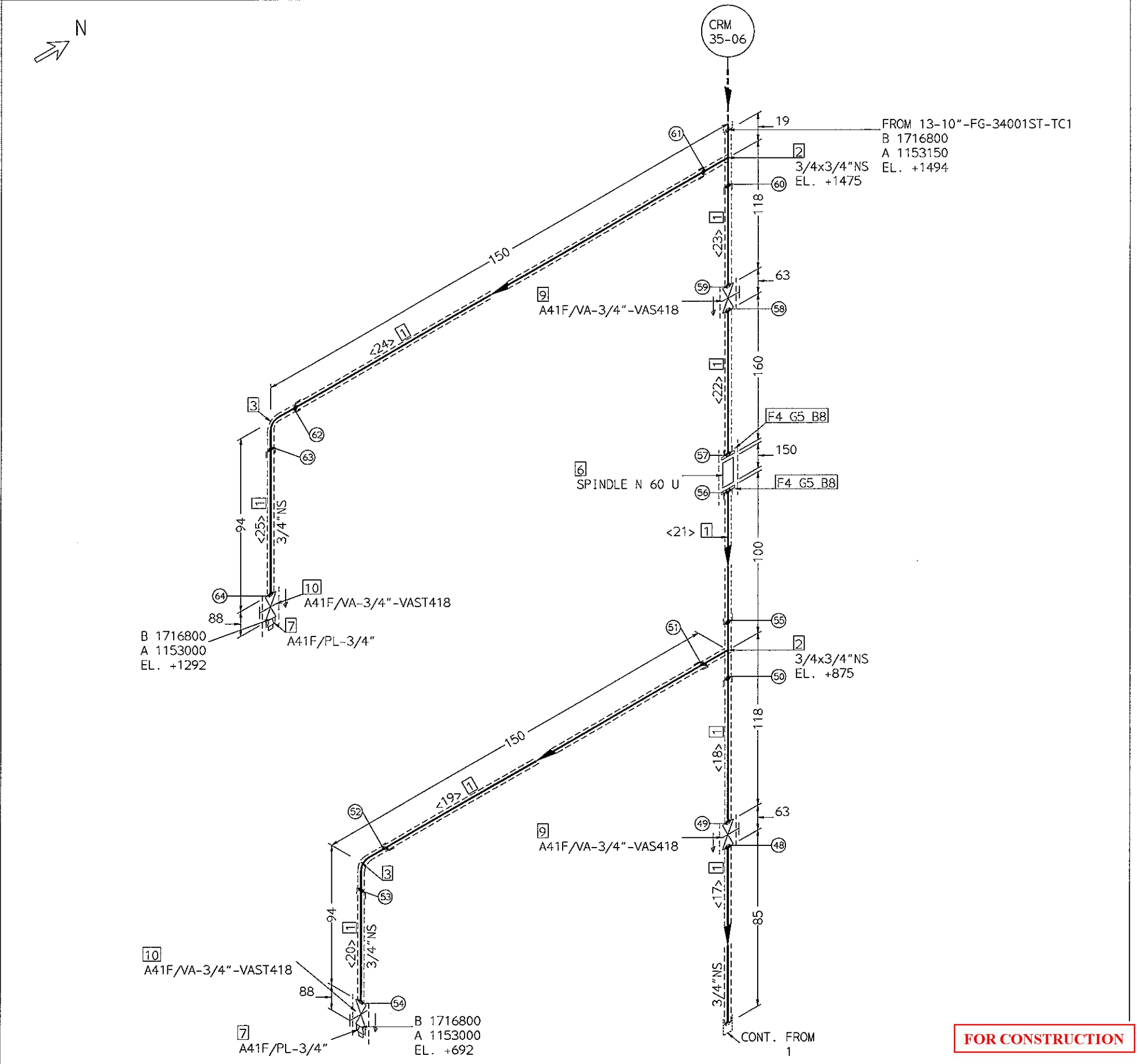
CUT PIPE LENGTH						
PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH	N.S. (INS)
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<10>	112	3/4		<11>	75	3/4
<12>	76	3/4		<13>	155	3/4
<14>	99	3/4		<15>	112	3/4
<16>	75	3/4				



