







<b>Contractor:</b>  <b>TIANCHEN CORP. CHINA</b>	<b>Project :</b>	<b>MKP Methanol Project</b>			<b>Owner :</b>  شرکت کیمیای پارس خاورمیانه <i>Mideco East Kimitage Pars Co.</i>
	<b>Unit :</b>	<b>Flare</b>	<b>Phase</b>	<b>Detail Engineering</b>	
	<b>Doc. Title :</b>	<b>Isometric Drawing</b>			
<b>Vendor:</b>  <b>SUNPOWER GROUP LTD.</b>	<b>Owner No. :</b>	<b>MKP-VD-8500-237-506-A3</b>			
	<b>Contr. No.:</b>	<b>MKP-11-DE-9000-FE-REQ-237</b>			
	<b>Vendor No.</b>	<b>17013D85000PE00-12</b>			
				<b>Rev. : 2</b>	<b>Page : 1 of 109</b>


## Isometric Drawing

REV.	DATE	PURPOSE OF ISSUE	PREPARE	CHECK	REVIEW	APPROVE
3	11.12.2019	Final Issue	Geng Yunfei	Bai Yang	Ji Ningbo	
2	29.11.2018	Final Issue	Geng Yunfei	Bai Yang	Ji Ningbo	
1	08.11.2018	Final Issue	Geng Yunfei	Bai Yang	Ji Ningbo	
0	14.12.2017	Final Issue	Geng Yunfei	Bai Yang	Ji Ningbo	
A	17.07.2017	Issued For Review	Geng Yunfei	Bai Yang	Ji Ningbo	

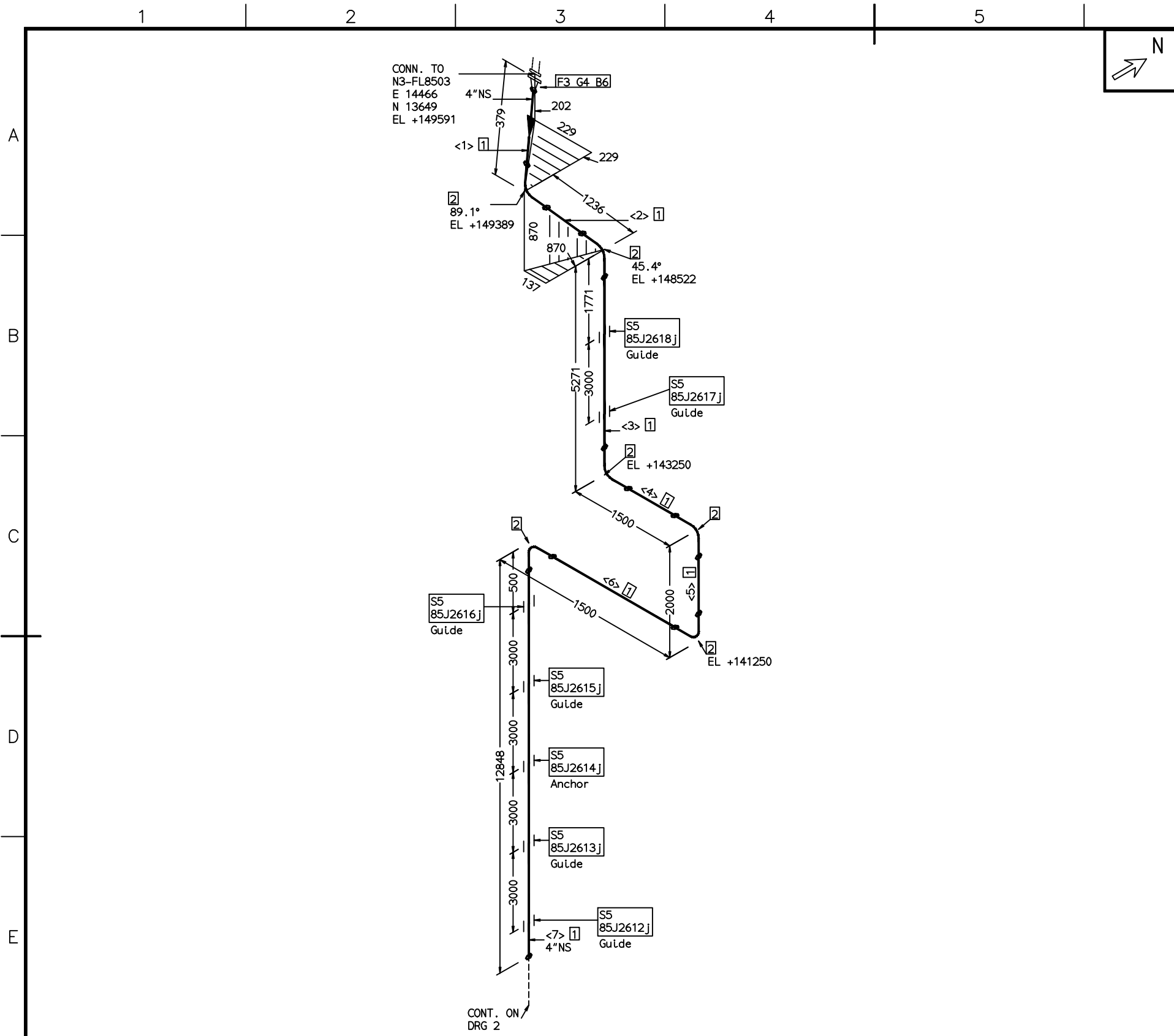
<b>Contractor:</b>  <b>TIANCHEN CORP. CHINA</b>	<b>Project :</b>	<b>MKP Methanol Project</b>			<b>Owner :</b>  شرکت کیمیاوی پارس خاورمیانه <b>Middle East Kinimayeh Parsi Co.</b>
	<b>Unit :</b>	<b>Flare</b>	<b>Phase</b>	<b>Detail Engineering</b>	
	<b>Doc. Title :</b>	<b>Isometric Drawing</b>			
<b>Vendor:</b>  <b>SUNPOWER GROUP LTD.</b>	<b>Owner No. :</b>	<b>MKP-VD-8500-237-506-A3</b>			
	<b>Contr. No.:</b>	<b>MKP-11-DE-9000-FE-REQ-237</b>			
	<b>Vendor No.</b>	<b>17013D85000PE00-12</b>			
				<b>Rev. : 2</b>	<b>Page : 2 of 109</b>

### REVISION INDEX

REV. PAGE	A	0	1	2	REV. PAGE	A	0	1	2	REV. PAGE	A	0	1	2	REV. PAGE	A					
1	X				39	X	X	X	X	77		X	X	X							
2	X				40	X	X	X	X	78		X	X	X							
3	X	X	X		41	X	X	X	X	79		X	X	X							
4	X	X			42	X	X	X	X	80		X	X	X							
5	X	X	X	X	43	X	X	X	X	81		X	X	X							
6	X	X	X	X	44	X	X	X	X	82		X	X	X							
7	X	X	X	X	45	X	X	X	X	83		X	X	X							
8	X	X	X	X	46	X	X	X	X	84		X	X	X							
9	X	X	X	X	47	X	X	X	X	85		X	X	X							
10	X	X	X	X	48	X	X	X	X	86		X	X	X							
11	X	X	X	X	49	X	X	X	X	87		X	X	X							
12	X	X	X	X	50	X	X	X	X	88		X	X	X							
13	X	X	X	X	51	X	X	X	X	89		X	X	X							
14	X	X	X	X	52	X	X	X	X	90		X	X	X							
15	X	X	X	X	53	X	X	X	X	91		X	X	X							
16	X	X	X	X	54	X	X	X	X	92		X	X	X							
17	X	X	X	X	55	X	X	X	X	93		X	X	X							
18	X	X	X	X	56	X	X	X	X	94		X	X	X							
19	X	X	X	X	57	X	X	X	X	95		X	X	X							
20	X	X	X	X	58	X	X	X	X	96		X	X	X							
21	X	X	X	X	59	X	X	X	X	97		X	X	X							
22	X	X	X	X	60	X	X	X	X	98		X	X	X							
23	X	X	X	X	61	X	X	X	X	99		X	X	X							
24	X	X	X	X	62	X	X	X	X	100		X	X	X							
25	X	X	X	X	63	X	X	X	X	101		X	X	X							
26	X	X	X	X	64	X	X	X	X	102		X	X	X							
27	X	X	X	X	65	X	X	X	X	103		X	X	X							
28	X	X	X	X	66	X	X	X	X	104		X	X	X							
29	X	X	X	X	67	X	X	X	X	105		X	X	X							
30	X	X	X	X	68		X	X	X	106		X	X	X							
31	X	X	X	X	69		X	X	X	107		X	X	X							
32	X	X	X	X	70		X	X	X	108		X	X	X							
33	X	X	X	X	71		X	X	X	109		X	X	X							
34	X	X	X	X	72		X	X	X	110		X									
35	X	X	X	X	73		X	X	X	111		X									
36	X	X	X	X	74		X	X	X												
37	X	X	X	X	75		X	X	X												
38	X	X	X	X	76		X	X	X												

 <b>江苏中圣高科技产业有限公司</b> JIANGSU SUNPOWER TECHNOLOGY CO., LTD		<b>管段轴测图索引</b> <b>ISOMETRIC DRAWING INDEX</b>		文件号 DOC. NO.	MKP-VD-8500-237-506	
				第PAGE 3 页, 共OF 109 页		
序号 No.	图纸文件号 Dwg. & Doc. No.	管线号 Line Number	图纸张数 Dwg. Sheet		备注 Remarks	修改 Mod
			自然 张数 Sheet	折合A1 Equiv. to A1		
1	MKP-VD-8500-237-506-FLG-85-201	4' -FLG-85-201-B24-P8	5	1.25		
2	MKP-VD-8500-237-506-FLG-85-200	64"-FLG-85-200-B24-P8	1	0.25		
3	MKP-VD-8500-237-506-HPC-85-200	1' -HPC-85-200-D24-H6	1	0.5		
4	MKP-VD-8500-237-506-HPS-85-201	2"-HPS-85-201-D24-H6	15	4		
5	MKP-VD-8500-237-506-HPS-85-200	2"-HPS-85-200-F24-H6	4	1		
6	MKP-VD-8500-237-506-HPS-85-202	1"-HPS-85-202-D24-H6	4	1		
7	MKP-VD-8500-237-506-IA-85-200	2"-IA-85-200-B50-N	2	0.5		
8	MKP-VD-8500-237-506-IA-85-201	3/4' -IA-85-201-B50-N	1	0.25		
9	MKP-VD-8500-237-506-IA-85-202	1' -IA-85-202-B40-N	2	0.5		
10	MKP-VD-8500-237-506-NG-85-201	3' -NG-85-201-B24-N	2	0.5		
11	MKP-VD-8500-237-506-NG-85-202	1' -NG-85-202-B24-N	6	1.5		
12	MKP-VD-8500-237-506-NG-85-203	2' -NG-85-203-B24-N	5	1.25		
13	MKP-VD-8500-237-506-NG-85-204	2' -NG-85-204-B24-N	2	0.5		
14	MKP-VD-8500-237-506-NG-85-205	1' -NG-85-205-B50-N	1	0.25		
15	MKP-VD-8500-237-506-NG-85-215	1' -NG-85-215-B40-N	2	0.5		
16	MKP-VD-8500-237-506-NG-85-206	1' -NG-85-206-B50-N	4	1		
17	MKP-VD-8500-237-506-NG-85-207	1' -NG-85-207-B50-N	4	1		
18	MKP-VD-8500-237-506-NG-85-208	1' -NG-85-208-B50-N	4	1		
19	MKP-VD-8500-237-506-NG-85-209	1' -NG-85-209-B50-N	4	1		
20	MKP-VD-8500-237-506-NG-85-214	1' -NG-85-214-B50-N	3	0.75		
21	MKP-VD-8500-237-506-NG-85-213	1' -NG-85-213-B50-N	3	0.75		
22	MKP-VD-8500-237-506-NG-85-212	1' -NG-85-212-B50-N	3	0.75		
23	MKP-VD-8500-237-506-NG-85-210	1' -NG-85-210-B40-N	4	0.5		
24	MKP-VD-8500-237-506-NG-85-301	2' -NG-85-301-B50-N	6	1.5		
25	MKP-VD-8500-237-506-NG-85-211	1' -NG-85-211-B50-N	3	0.75		
26	MKP-VD-8500-237-506-NG-85-200	4"-NG-85-200-B24-N	2	0.5		





FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	4	PPSB1506A_04_S23.1M
<b>FITTINGS</b>			
2	ELBOW 90° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	4	JELSB1506D_04_6
<b>FLANGES</b>			
3	FLANGE;WN;CL150;RF;A105;ASME B16.5;SCH40	4	FFW62R1801H_04 1
<b>GASKETS</b>			
4	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	4	GSD62A4SGD_04: 1
<b>SUPPORTS</b>			
5	PIPING SUPPORT;ATTA	4	ATTA01_04:100 7
<b>ERECTION MATERIALS</b>			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>BOLTS</b>			
6	105 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 8

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSB1506A_04_S	<1>	153	4		BE/BE
4:100					
PPSB1506A_04_S	<2>	1022	4		BE/BE
4:100					
PPSB1506A_04_S	<3>	5056	4		BE/BE
4:100					
PPSB1506A_04_S	<4>	1195	4		BE/BE
4:100					
PPSB1506A_04_S	<5>	1696	4		BE/BE
4:100					
PPSB1506A_04_S	<6>	1195	4		BE/BE
4:100					
PPSB1506A_04_S	<7>	12696	4		BE/BE
4:100					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
				3

 TCC 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 1 TOTAL 5
 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 1 TOTAL 5

Isometric Drawing 4''-FLG-85-201-B24-P8	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 1	TOT. 5
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES

1:DELETE.

2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.

3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.

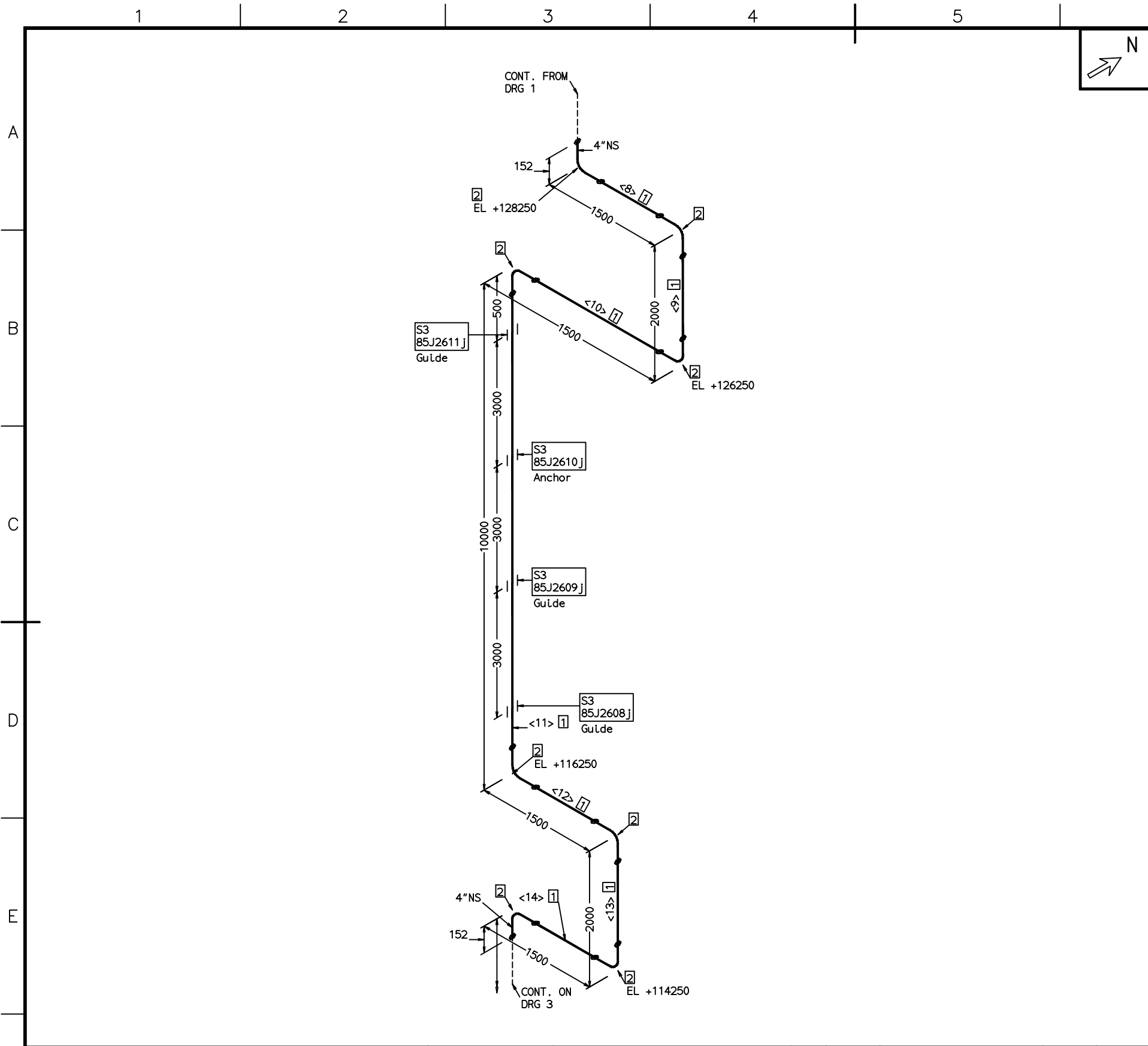
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.

5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.

6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$   
 N,E IS ARCHITECTURE COORDINATE SYSTEM.  
 X,Y IS SURVEYING COORDINATE SYSTEM.

7:DELETE.

DESIGN PRESS.(barg):	5.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	11.73	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	P8	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	A4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	4	PPSB1506A_04_S17.9M
<b>FITTINGS</b>			
2	ELBOW 90° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	4	JELSB1506D_04_ 8
<b>SUPPORTS</b>			
3	PIPING SUPPORT;ATTA	4	ATTA01_04:100 4

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. BE/BE
PPSB1506A_04_S	<8>	1195	4		BE/BE
PPSB1506A_04_S	<9>	1696	4		BE/BE
PPSB1506A_04_S	<10>	1195	4		BE/BE
PPSB1506A_04_S	<11>	9696	4		BE/BE
PPSB1506A_04_S	<12>	1195	4		BE/BE
PPSB1506A_04_S	<13>	1696	4		BE/BE
PPSB1506A_04_S	<14>	1195	4		BE/BE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



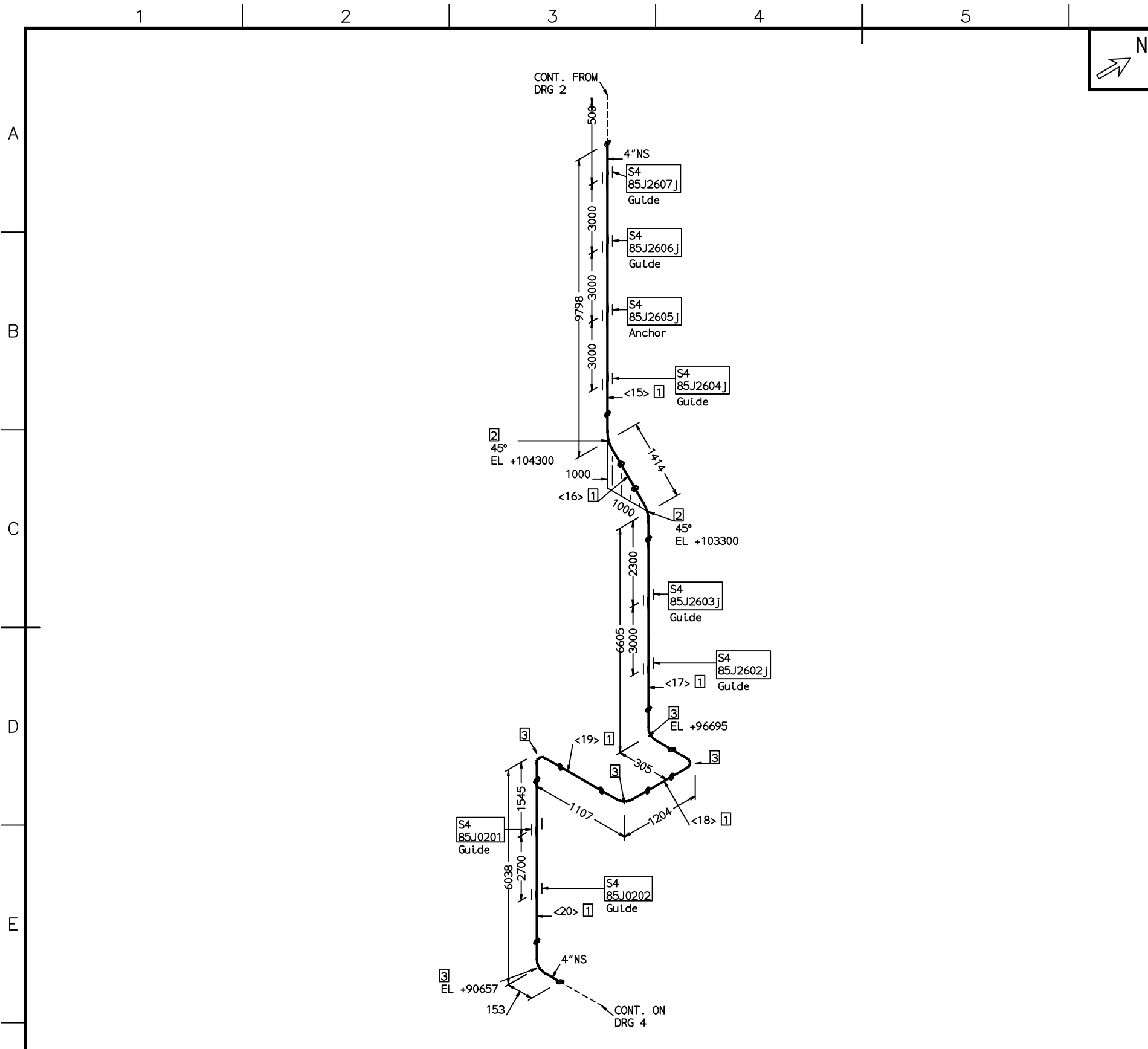
Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>OPERATIONS DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 TCC 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 2 TOTAL 5
 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 2 TOTAL 5

Isometric Drawing 4''-FLG-85-201-824-P8	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 5
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	5.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	11.73	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	P8	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	A4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								




FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	4	PPSB1506A_04_S24.9M
<b>FITTINGS</b>			
2	ELBOW 45° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	4	JEKSB1506D_04_2
3	ELBOW 90° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	4	JELSB1506D_04_5
<b>SUPPORTS</b>			
4	PIPING SUPPORT;ATTA	4	ATTA01_04:100 8

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSB1506A_04_S <15>	<15>	9735	4		BE/BE
PPSB1506A_04_S <16>	<16>	1288	4		BE/BE
PPSB1506A_04_S <17>	<17>	6390	4		BE/BE
PPSB1506A_04_S <18>	<18>	900	4		BE/BE
PPSB1506A_04_S <19>	<19>	803	4		BE/BE
PPSB1506A_04_S <20>	<20>	5734	4		BE/BE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