△						DPR. PRESS.: 0.17 MPa(G)	DPR. TEMP.: 130 °C	CLASS: A41F	DWN. K.W.TSAI	06/03/2011	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 : H50	DESN. K.W.CHANG	06/03/2011									
△						HYDRD TEST: WATER 0.525 MPa(G)	PWHT : NO	TRACING : ---	CHK. Y.C.CHOU	06/03/2011									
△						PAINTING : PER SPEC.	STEAM OUT: NO	RT : 10 %	APPR. A.F.WU	06/03/2011									
△	08/31/2011	FOR CONSTRUCTION	K.W.TSAI	Y.C.CHOU	A.F.WU	WELDED	FIELD WELDED	SOCKET	THREAD	COUPLING	FIELD CONN.	SUPPORT	STEAM TRACE	INSULATION	DWG NO.: 313A	CONTRACT: C192502	LINE NO.:	SHT.	ISSUE
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.										DIA. NO.: 1208-036/0201-033	FILE NO.: 13-LLCCRM35-3	13-2"-LLC-CRM35-A41F-H	3 OF 10	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	0.9M
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
GASKETS				
5	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
INSTRUMENTS				
6	TRAP CL150 RF	3/4	A41F/TRAP-3/4"	1
ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
FITTINGS				
7	PLUG A105 HEXAGONAL TYPE SCRD(M-NPT) ASME B16.11	3/4	A41F/PL-3/4"	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 API602 BY MFR (VAS418)	3/4	A41F/VA-3/4"-VAS418	2
10	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

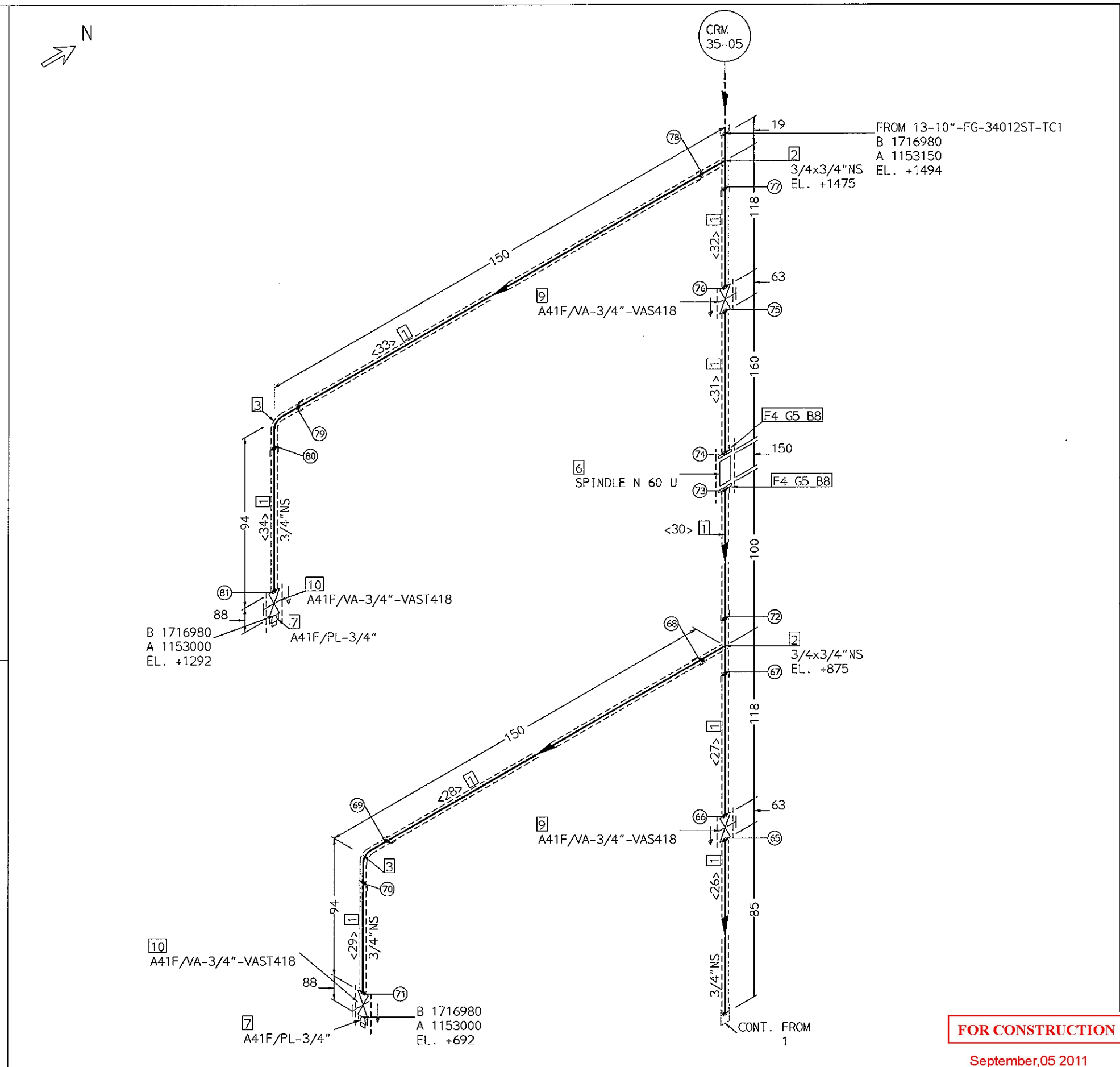
CUT PIPE LENGTH						
PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH	N.S. (INS)
<17>	85	3/4		<18>	99	3/4
<19>	112	3/4		<20>	75	3/4
<21>	76	3/4		<22>	155	3/4
<23>	99	3/4		<24>	112	3/4
<25>	75	3/4				