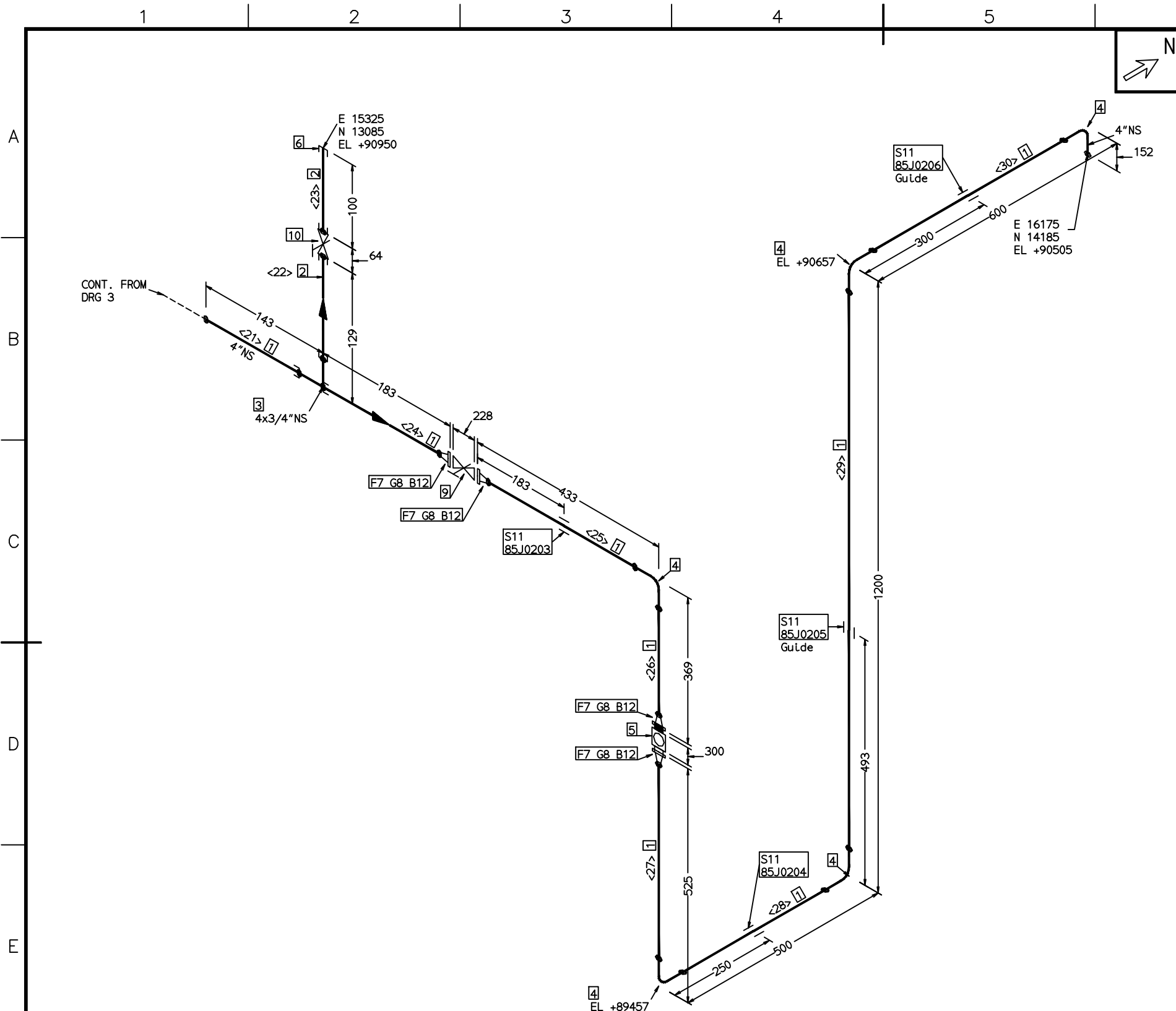
 <b>TCC</b> 中国天辰工程技术有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 3 TOTAL 5
 <b>江苏中圣高科技产业有限公司</b> JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 3 TOTAL 5

Isometric Drawing 4''-FLG-85-201-824-P8	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 3	TOT. 5
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y = N \cos \alpha - E \sin \alpha + 3051408.46$ ;  $X = N \sin \alpha + E \cos \alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N, E IS ARCHITECTURE COORDINATE SYSTEM.  
 X, Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	5.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	11.73	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	P8	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	A4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	4	PPSB1506A_04_S 2.3M
2	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	3/4	PPSP1506A_0J_S 0.2M
<b>FITTINGS</b>			
3	SOCKETOLET;SW;ASTM A105;MSS SP-97;CL3000	4 x 3/4	JOOFS18010L3_0 1
4	ELBOW 90°;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	4	JELSB1506D_04_ 5
5	Pplng Slight glass;CL150;RF;A105/Tempered boron glass;See data table	4	SJA62R70AF_04: 1
6	CAP;NPT;ASTM A105;ASME B16.11;CL3000	3/4	JKFFN1801GL3_0 1
<b>FLANGES</b>			
7	FLANGE;WN;CL150;RF;A105;ASME B16.5;SCH40	4	FFW62R1801H_04 4
<b>GASKETS</b>			
8	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	4	GSD62A4SGD_04: 4
<b>VALVES / IN-LINE ITEMS</b>			
9	GATE VALVE;BB;OS&Y;CL150;RF;ASTM A216-WCB;Trim:13Cr/STL;API600;FLEXIBLE WEDGE	4	Z40H1-150C2_04 1
10	GATE VALVE;BB;OS&Y;CL800;SW;A105;Trim:13Cr/STL;API602;SOLID WEDGE	3/4	Z51H1-800C1_0J 1
<b>SUPPORTS</b>			
11	PIPING SUPPORT;ATTA	4	ATTA01_04:100 4
<b>ERECTION MATERIALS</b>			
<b>BOLTS</b>			
12	105 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 32

\*\*\*\*\*  
\* CONT. ON DRG 5 \*  
\*\*\*\*\*

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

LIBRARY	HALDOR TOPSØE A/S	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
CONTRACTOR	TCC 中国天辰工程有限公司				3

CONTRACTOR	TCC 中国天辰工程有限公司	CONTRACTOR DRAWING NO.	MKP-11-DE-9000-FE-REQ-237
SUB-CONTRACTOR	江苏中圣高科技产业有限公司	SUB-CONTRACTOR DRAWING NO.	17013D85000PE00-12
	JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SHEET 4	TOTAL 5

Isometric Drawing		PROJECT	ME Methanol Project
4''-FLG-85-201-824-P8		UNIT	Flare
		PHASE	Detail Engineering
SCALE NO	SHEET 4	TOT. 5	SIZE A3
OWNER		MKP-VD-8500-237-506-A3	

NOTES

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha - E\sin\alpha + 3051408.46$ ;  $X=N\sin\alpha + E\cos\alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N,E IS ARCHITECTURE COORDINATE SYSTEM.  
 X,Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	5.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE PRESS(barg)	11.73	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
INSULATION CLASS:	P8	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY
PAINT CODE/COATING:	A4	REV.	DATE	DESCRIPTION	DESIGN	CHECK
SHOP WELD		FIELD WELD		SOCKET WELD		SCREWED JOINT
PIPING CLASS:	B24			COMPJ	PIPE	LAGGED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1			JOINT	SUPPORT	TRACED PIPE



\*\*\*\*\*  
\* CONT. FROM DRG 4 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSB1506A_04_S <21>	4:100	143	4		BE/PE
PPSP1506A_0J_S <22>	8:20	50	3/4		PE/PE
PPSP1506A_0J_S <23>	8:20	100	3/4		PE/TH
PPSB1506A_04_S <24>	4:100	106	4		PE/BE
PPSB1506A_04_S <25>	4:100	204	4		BE/BE
PPSB1506A_04_S <26>	4:100	141	4		BE/BE
PPSB1506A_04_S <27>	4:100	297	4		BE/BE
PPSB1506A_04_S <28>	4:100	195	4		BE/BE
PPSB1506A_04_S <29>	4:100	896	4		BE/BE
PPSB1506A_04_S <30>	4:100	295	4		BE/BE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 5 TOTAL 5

 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 5 TOTAL 5

Isometric Drawing 4''-FLG-85-201-824-P8	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 5	TOT. 5
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY				
1:DELETE.	DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	11.73	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	P8	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	A4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

A

B

C

D

E

F

A

B

C

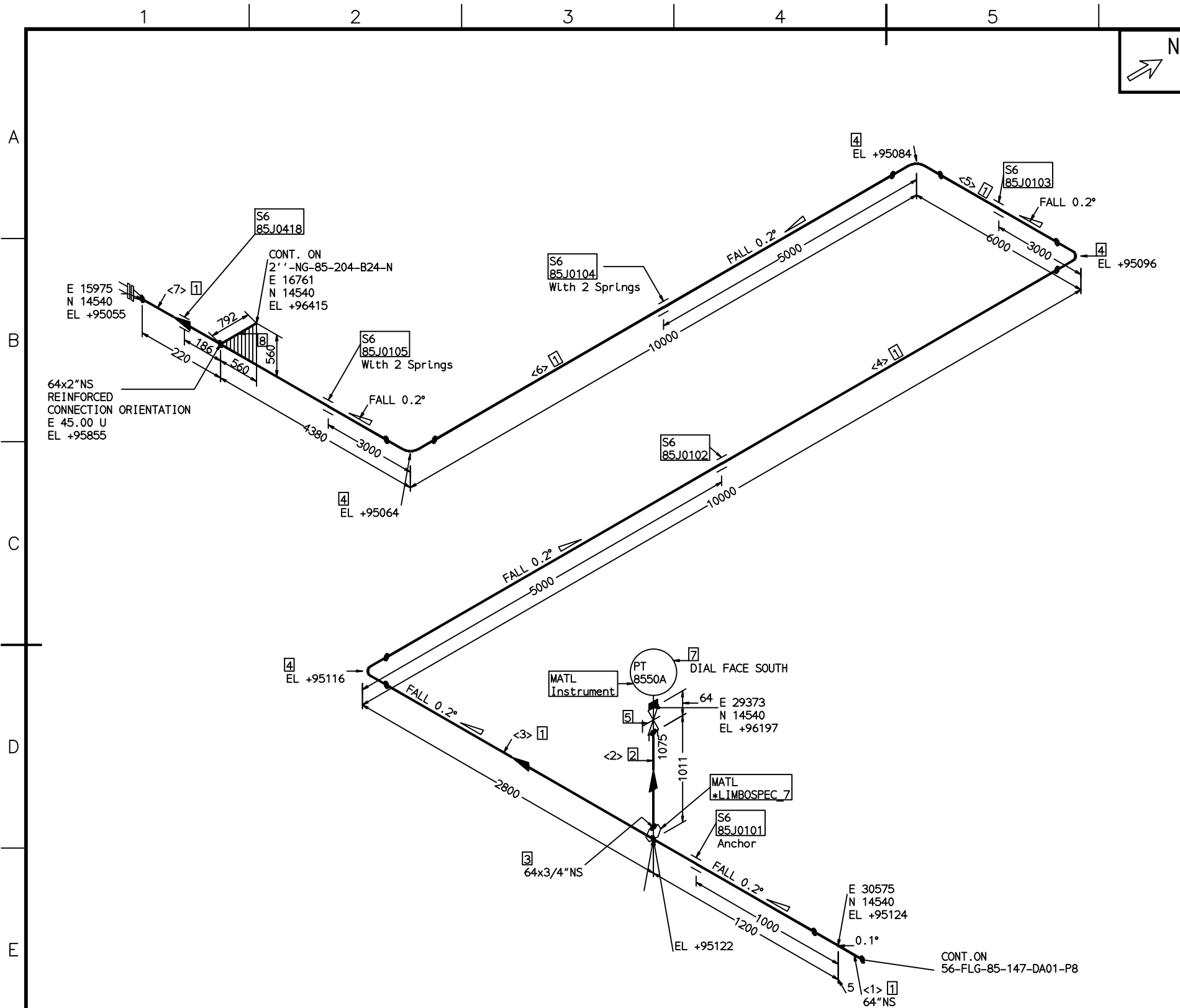
D

E

F

1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;EFW,BE,ASTM A672 Gr.B60 CL.12,ASME B36.10M;14.27mm	64	PPEP1523A_64_A15.1M
2	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	3/4	PPSP1506A_OJ_S 0.2M
8	PIPE;SMLS;BE;ASTM A106 B;ASME B36.10M;SCH40	2	PPSB1506A_02_S 0.795M
<b>FITTINGS</b>			
3	SOCKETOLET;SW;ASTM A105;MSS SP-97;CL3000	64 x 3/4	JOOFS13030L3_6 1
4	ELBOW 90°;WELDED;LR;BW;ASTM A234 WPB;ASME B16.9;14.27mm	64	JELWB1601F_64_ 4
<b>VALVES / IN-LINE ITEMS</b>			
5	GATE VALVE;BB;OS&Y;CL800;SW;A105;TrIm:13Cr/S TL;API602;SOLID WEDGE	3/4	Z51H1-800C1_OJ 1
<b>SUPPORTS</b>			
6	PIPING SUPPORT;ATTA	64	ATTA01_64;1600 5
<b>ERECTION MATERIALS</b>			
<b>INSTRUMENTS</b>			
7	仪表 PT 8550A	3/4	1

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. PE/BE
PPEP1523A_64_A	<1>	2	64		PE/BE
E:1600					
PPSP1506A_OJ_S	<2>	150	3/4		BE/PE
E:20					
PPEP1523A_64_A	<3>	1560	64		BE/BE
E:1600					
PPEP1523A_64_A	<4>	5124	64		BE/BE
E:1600					
PPEP1523A_64_A	<5>	1124	64		BE/BE
E:1600					
PPEP1523A_64_A	<6>	5124	64		BE/BE
E:1600					
PPEP1523A_64_A	<7>	2162	64		BE/PE
E:1600					
PPSB1506A_02_S	<8>	792	2		BE/PE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:  Middle East Kimiaye Pars Company

LIBRARY	HALDOR TOPSØE A/S	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
CONTRACTOR	TCC 中国天辰工程有限公司				3

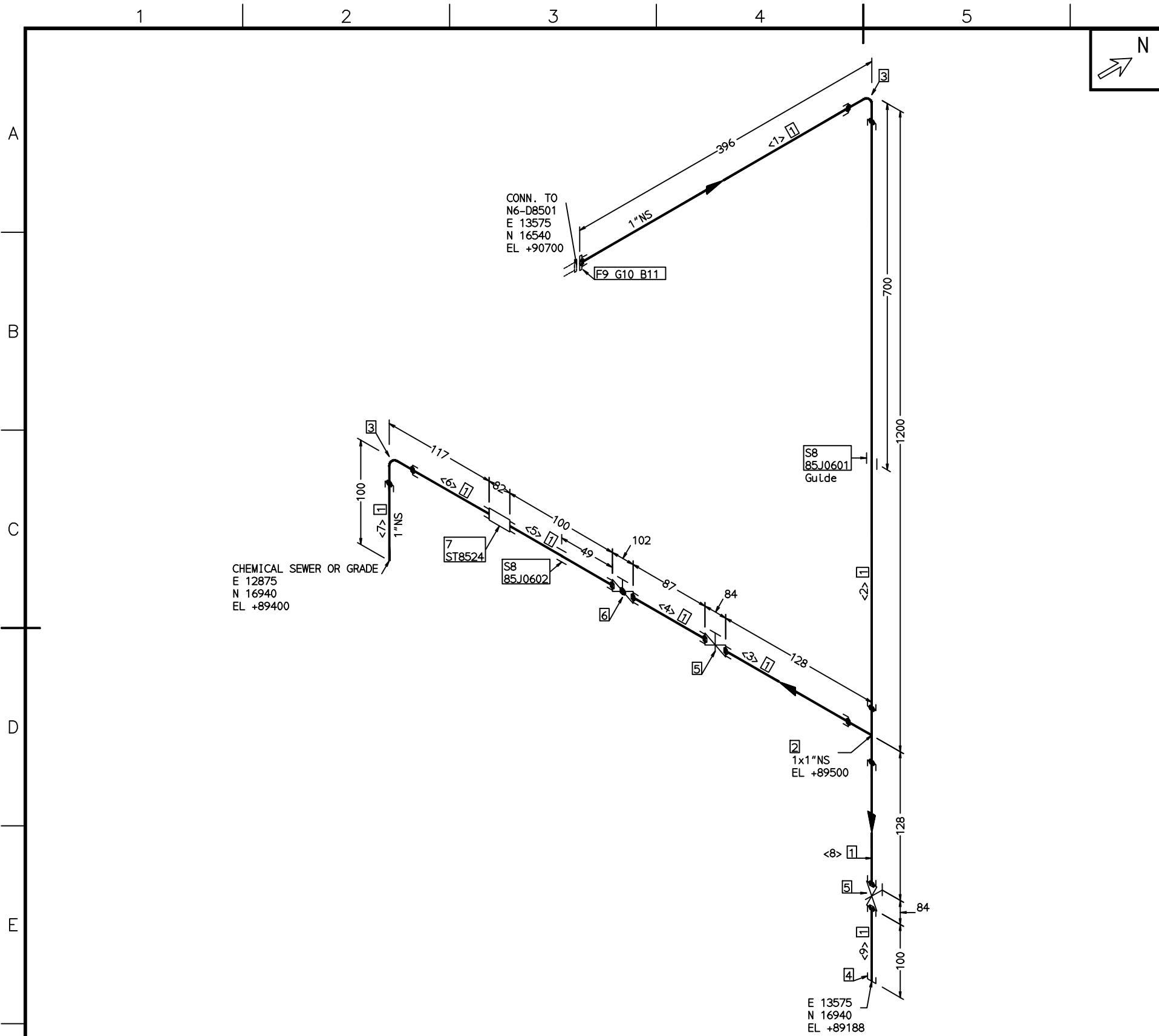
CONTRACTOR DRAWING NO.	
MKP-11-DE-9000-FE-REQ-237	
SHEET 1	TOTAL 1
SUB-CONTRACTOR DRAWING NO.	
17013D85000PE00-12	
SHEET 1	TOTAL 1

Isometric Drawing		PROJECT	ME Methanol Project
64"-FLG-85-200-B24-P8		UNIT	Flare
		PHASE	Detail Engineering
SCALE NO	SHEET 1	TOT. 1	SIZE A3
OWNER DWG NO.		MKP-VD-8500-237-506-A3	

**NOTES**

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha - E\sin\alpha + 3051408.46$ ;  $X=N\sin\alpha + E\cos\alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N.E IS ARCHITECTURE COORDINATE SYSTEM.  
 X.Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	5.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	AIR	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	5.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	P8	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	A4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								



FABRICATION MATERIALS				
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>PIPE</b>				
1	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	1	PPSP1506A_01_S 2.2M	
<b>FITTINGS</b>				
2	TEE EQUAL;SW;ASTM A105;ASME B16.11;CL3000	1 x 1	JTSFS1801GL3_0	1
3	ELBOW 90°;SW;ASTM A105;ASME B16.11;CL3000	1	JEQFS1801GL3_0	2
4	CAP;NPT;ASTM A105;ASME B16.11;CL3000	1	JKFFN1801GL3_0	1
<b>VALVES / IN-LINE ITEMS</b>				
5	GATE VALVE;BB;OS&Y;CL800;SW;A105;TrLm:13Cr/S TL;API602;SOLID WEDGE GLOBE	1	Z51H1-800C1_01	2
6	VALVE;BB;OS&Y;CL800;SW;A105;TrLm:13Cr/S TL;API602;SWIVEL PLUG	1	J51H1-800C1_01	1
7	TRAP;CL800;SW;BODY:A105;TrLm:304SS;See data table	1	TRAP68S01AF_01	1
<b>SUPPORTS</b>				
8	PIPING SUPPORT;ATTA	1	ATTA01_01:25	2
<b>FLANGES</b>				
9	FLANGE;SW;CL300;RF;A105;ASME B16.5	1	FFS63R1801H_01	1
<b>GASKETS</b>				
10	GASKET SS316L WND FLEXIBLE GRAPHITE, SS3161R & CS CR,SPIRAL WND, RF, CL300, ASMEB16.20, ASME B16.5,T=4.5mm.	1	GSD63A1SGD_01:	1
<b>BOLTS</b>				
11	95 FULL THREADED STUD BOLT/2 HEAVY NUTS (1I TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16	4

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. PE/PE
PPSP1506A_01_S	<1>	364	1		PE/PE
8:25					
PPSP1506A_01_S	<2>	1156	1		PE/PE
8:25					
PPSP1506A_01_S	<3>	106	1		PE/PE
8:25					
PPSP1506A_01_S	<4>	87	1		PE/PE
8:25					
PPSP1506A_01_S	<5>	100	1		PE/TH
8:25					
PPSP1506A_01_S	<6>	95	1		TH/PE
8:25					
PPSP1506A_01_S	<7>	78	1		PE/PE
8:25					
PPSP1506A_01_S	<8>	106	1		PE/PE
8:25					
PPSP1506A_01_S	<9>	100	1		PE/TH
8:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:

Middle East  
Kimiaye Pars Company

HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
				3

TCC 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.
	MKP-11-DE-9000-FE-REQ-237
	SHEET 1 TOTAL 1

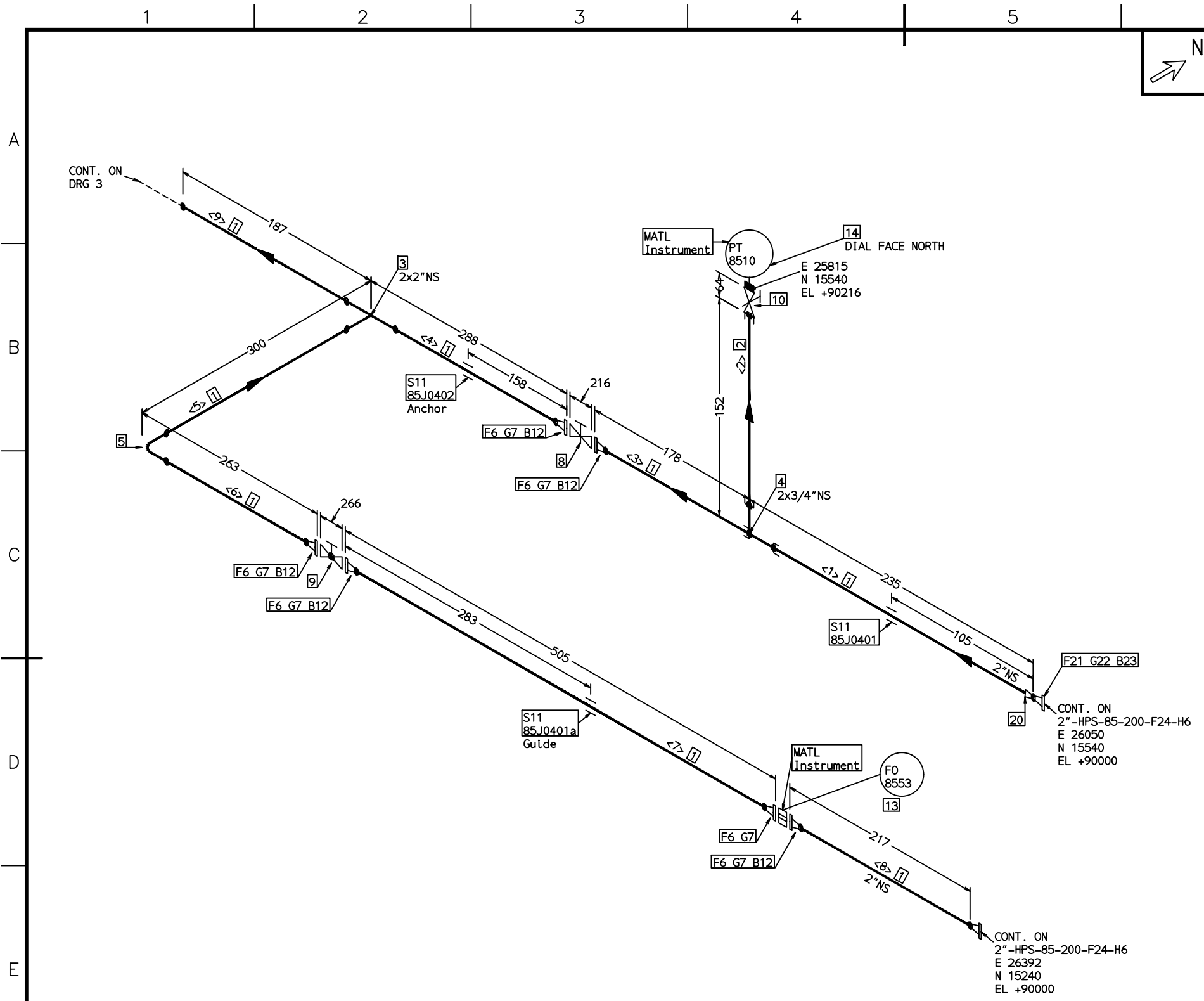
江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.
	17013D85000PE00-12
	SHEET 1 TOTAL 1