△						DPR. PRESS.: 0.17 MPa(G)	DPR. TEMP.: 130 °C	CLASS: A41F	DWN. K.W.TSAI	06/03/2011	REVIEWED	 富台工程股份有限公司 FU-TAI ENGINEERING CO., LTD.			
△						DES. PRESS.: 0.35/FV MPa(G)	DES. TEMP.: 148 °C	INSULATION: H50	DESN. K.W.CHANG	06/03/2011					
△						HYDRO TEST: WATER 0.525 MPa(G)	PWHT: NO	TRACING: ---	CHK. Y.C.CHOU	06/03/2011					
△						PAINTING: PER SPEC.	STEAM OUT: NO	RT: 10	APPR. A.F.WU	06/03/2011					
△	08/31/2011	FOR CONSTRUCTION	K.W.TSAI	Y.C.CHOU	A.F.WU	WELDED FIELD WELDED SOCKET THREAD COUPLING FIELD CONN. SUPPORT STEAM TRACE INSULATION				DWG NO.: 313A		CONTRACT: C192502	LINE NO.:	SHT.	ISSUE
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.					DIA. NO.: 1208-036/0201-033		FILE NO.: 13-LLCCRM35-4	13-2"-LLC-CRM35-A41F-H	4 OF 10	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	0.9M
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
GASKETS				
5	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
INSTRUMENTS				
6	TRAP CL150 RF	3/4	A41F/TRAP-3/4"	1
ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
FITTINGS				
7	PLUG A105 HEXAGONAL TYPE SCRD(M-NPT) ASME B16.11	3/4	A41F/PL-3/4"	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	2
10	GATE VALVE CL800 SW/SCRD(NPT) A105 BODY #8 TRIM SOLID WEDGE OS&Y BB AP1602 BY MFR (VAST418)	3/4	A41F/VA-3/4"-VAST418	2

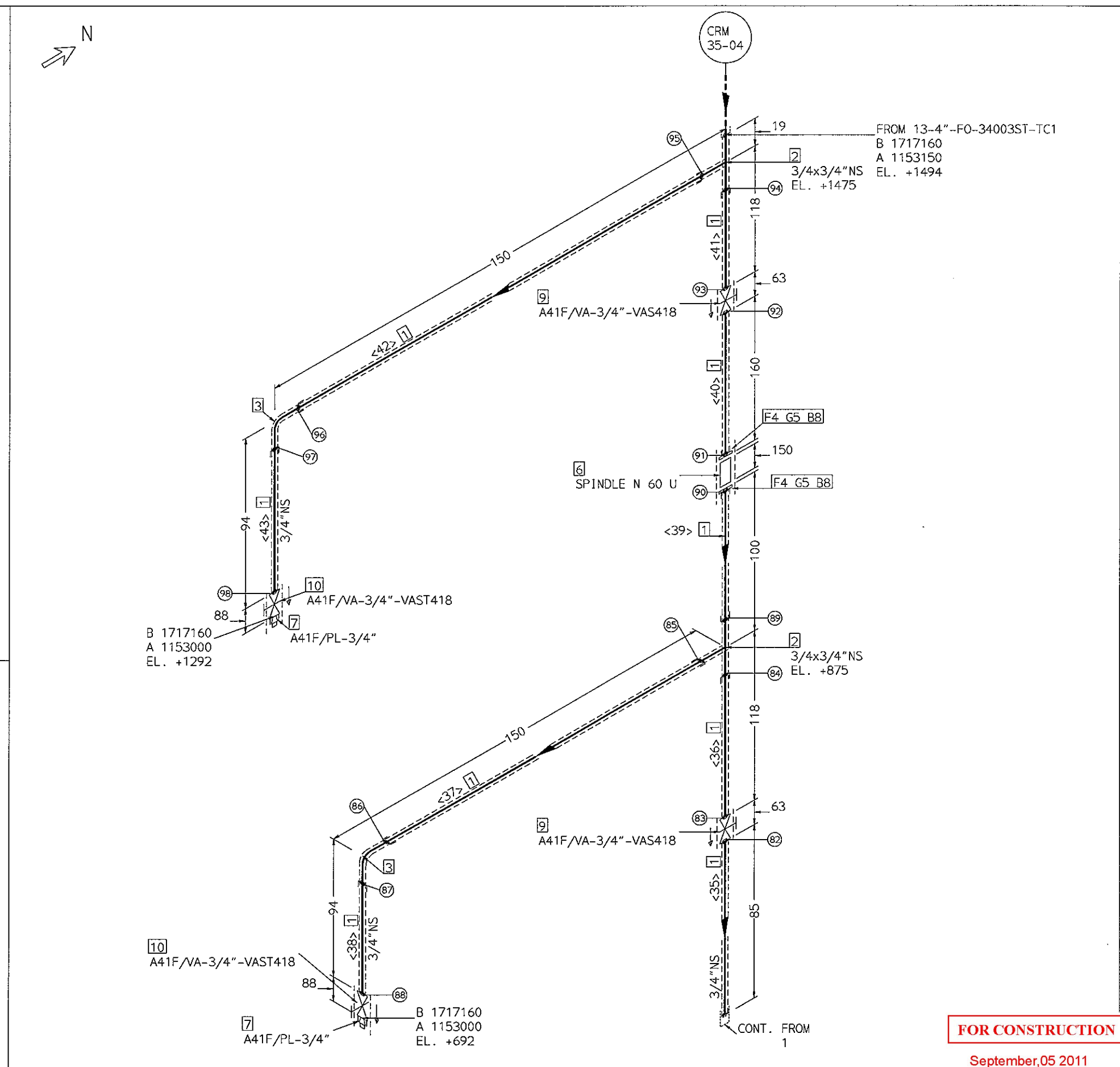
CUT PIPE LENGTH						
PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH	N.S. (INS)
<26>	85	3/4		<27>	99	3/4
<28>	112	3/4		<29>	75	3/4
<30>	76	3/4		<31>	155	3/4
<32>	99	3/4		<33>	112	3/4
<34>	75	3/4				



△						OPR. PRESS.: 0.17 MPa(G)	OPR. TEMP.: 130 °C	CLASS: A41F	DWN. K.W.TSAI	06/03/2011	REVIEWED	富台工程股份有限公司 FU-TAI ENGINEERING CO., LTD.							
△						DES. PRESS.: 0.35/FV MPa(G)	DES. TEMP.: 148 °C	INSULATION : H50	DESN. K.W.CHANG	06/03/2011									
△						HYDRO TEST: WATER 0.525 MPa(G)	PWHT : NO	TRACING : ---	CHK. Y.C.CHOU	06/03/2011									
△						PAINTING : PER SPEC.	STEAM OUT: NO	RT : 10	APPR. A.F.WU	06/03/2011									
△	08/31/2011	FOR CONSTRUCTION	K.W.TSAI	Y.C.CHOU	A.F.WU	WELDED	FIELD WELDED	SOCKET	THREAD	COUPLING	FIELD CONN.	SUPPORT	STEAM TRACE	INSULATION	DWG NO.: 313A	CONTRACT: C192502	LINE NO.:	SHT.	ISSUE
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.										DIA. NO.: 1208-036/0201-033	FILE NO.: 13-LLCCRM35-5	13-2"-LLC-CRM35-A41F-H	5 OF 10	0

FABRICATION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
PIPE				
1	PIPE A106 GR.8 SCH80 SMLS PE ASME B36.10M	3/4	A41F/P-3/4"-80	0.9M
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
GASKETS				
5	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
INSTRUMENTS				
6	TRAP CL150 RF	3/4	A41F/TRAP-3/4"	1
ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
FITTINGS				
7	PLUG A105 HEXAGONAL TYPE SCRD(M-NPT) ASME B16.11	3/4	A41F/PL-3/4"	2
BOLTS				
8	70 MM LONG STUD BOLT . M12 A193 GR.87 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 API602 BY MFR (VAS418)	3/4	A41F/VA-3/4"-VAS418	2
10	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