Isometric Drawing 1''-HPC-85-200-D24-H6	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 1	TOT. 1
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha - E\sin\alpha + 3051408.46$ ;  $X=N\sin\alpha + E\cos\alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N.E IS ARCHITECTURE COORDINATE SYSTEM.  
 X.Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	15.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	36	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	D24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-506-A1								



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	2	PPSB1506A_02_S 1.5M
2	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	3/4	PPSP1506A_0J_S 0.1M
<b>FITTINGS</b>			
3	TEE EQUAL;SMLS;BW;ASTM A234 WPB;ASME B16.9;SCH40	2 x 2	JTSSB1506D_02_ 1
4	SOCKETOLET;SW;ASTM A105;MSS SP-97;CL3000	2 x 3/4	JOOFS18010L3_0 1
5	ELBOW 90°;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	2	JELSB1506D_02_ 1
20	SWG ECC;ASTM A234 WPB;SMLS BLEXPSE;MSS SP-95 S-160	2 x 1	I30352307 1
<b>FLANGES</b>			
6	FLANGE;WN;CL300;RF;A105;ASME B16.5;SCH40	2	FFW63R1801H_02 6
21	FLANGE;SW;CL600;RF;A105;ASME B16.5;SCH160	1	I30554159 1
<b>GASKETS</b>			
7	GASKET SS316L WND FLEXIBLE GRAPHITE, SS3161R & CS CR, SPIRAL WND, RF, CL300, ASMEB16.20, ASME B16.5, T=4.5mm.	2	GSD63A1SGD_02: 6
22	SP WOUND GASKET 316L-W, GLAPH-F CL600 THK 4.5mm	1	I25418389 1
<b>VALVES / IN-LINE ITEMS</b>			
8	GATE VALVE;BB;OS&Y;CL300;RF;ASTM A216-WCB;TrLm:13Cr/STL;API600;FLEXIBLE WEDGE	2	Z40H1-300C2_02 1
9	GLOBE VALVE;BB;OS&Y;CL300;RF;ASTM A216-WCB;TrLm:13Cr/STL;BS1873;PARABOLIC DISC	2	J41H1-300C2_02 1
10	GATE VALVE;BB;OS&Y;CL800;SW;A105;TrLm:13Cr/S TL;API602;SOLID WEDGE	3/4	Z51H1-800C1_0J 1
<b>SUPPORTS</b>			
11	PIPING SUPPORT;ATTA	2	ATTA01_02:50 3
<b>ERECTION MATERIALS</b>			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY

\*\*\*\*\*  
\* CONT. ON DRG 2 \*  
\*\*\*\*\*

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER: Middle East Kimiaye Pars Company

HALDOR TOPSØE A/S COPENHAGEN DENMARK	DOCUMENT NAME:	JOB NO.:	DOC. NO.:	REV.:
				3

中国天辰工程有限公司 CHINA TIANCHEN ENGINEERING CORPORATION	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 1 TOTAL 15
江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 1 TOTAL 15

Isometric Drawing 2"-HPS-85-201-D24-H6	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 1	TOT. 15
SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3

NOTES

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha -E\sin\alpha +3051408.46$ ;  $X=N\sin\alpha +E\cos\alpha +652275.26$ ;  $\alpha =7.52775036^\circ$   
 N,E IS ARCHITECTURE COORDINATE SYSTEM.  
 X,Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	15.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	36.0	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	D24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

**BOLTS**

12	105 FULL THREADED STUD BOLT/2 HEAVY NUTS (11 TYPE, m=1.0d), ASTM A193 B7/A194 2H, GALVANISED, ASME B18.2.1/18.2.2	5/8	LS3433A:M16	40
23	95 F-Th Bolt&2 HEAVY HEX NUTS ASTM A193 B7/A194 2H GALVANISED	5/8	Item:152-44	4

**INSTRUMENTS**

13	ORIFICE300RF > ORIFICE PLATE 3MM & 6MM #300 FO 8553	2		1
14	仪表 PT 8510	3/4		1

**CUT PIPE LENGTH**

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. PE/PE
PPSB1506A_02_S	<1>	235	2		PE/PE
4:50					
PPSP1506A_0J_S	<2>	100	3/4		PE/PE
8:20					
PPSB1506A_02_S	<3>	108	2		PE/BE
4:50					
PPSB1506A_02_S	<4>	155	2		BE/BE
4:50					
PPSB1506A_02_S	<5>	160	2		BE/BE
4:50					
PPSB1506A_02_S	<6>	117	2		BE/BE
4:50					
PPSB1506A_02_S	<7>	365	2		BE/BE
4:50					
PPSB1506A_02_S	<8>	147	2		PE/BE
4:50					
PPSB1506A_02_S	<9>	123	2		BE/BE
4:50					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

HALDOR TOPSØE A/S  
COPENHAGEN DENMARK

DOCUMENT NAME: \_\_\_\_\_

JOB NO. \_\_\_\_\_ DOC. NO. \_\_\_\_\_

REV. 3

**TCC 中国天辰工程有限公司**  
CHINA TIANCHEN ENGINEERING CORPORATION

CONTRACTOR DRAWING NO.  
MKP-11-DE-9000-FE-REQ-237

SHEET 2 TOTAL 15

**江苏中圣高科技产业有限公司**  
JIANGSU SUNPOWER TECHNOLOGY CO., LTD

SUB-CONTRACTOR DRAWING NO.  
17013D85000PE00-12

SHEET 2 TOTAL 15

Isometric Drawing  
2"-HPS-85-201-D24-H6

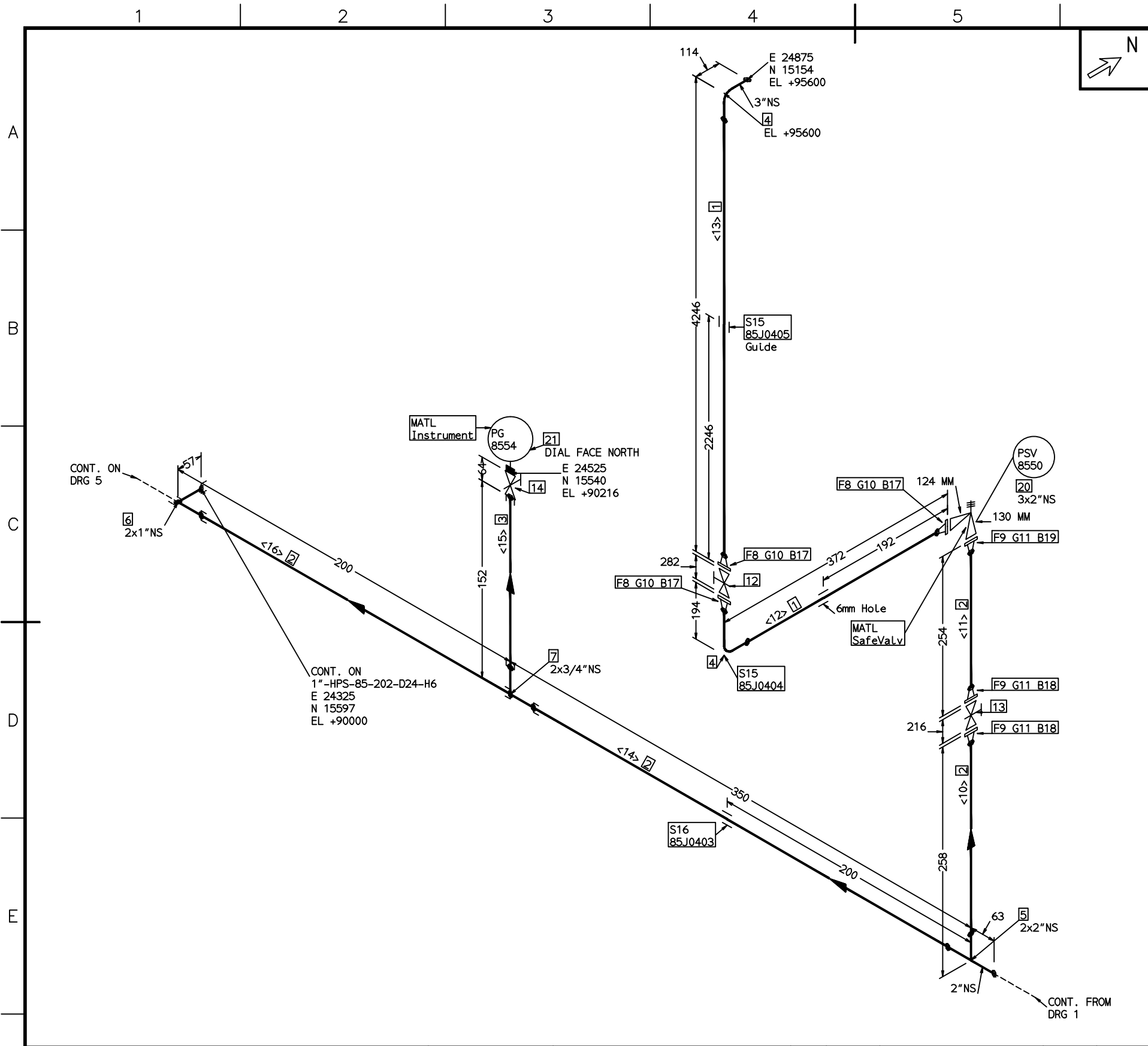
PROJECT	ME Methanol Project
UNIT	Flare
PHASE	Detail Engineering
OWNER DWG NO.	MKP-VD-8500-237-506-A3

SCALE NO SHEET 2 TOT. 15 SIZE A3

NOTES	DESIGN PRESS.(barg):	DESIGN TEMP(°C):	LEAKAGE TEST MEDIUM:	LEAKAGE PRESS(barg)	INSULATION CLASS:	PAINT CODE/COATING:	PIPING CLASS:	REF.PIPING PLAN NO.:
1:DELETE.	15.0	410.0	water	36.0	H6	B4	D24	MKP-VD-8500-237-505-A1
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.								
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.								
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.								
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.								
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.								
7:DELETE.								

REV.	DATE	DESCRIPTION	DESIGN	CHECK
3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY

SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
●	✗	⊥	⊥	⊥	⊥	⊥	⊥



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	3	PPSB1506A_03_S 4.3M
2	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	2	PPSB1506A_02_S 0.8M
3	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	3/4	PPSP1506A_0J_S 0.1M
<b>FITTINGS</b>			
4	ELBOW 90° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	3	JELSB1506D_03_ 2
5	TEE EQUAL;SMLS;BW;ASTM A234 WPB;ASME B16.9;SCH40	2 x 2	JTSSB1506D_02_ 1
6	SOCKETOLET;SW;ASTM A105;MSS SP-97;CL3000	2 x 1	JOOFS18010L3_0 1
7	SOCKETOLET;SW;ASTM A105;MSS SP-97;CL3000	2 x 3/4	JOOFS18010L3_0 1
<b>FLANGES</b>			
8	FLANGE;WN;CL300;RF;A105;ASME B16.5;SCH40	3	FFW63R1801H_03 3
9	FLANGE;WN;CL300;RF;A105;ASME B16.5;SCH40	2	FFW63R1801H_02 3
<b>GASKETS</b>			
10	GASKET SS316L WND FLEXIBLE GRAPHITE, SS3161R & CS CR, SPIRAL WND, RF, CL300, ASMEB16.20, ASME B16.5, T=4.5mm.	3	GSD63A1SGD_03: 3
11	GASKET SS316L WND FLEXIBLE GRAPHITE, SS3161R & CS CR, SPIRAL WND, RF, CL300, ASMEB16.20, ASME B16.5, T=4.5mm.	2	GSD63A1SGD_02: 3
<b>VALVES / IN-LINE ITEMS</b>			
12	GATE VALVE;BB;OS&Y;CL300;RF;ASTM A216-WCB;TrLm:13Cr/STL;API600;FLEXIBLE WEDGE	3	Z40H1-300C2_03 1
13	GATE VALVE;BB;OS&Y;CL300;RF;ASTM A216-WCB;TrLm:13Cr/STL;API600;FLEXIBLE WEDGE	2	Z40H1-300C2_02 1
14	GATE VALVE;BB;OS&Y;CL800;SW;A105;TrLm:13Cr/S TL;API602;SOLID WEDGE	3/4	Z51H1-800C1_0J 1
<b>SUPPORTS</b>			
15	PIPING SUPPORT;ATTA	3	ATTA01_03:80 2
16	PIPING SUPPORT;ATTA	2	ATTA01_02:50 1
<b>ERECTION MATERIALS</b>			
<b>BOLTS</b>			
17	125 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	3/4	LS3433A:M20 24

\*\*\*\*\*  
THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

LIBRARY	HALDOR TOPSØE A/S	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
CONTRACTOR	TCC 中国天辰工程有限公司				3


CONTRACTOR DRAWING NO.	
MKP-11-DE-9000-FE-REQ-237	
SHEET 3	TOTAL 15
SUB-CONTRACTOR DRAWING NO.	
17013D85000PE00-12	
SHEET 3	TOTAL 15

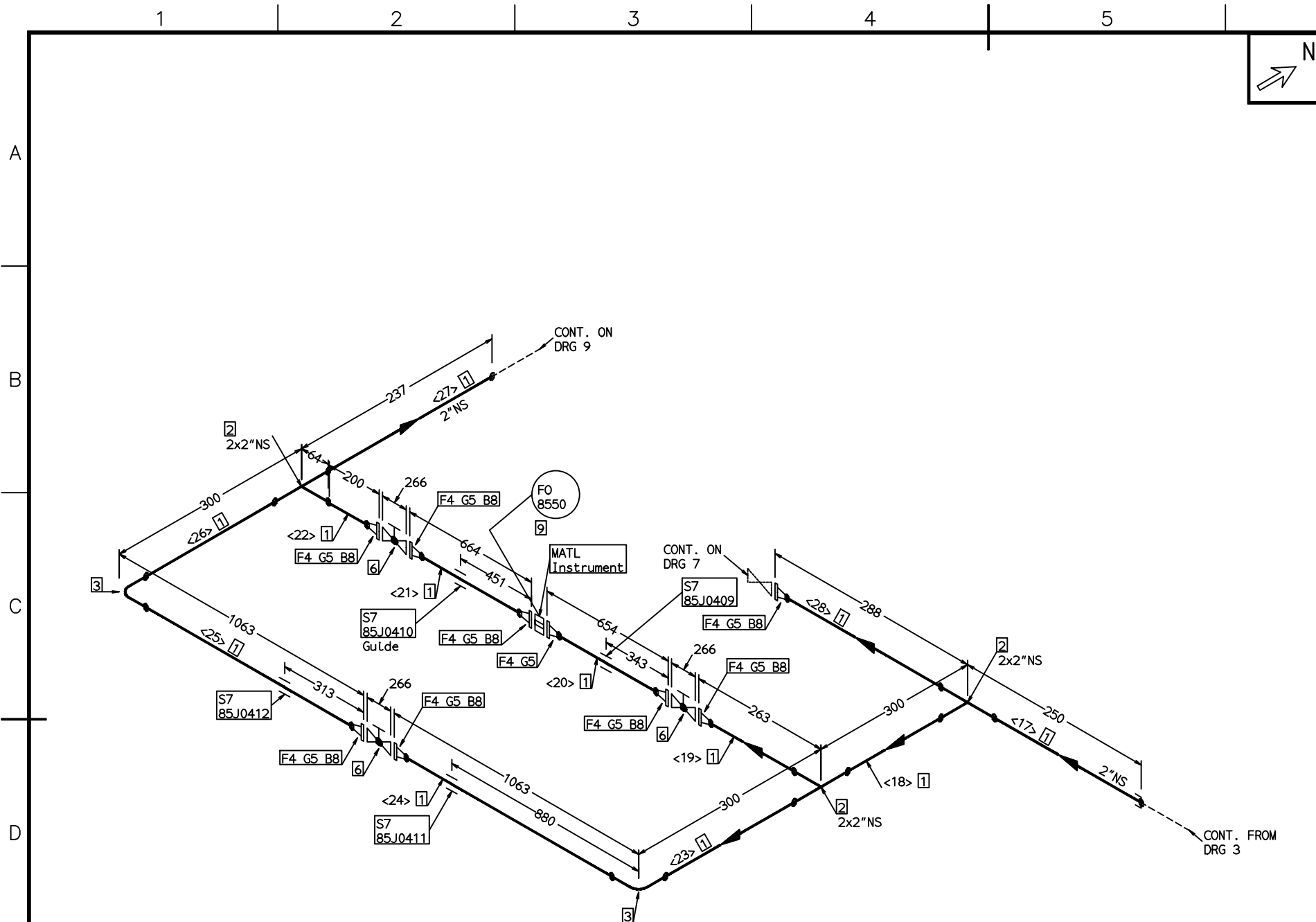
PROJECT		ME Methanol Project	
UNIT		Flare	
PHASE		Detail Engineering	
SCALE NO	SHEET 3	TOT. 15	SIZE A3
OWNER DWG NO.		MKP-VD-8500-237-506-A3	

NOTES

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y = N \cos \alpha - E \sin \alpha + 3051408.46$ ;  $X = N \sin \alpha + E \cos \alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N, E IS ARCHITECTURE COORDINATE SYSTEM.  
 X, Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	15.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE PRESS(barg)	36.0	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
INSULATION CLASS:	H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY
PAINT CODE/COATING:	B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK
SHOP WELD						
FIELD WELD						
SOCKET WELD						
SCREWED JOINT						
COMPJN JOINT						
PIPE SUPPORT						
LAGGED PIPE						
TRACED PIPE						
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1					

						<p>***** * CONT. FROM DRG 3 * *****</p> <p>18 105 FULL THREADED STUD BOLT/2 HEAVY NUTS 5/8 LS3433A:M16 16 (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2</p> <p>19 100 FULL THREADED STUD BOLT/2 HEAVY NUTS 5/8 LS3433A:M16 8 (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2</p> <p>INSTRUMENTS</p> <p>20 SAFE VALVE,300#RF/300#RF PSV 8550 3 x 2 1 21 仪表 PG 8554 3/4 1</p>																																																																																											
						<p>CUT PIPE LENGTH</p> <table border="1"> <thead> <tr> <th>ITEM CODE</th> <th>PIECE NO</th> <th>CUT LENGTH</th> <th>N.S. (INS)</th> <th>REMARKS</th> <th>END PREP.</th> </tr> </thead> <tbody> <tr> <td>PPSB1506A_02_S</td> <td>&lt;10&gt;</td> <td>124</td> <td>2</td> <td></td> <td>BE/BE</td> </tr> <tr> <td>4:50</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSB1506A_02_S</td> <td>&lt;11&gt;</td> <td>114</td> <td>2</td> <td></td> <td>BE/BE</td> </tr> <tr> <td>4:50</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSB1506A_03_S</td> <td>&lt;12&gt;</td> <td>179</td> <td>3</td> <td></td> <td>BE/BE</td> </tr> <tr> <td>4:80</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSB1506A_03_S</td> <td>&lt;13&gt;</td> <td>4052</td> <td>3</td> <td></td> <td>BE/BE</td> </tr> <tr> <td>4:80</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSB1506A_02_S</td> <td>&lt;14&gt;</td> <td>286</td> <td>2</td> <td></td> <td>BE/PE</td> </tr> <tr> <td>4:50</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSP1506A_0J_S</td> <td>&lt;15&gt;</td> <td>100</td> <td>3/4</td> <td></td> <td>PE/PE</td> </tr> <tr> <td>8:20</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSB1506A_02_S</td> <td>&lt;16&gt;</td> <td>200</td> <td>2</td> <td></td> <td>PE/PE</td> </tr> <tr> <td>4:50</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.	PPSB1506A_02_S	<10>	124	2		BE/BE	4:50						PPSB1506A_02_S	<11>	114	2		BE/BE	4:50						PPSB1506A_03_S	<12>	179	3		BE/BE	4:80						PPSB1506A_03_S	<13>	4052	3		BE/BE	4:80						PPSB1506A_02_S	<14>	286	2		BE/PE	4:50						PPSP1506A_0J_S	<15>	100	3/4		PE/PE	8:20						PPSB1506A_02_S	<16>	200	2		PE/PE	4:50					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.																																																																																												
PPSB1506A_02_S	<10>	124	2		BE/BE																																																																																												
4:50																																																																																																	
PPSB1506A_02_S	<11>	114	2		BE/BE																																																																																												
4:50																																																																																																	
PPSB1506A_03_S	<12>	179	3		BE/BE																																																																																												
4:80																																																																																																	
PPSB1506A_03_S	<13>	4052	3		BE/BE																																																																																												
4:80																																																																																																	
PPSB1506A_02_S	<14>	286	2		BE/PE																																																																																												
4:50																																																																																																	
PPSP1506A_0J_S	<15>	100	3/4		PE/PE																																																																																												
8:20																																																																																																	
PPSB1506A_02_S	<16>	200	2		PE/PE																																																																																												
4:50																																																																																																	
						<p>THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.</p> <p>OWNER:</p>  <p>Middle East Kimiaye Pars Company</p>																																																																																											
						<p>HALDOR TOPSØE A/S</p> <p>CONTRACTOR DRAWING NO. MKP-11-DE-9000-FE-REQ-237</p> <p>SHEET 4 TOTAL 15</p>																																																																																											
						<p>江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD</p> <p>SUB-CONTRACTOR DRAWING NO. 17013D85000PE00-12</p> <p>SHEET 4 TOTAL 15</p>																																																																																											
						<p>Isometric Drawing</p> <p>2"-HPS-85-201-D24-H6</p> <p>PROJECT: ME Methanol Project UNIT: Flare PHASE: Detail Engineering</p>																																																																																											
						<p>SCALE NO SHEET 4 TOT. 15 SIZE A3 OWNER DWG NO. MKP-VD-8500-237-506-A3</p>																																																																																											
<p>NOTES</p> <p>1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036 ° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.</p>		DESIGN PRESS.(barg): 15.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY																																																																																										
		DESIGN TEMP(°C): 410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY																																																																																										
		LEAKAGE TEST MEDIUM: water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY																																																																																										
		LEAKAGE PRESS(barg) 36.0	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY																																																																																										
		INSULATION CLASS: H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY																																																																																										
		PAINT CODE/COATING: B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK																																																																																										
		PIPING CLASS: D24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE																																																																																							
		REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1																																																																																														



FABRICATION MATERIALS				
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>PIPE</b>				
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	2	PPSB1506A_02_S 4.2M	
<b>FITTINGS</b>				
2	TEE EQUAL;SMLS;BW;ASTM A234 WPB;ASME B16.9;SCH40	2 x 2	JTSSB1506D_02_ 3	
3	ELBOW 90° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	2	JELSB1506D_02_ 2	
<b>FLANGES</b>				
4	FLANGE;WN;CL300;RF;A105;ASME B16.5;SCH40	2	FFW63R1801H_02 9	
<b>GASKETS</b>				
5	GASKET SS316L WND FLEXIBLE GRAPHITE, SS3161R & CS CR,SPIRAL WND, RF, CL300, ASMEB16.20, ASME B16.5,T=4.5mm.	2	GSD63A1SGD_02: 9	
<b>VALVES / IN-LINE ITEMS</b>				
6	GLOBE VALVE;BB;OS&Y;CL300;RF;ASTM A216-WCB;TrLm:13Cr/STL;BS1873;PARABOLIC DISC	2	J41H1-300C2_02 3	
<b>SUPPORTS</b>				
7	PIPING SUPPORT;ATTA	2	ATTA01_02:50 4	
<b>ERECTION MATERIALS</b>				
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>BOLTS</b>				
8	105 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 64	
<b>INSTRUMENTS</b>				
9	ORIFICE300RF > ORIFICE PLATE 3MM & 6MM #300 FO 8550	2		1