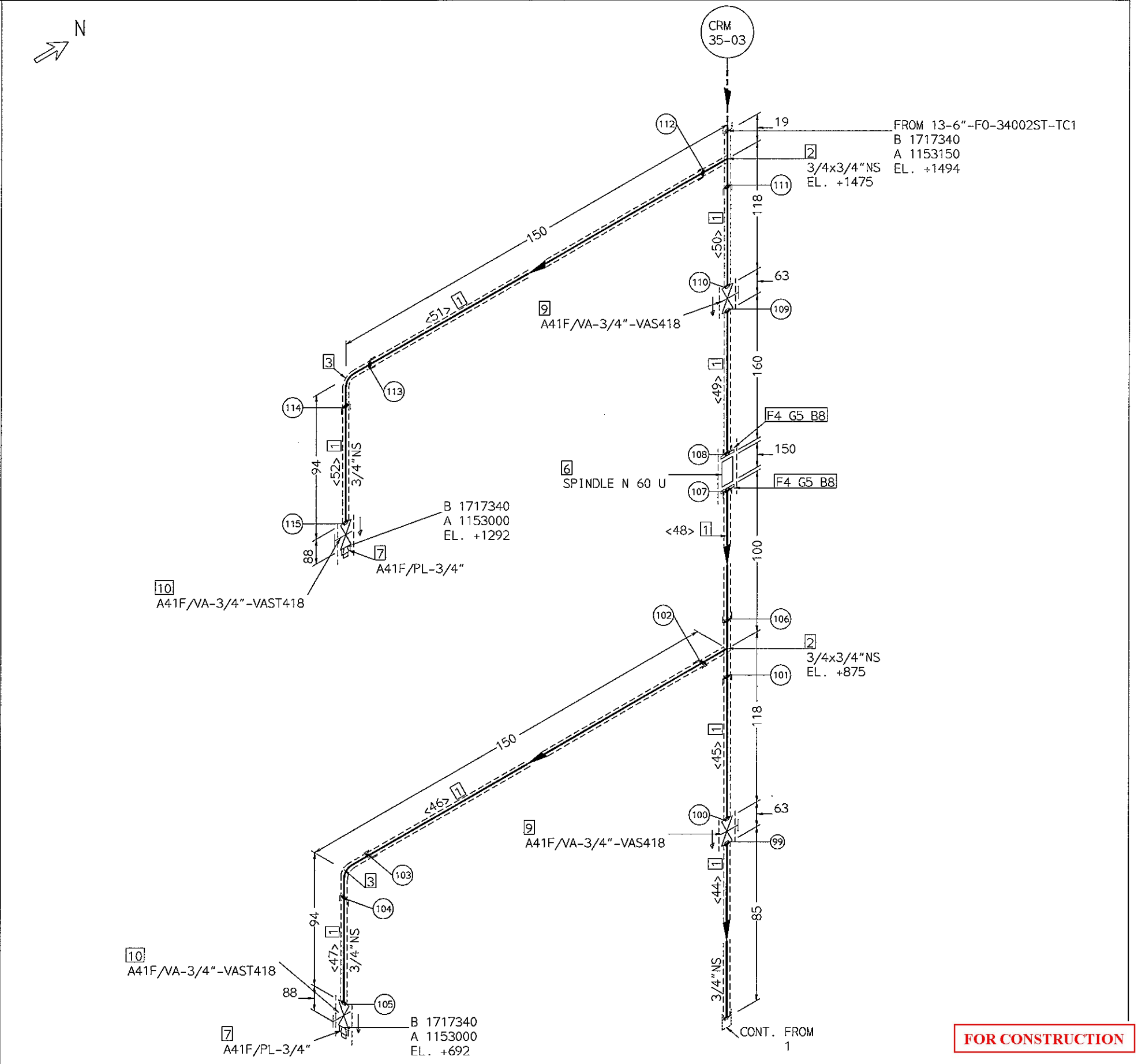
CUT PIPE LENGTH						
PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH	N.S. (INS)
<35>	85	3/4		<36>	99	3/4
<37>	112	3/4		<38>	75	3/4
<39>	76	3/4		<40>	155	3/4
<41>	99	3/4		<42>	112	3/4
<43>	75	3/4				



△						DPR. PRESS.: 0.17 MPa(G)	DPR. TEMP.: 130 °C	CLASS: A41F	DWN. K.W.TSAI	06/03/2011	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 : H50	DESN. K.W.CHANG	06/03/2011					
△						HYDRO TEST: WATER 0.525 MPa(G)	PWHT : NO	TRACING : ---	CHK. Y.C.CHOU	06/03/2011					
△						PAINTING : PER SPEC.	STEAM OUT: NO	RT : 10	APPR. A.F.WU	06/03/2011					
△	08/31/2011	FOR CONSTRUCTION	K.W.TSAI	Y.C.CHOU	A.F.WU	WELDED FIELD WELDED SOCKET THREAD COUPLING FIELD CONN. SUPPORT STEAM TRACE INSULATION				DWG NO.: 313A		CONTRACT: C192502	LINE NO.:	SHT.	ISSUE
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.					DIA. NO.: 1208-036/0201-033		FILE NO.: 13-LLCCRM35-6	13-2"-LLC-CRM35-A41F-H	6 OF 10	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	0.9M
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
GASKETS				
5	GASKET CL150 RF 4.5mm 316SS SPIRAL WOUND FILLER FLEXIBLE GRAPHITE INNER RING 316SS OUTER RING LOW CS (G214ACH) ASME B16.20	3/4	A41F/GR-3/4"-G214ACH	2
INSTRUMENTS				
6	TRAP CL150 RF	3/4	A41F/TRAP-3/4"	1
ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
FITTINGS				
7	PLUG A105 HEXAGONAL TYPE SCRD(M-NPT) ASME B16.11	3/4	A41F/PL-3/4"	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	2
10	GATE VALVE CL800 SW/SCRD(NPT) A105 BODY #8 TRIM SOLID WEDGE OS&Y BB AP1602 BY MFR (VAST418)	3/4	A41F/VA-3/4"-VAST418	2

CUT PIPE LENGTH						
PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH	N.S. (INS)
<44>	85	3/4		<45>	99	3/4
<46>	112	3/4		<47>	75	3/4
<48>	76	3/4		<49>	155	3/4
<50>	99	3/4		<51>	112	3/4
<52>	75	3/4				



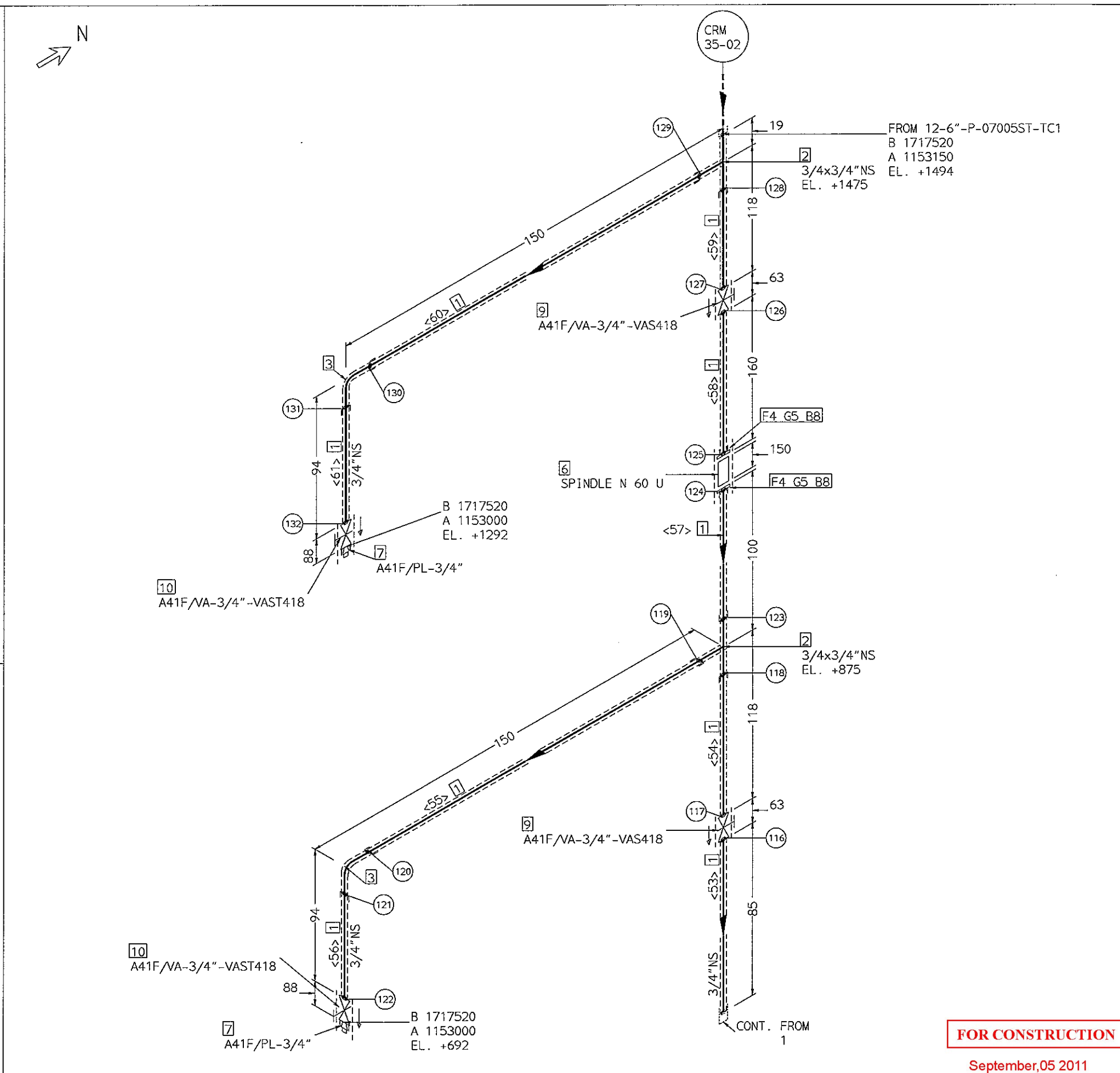
FOR CONSTRUCTION

September,05 2011

△						OPR. PRESS.: 0.17 MPa(G)	OPR. TEMP.: 130 °C	CLASS: A41F	DWN.	K.W.TSAI	06/03/2011	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: H50	DESN.	K.W.CHANG	06/03/2011				
△						HYDRD TEST: WATER 0.525 MPa(G)	PWHT: NO	TRACING: ---	CHK.	Y.C.CHOU	06/03/2011				
△						PAINTING: PER SPEC.	STEAM OUT: NO	RT: 10	APPR.	A.F.WU	06/03/2011				
△	08/31/2011	FOR CONSTRUCTION		K.W.TSAI	Y.C.CHOU	A.F.WU	WELDED FIELD WELDED SOCKET THREAD COUPLING FIELD CONN. SUPPORT STEAM TRACE INSULATION				DWG NO.: 313A	CONTRACT: C192502	LINE NO.:	SHT.	ISSUE