\*\*\*\*\*  
\* CONT. ON DRG 6 \*  
\*\*\*\*\*

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



**Middle East  
Kimiaye Pars Company**

	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 5 TOTAL 15
	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 5 TOTAL 15

Isometric Drawing 2"-HPS-85-201-D24-H6	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

SCALE NO	SHEET 5	TOT. 15	SIZE A3
----------	---------	---------	---------

**NOTES**

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y = N \cos \alpha - E \sin \alpha + 3051408.46$ ;  $X = N \sin \alpha + E \cos \alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N, E IS ARCHITECTURE COORDINATE SYSTEM.  
 X, Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	15.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	36.0	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	D24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								



\*\*\*\*\*  
\* CONT. FROM DRG 5 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSB1506A_02_S <17>	4:50	187	2		PE/BE
PPSB1506A_02_S <18>	4:50	173	2		BE/BE
PPSB1506A_02_S <19>	4:50	129	2		BE/BE
PPSB1506A_02_S <20>	4:50	514	2		BE/BE
PPSB1506A_02_S <21>	4:50	524	2		BE/BE
PPSB1506A_02_S <22>	4:50	130	2		BE/BE
PPSB1506A_02_S <23>	4:50	160	2		BE/BE
PPSB1506A_02_S <24>	4:50	917	2		BE/BE
PPSB1506A_02_S <25>	4:50	917	2		BE/BE
PPSB1506A_02_S <26>	4:50	161	2		BE/BE
PPSB1506A_02_S <27>	4:50	173	2		BE/BE
PPSB1506A_02_S <28>	4:50	154	2		BE/BE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
				3

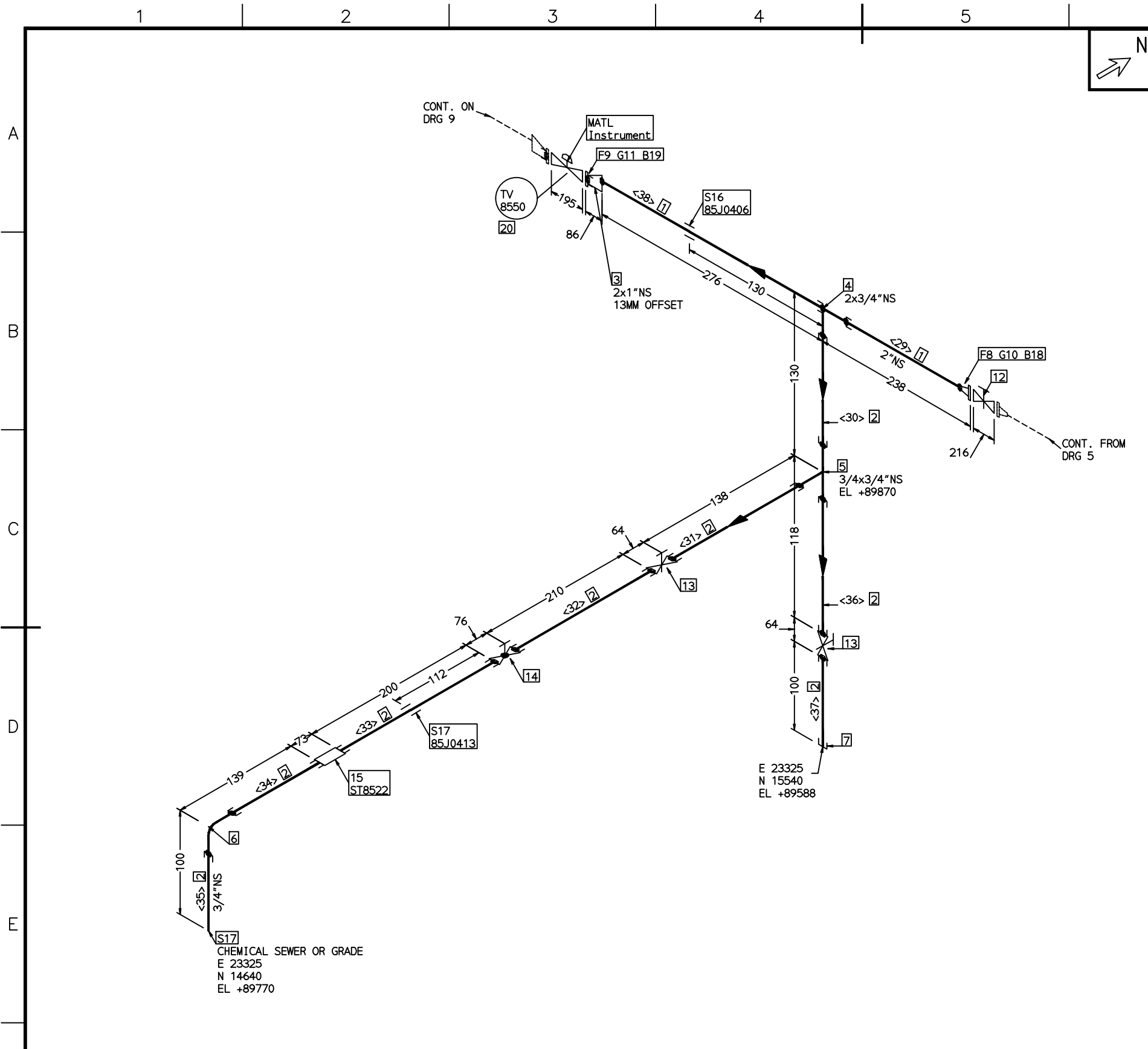
 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 6 TOTAL 15

 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 6 TOTAL 15

Isometric Drawing 2"-HPS-85-201-D24-H6	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 6	TOT. 15
SIZE	A3	OWNER DWG NO.
		MKP-VD-8500-237-506-A3


NOTES	DESIGN PRESS.(barg):	DESIGN TEMP(°C):	LEAKAGE TEST MEDIUM:	LEAKAGE PRESS(barg)	INSULATION CLASS:	PAINT CODE/COATING:	PIPING CLASS:	REF.PIPING PLAN NO.:
1:DELETE.	15.0	410.0	water	36.0	H6	B4	D24	MKP-VD-8500-237-505-A1
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.								
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.								
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.								
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.								
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.								
7:DELETE.								

SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
—●—	—X—	—E—	—E—	—□—	—=—	—- - -	—- - -



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	2	PPSB1506A_02_S 0.5M
2	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	3/4	PPSP1506A_OJ_S 1.0M
<b>FITTINGS</b>			
3	REDUCER ECC.;SMLS;BW;ASTM A234 WPB;ASME B16.9;SCH40XSCH80	2 x 1	JRESB1506D_020 1
4	SOCKETOLET;SW;ASTM A105;MSS SP-97;CL3000	2 x 3/4	JOOFS18010L3_0 1
5	TEE EQUAL;SW;ASTM A105;ASME B16.11;CL3000	3/4 x 3/4	JTSFS1801GL3_0 1
6	ELBOW 90°;SW;ASTM A105;ASME B16.11;CL3000	3/4	JEQFS1801GL3_0 1
7	CAP;NPT;ASTM A105;ASME B16.11;CL3000	3/4	JKFFN1801GL3_0 1
<b>FLANGES</b>			
8	FLANGE;WN;CL300;RF;A105;ASME B16.5;SCH40	2	FFW63R1801H_02 1
9	FLANGE;SW;CL300;RF;A105;ASME B16.5	1	FFS63R1801H_01 1
<b>GASKETS</b>			
10	GASKET SS316L WND FLEXIBLE GRAPHITE, SS3161R & CS CR, SPIRAL WND, RF, CL300, ASMEB16.20, ASME B16.5, T=4.5mm.	2	GSD63A1SGD_02: 1
11	GASKET SS316L WND FLEXIBLE GRAPHITE, SS3161R & CS CR, SPIRAL WND, RF, CL300, ASMEB16.20, ASME B16.5, T=4.5mm.	1	GSD63A1SGD_01: 1
<b>VALVES / IN-LINE ITEMS</b>			
12	GATE VALVE;BB;OS&Y;CL300;RF;ASTM A216-WCB;TrLm:13Cr/STL;API600;FLEXIBLE WEDGE	2	Z40H1-300C2_02 1
13	GATE VALVE;BB;OS&Y;CL800;SW;A105;TrLm:13Cr/S TL;API602;SOLID WEDGE	3/4	Z51H1-800C1_OJ 2
14	GLOBE VALVE;BB;OS&Y;CL800;SW;A105;TrLm:13Cr/S TL;API602;SWIVEL PLUG	3/4	J51H1-800C1_OJ 1
15	TRAP;CL800;SW;BODY:A105;TrLm:304SS;See data table	3/4	TRAP68S01AF_OJ 1
<b>SUPPORTS</b>			
16	PIPING SUPPORT;ATTA	2	ATTA01_02:50 1
17	PIPING SUPPORT;ATTA	3/4	ATTA01_0J:20 2
<b>ERECTION MATERIALS</b>			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
***** * CONT. ON DRG 8 * *****			

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:  Middle East Kimiaye Pars Company

LIBRARY	HALDOR TOPSØE A/S	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
CONTRACTOR	TCC 中国天辰工程有限公司 CHINA TIANCHEN ENGINEERING CORPORATION		CONTRACTOR DRAWING NO.	MKP-11-DE-9000-FE-REQ-237	
CONTRACTOR	江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD		SUB-CONTRACTOR DRAWING NO.	17013D85000PE00-12	

NOTES	DESIGN PRESS.(barg):	15.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY				
	DESIGN TEMP.(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY				
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY				
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	36.0	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY				
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY				
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK				
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	D24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE	
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1									

SCALE NO	SHEET 7	TOT. 15	SIZE A3	PROJECT	ME Methanol Project
Isometric Drawing				UNIT	Flare
2"-HPS-85-201-D24-H6				PHASE	Detail Engineering
OWNER DWG NO.				MKP-VD-8500-237-506-A3	

\*\*\*\*\*  
\* CONT. FROM DRG 7 \*  
\*\*\*\*\*

BOLTS			
18	105 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 8
19	95 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 4
INSTRUMENTS			
20	CV300RF FISHER TYPE CTRL VALVE CL300RF	1	1
	TV 8550		

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. BE/PE
PPSB1506A_02_S	<29>	168	2		BE/PE
4:50					
PPSP1506A_0J_S	<30>	59	3/4		PE/PE
8:20					
PPSP1506A_0J_S	<31>	119	3/4		PE/PE
8:20					
PPSP1506A_0J_S	<32>	210	3/4		PE/PE
8:20					
PPSP1506A_0J_S	<33>	200	3/4		PE/TH
8:20					
PPSP1506A_0J_S	<34>	120	3/4		TH/PE
8:20					
PPSP1506A_0J_S	<35>	81	3/4		PE/PE
8:20					
PPSP1506A_0J_S	<36>	99	3/4		PE/PE
8:20					
PPSP1506A_0J_S	<37>	100	3/4		PE/TH
8:20					
PPSB1506A_02_S	<38>	249	2		PE/BE
4:50					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