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.						DIA. NO.: 1208-036/0201-033	FILE NO.: 13-LLCCRM35-7	13-2"-LLC-CRM35-A41F-H	7 OF 10	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	0.9M
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
GASKETS				
5	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
INSTRUMENTS				
6	TRAP CL150 RF	3/4	A41F/TRAP-3/4"	1
ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
FITTINGS				
7	PLUG A105 HEXAGONAL TYPE SCRD(M-NPT) ASME B16.11	3/4	A41F/PL-3/4"	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	2
10	GATE VALVE CL800 SW/SCRD(NPT) A105 BODY #8 TRIM SOLID WEDGE OS&Y BB AP1602 BY MFR (VAST418)	3/4	A41F/VA-3/4"-VAST418	2

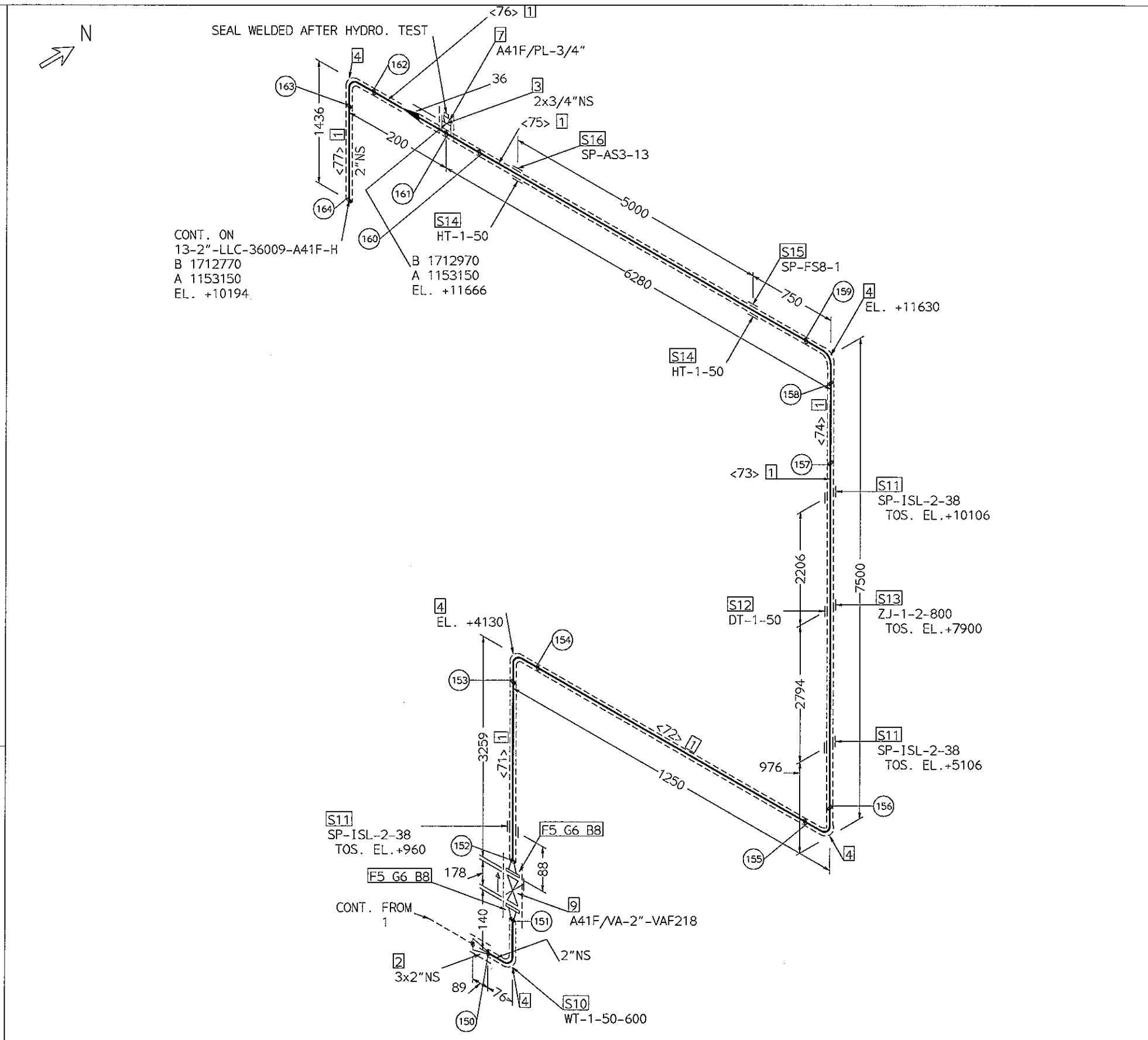
CUT PIPE LENGTH						
PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH	N.S. (INS)
<53>	85	3/4		<54>	99	3/4
<55>	112	3/4		<56>	75	3/4
<57>	76	3/4		<58>	155	3/4
<59>	99	3/4		<60>	112	3/4
<61>	75	3/4				



△						DPR. PRESS.: 0.17 MPa(G)	DPR. TEMP.: 130 °C	CLASS: A41F	DWN. K.W.TSAI	06/03/2011	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: H50	DESN. K.W.CHANG	06/03/2011					
△						HYDRO TEST: WATER 0.525 MPa(G)	PWHT: NO	TRACING: ---	CHK. Y.C.CHOU	06/03/2011					
△						PAINTING: PER SPEC.	STEAM OUT: NO	RT: 10	APPR. A.F.WU	06/03/2011					
△	08/31/2011	FOR CONSTRUCTION	K.W.TSAI	Y.C.CHOU	A.F.WU	WELDED FIELD WELDED SOCKET THREAD COUPLING FIELD CONN. SUPPORT STEAM TRACE INSULATION				DWG NO.: 313A		CONTRACT: C192502	LINE NO.:	SHT.	ISSUE
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.					DIA. NO.: 1208-036/0201-033		FILE NO.: 13-LLCCRM35-8	13-2"-LLC-CRM35-A41F-H8 OF 100		

FABRICATION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
PIPE				
1	PIPE A106 GR.B SCH40 SMLS BE ASME B36.10M	2	A41F/P-2"-40	19.3M
FITTINGS				
2	REDUCER CONC A234 GR.WPB SCH40 SMLS BW ASME B16.9	3 x 2	A41F/RC-3"x2"	1
3	HALF COUPLING CL3000 SCRD(NPT) A105 ASME B16.11	2 x 3/4	A41F/CHT-2"x3/4"	1
4	90 DEG. ELBOW LR A234 GR.WPB SCH40 SMLS BW ASME B16.9	2	A41F/EB-2"x90	5
FLANGES				
5	FLANGE CL150 RF WN A105 SCH40 BORE ASME B16.5	2	A41F/WFR-2"	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	2	A41F/GR-2"-G214ACM	2
ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
FITTINGS				
7	PLUG A105 HEXAGONAL TYPE SCRD(M-NPT) ASME B16.11	3/4	A41F/PL-3/4"	1
BOLTS				
8	100 MM LONG STUD BOLT . M16 A193 GR.B7 W/HEX HEAD HEAVY NUT A194 GR.2H		A41F/BSF-2"-100	8
COMPONENTS				
9	GATE VALVE CL150 RF A216 GR.WCB BODY #8 TRIM FLEXIBLE WEDGE OS&Y BB ASME B16.10 API600 (VAF218)	2	A41F/VA-2"-VAF218	1
SUPPORTS				
10	PIPE SUPPORT (WT-1-50-600)	2	SUP/WT-1-2"	1
11	SPECIAL SUPPORT (SP-ISL-2-38)	2	SUP/ISL-2"	3
12	PIPE SUPPORT (DT-1-50)	2	SUP/DT-1-2"	1
13	PIPE SUPPORT (ZJ-1-2-800)	2	SUP/ZJ-1-2-2"	1
14	PIPE SUPPORT (HT-1-50)	2	SUP/HT-1-2"	2
15	SPECIAL SUPPORT (SP-FS8-1)	2	SUP/FS8-1-2"	1
16	SPECIAL SUPPORT (SP-AS3-13)	2	SUP/AS3-2"	1

CUT PIPE LENGTH					
PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH
<71>	3119	2		<72>	1098
<73>	6000	2		<74>	1347
<75>	6000	2		<76>	328
<77>	1360	2			



FOR CONSTRUCTION

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△						OPR. PRESS.: 0.17 MPa(G)	OPR. TEMP.: 130 °C	CLASS: A41F	DWN. K.W.TSAI	06/03/2011	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 : H50	DESN. K.W.CHIANG	06/03/2011					
△						HYDRD TEST: WATER 0.525 MPa(G)	PWHT : NO	TRACING : ---	CHK. Y.C.CHOU	06/03/2011					
△						PAINTING : PER SPEC.	STEAM OUT: NO	RT : 10 %	APPR. A.F.WU	06/03/2011					
△	08/31/2011	FOR CONSTRUCTION	K.W.TSAI	Y.C.CHOU	A.F.WU	WELDED FIELD WELDED SOCKET THREAD COUPLING FIELD CONN. SUPPORT STEAM TRACE INSULATION				DWG NO.: 313A		CONTRACT: C192502	LINE NO. :	SHT.	ISSUE
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.	        				DIA. NO.: 1208-036/0201-033		FILE NO.: 13-LLCCRM35-10	13-2"-LLC-CRM35-A41F-H	10 OF 10	0