**Middle East  
Kimiaye Pars Company**

	HALDOR TOPSØE A/S	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
					3

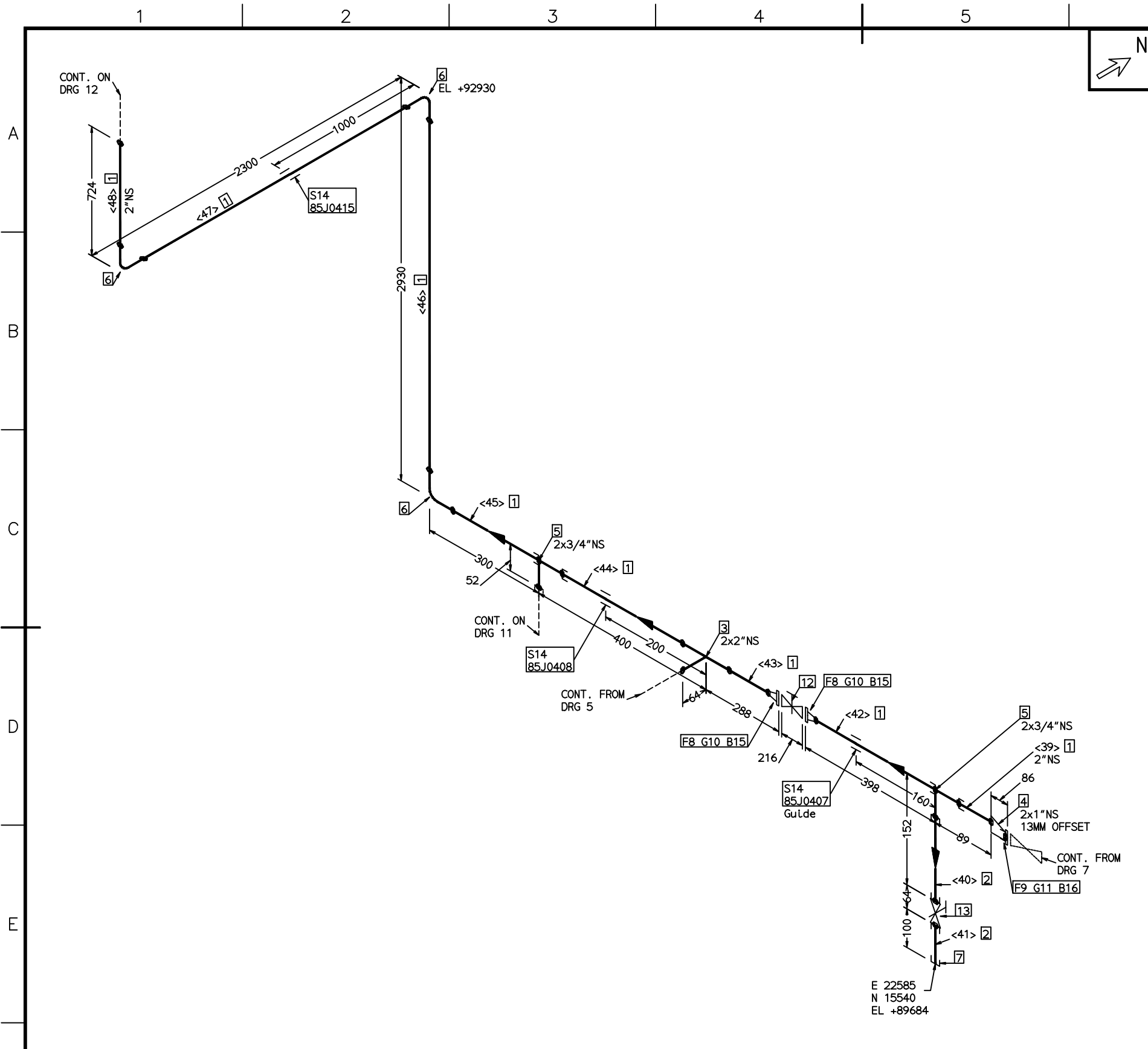
	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 8 TOTAL 15

	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 8 TOTAL 15

Isometric Drawing 2"-HPS-85-201-D24-H6	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 8	TOT. 15
SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3

NOTES	DESIGN PRESS.(barg):	15.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	36.0	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	D24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	2	PPSB1506A_02_S 6.8M
2	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	3/4	PPSP1506A_0J_S 0.2M
<b>FITTINGS</b>			
3	TEE EQUAL;SMLS;BW;ASTM A234 WPB;ASME B16.9;SCH40	2 x 2	JTSSB1506D_02_ 1
4	REDUCER ECC.;SMLS;BW;ASTM A234 WPB;ASME B16.9;SCH40XSCH80	2 x 1	JRESB1506D_020 1
5	SOCKETOLET;SW;ASTM A105;MSS SP-97;CL3000	2 x 3/4	JOOFS18010L3_0 2
6	ELBOW 90°;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	2	JELSB1506D_02_ 3
7	CAP;NPT;ASTM A105;ASME B16.11;CL3000	3/4	JKFFN1801GL3_0 1
<b>FLANGES</b>			
8	FLANGE;WN;CL300;RF;A105;ASME B16.5;SCH40	2	FFW63R1801H_02 2
9	FLANGE;SW;CL300;RF;A105;ASME B16.5	1	FFS63R1801H_01 1
<b>GASKETS</b>			
10	GASKET SS316L WND FLEXIBLE GRAPHITE, SS3161R & CS CR, SPIRAL WND, RF, CL300, ASMEB16.20, ASME B16.5, T=4.5mm.	2	GSD63A1SGD_02: 2
11	GASKET SS316L WND FLEXIBLE GRAPHITE, SS3161R & CS CR, SPIRAL WND, RF, CL300, ASMEB16.20, ASME B16.5, T=4.5mm.	1	GSD63A1SGD_01: 1
<b>VALVES / IN-LINE ITEMS</b>			
12	GATE VALVE;BB;OS&Y;CL300;RF;ASTM A216-WCB;TrLm:13Cr/STL;API600;FLEXIBLE WEDGE	2	Z40H1-300C2_02 1
13	GATE VALVE;BB;OS&Y;CL800;SW;A105;TrLm:13Cr/STL;API602;SOLID WEDGE	3/4	Z51H1-800C1_0J 1
<b>SUPPORTS</b>			
14	PIPING SUPPORT;ATTA	2	ATTA01_02:50 3
<b>ERECTION MATERIALS</b>			
<b>BOLTS</b>			
15	105 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d), ASTM A193 B7/A194 2H, GALVANISED, ASME B18.2.1/18.2.2	5/8	LS3433A:M16 16
16	95 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d), ASTM A193 B7/A194 2H, GALVANISED, ASME B18.2.1/18.2.2	5/8	LS3433A:M16 4

\*\*\*\*\*  
\* CONT. ON DRG 10 \*

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:

Middle East  
Kimiaye Pars Company

<p>HALDOR TOPSØE A/S CORPORATION DENMARK</p>	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
				3

<p>TCC 中国天辰工程有限公司 CHINA TIANCHEN ENGINEERING CORPORATION</p>	CONTRACTOR DRAWING NO.
	MKP-11-DE-9000-FE-REQ-237
	SHEET 9 TOTAL 15

<p>江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD</p>	SUB-CONTRACTOR DRAWING NO.
	17013D85000PE00-12
	SHEET 9 TOTAL 15

Isometric Drawing 2"-HPS-85-201-D24-H6	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 9	TOT. 15
SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3

NOTES

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha - E\sin\alpha + 3051408.46$ ;  $X=N\sin\alpha + E\cos\alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N.E IS ARCHITECTURE COORDINATE SYSTEM.  
 X.Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	15.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	36.0	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	D24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

1 2 3 4 5 6 7 8

A  
B  
C  
D  
E  
F

\*\*\*\*\*  
\* CONT. FROM DRG 9 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSB1506A_02_S <39>	4:50	89	2		BE/PE
PPSP1506A_0J_S <40>	8:20	100	3/4		PE/PE
PPSP1506A_0J_S <41>	8:20	100	3/4		PE/TH
PPSB1506A_02_S <42>	4:50	328	2		PE/BE
PPSB1506A_02_S <43>	4:50	155	2		BE/BE
PPSB1506A_02_S <44>	4:50	336	2		BE/PE
PPSB1506A_02_S <45>	4:50	224	2		PE/BE
PPSB1506A_02_S <46>	4:50	2778	2		BE/BE
PPSB1506A_02_S <47>	4:50	2148	2		BE/BE
PPSB1506A_02_S <48>	4:50	648	2		BE/BE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 10 TOTAL 15

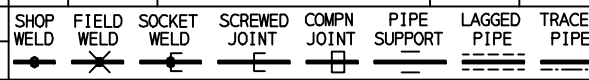
 <b>江苏中圣高科技产业有限公司</b> <small>JIANGSU SUNPOWER TECHNOLOGY CO., LTD</small>	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 10 TOTAL 15

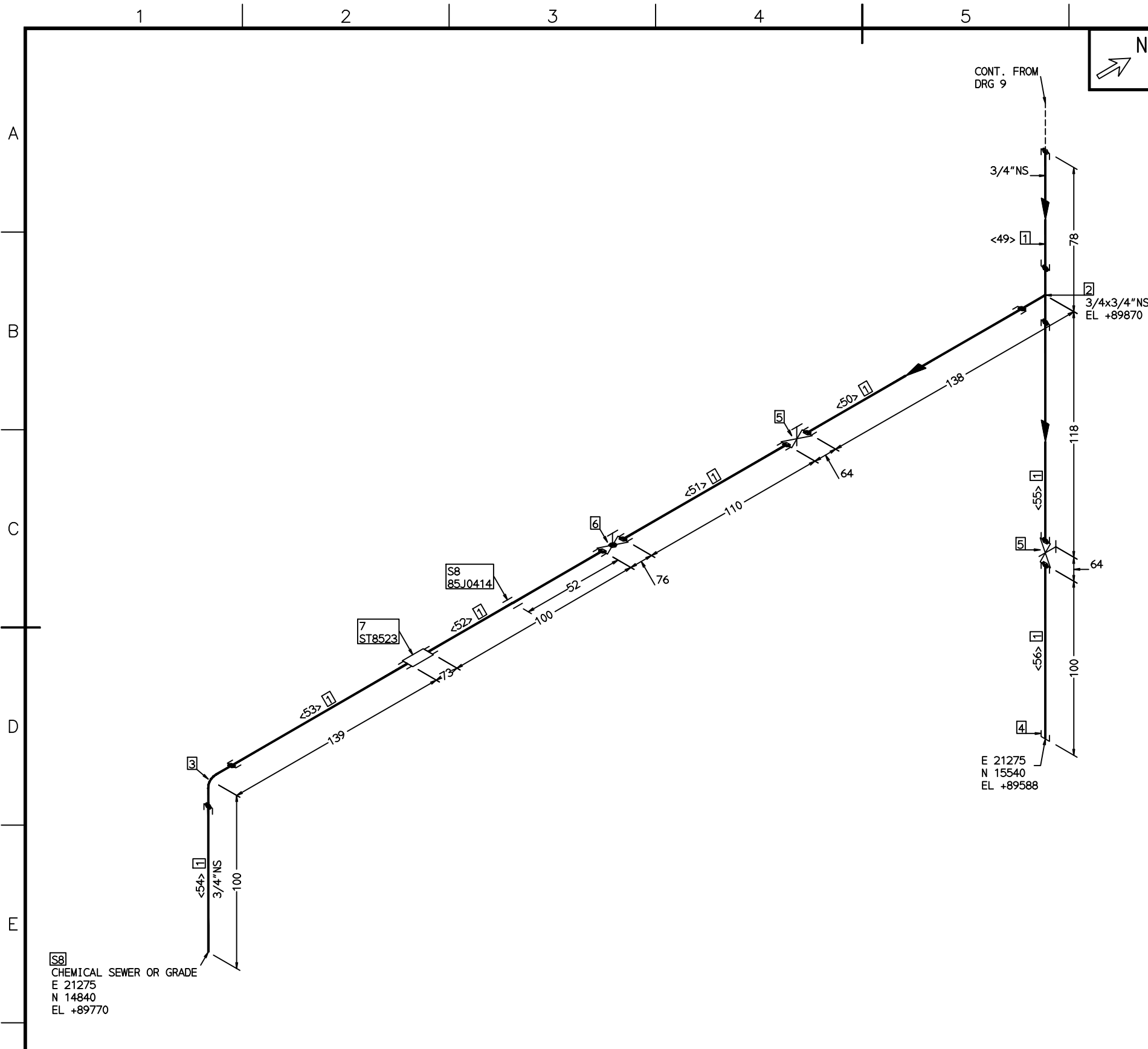
Isometric Drawing 2"-HPS-85-201-D24-H6	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 10	TOT. 15
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	DESIGN TEMP(°C):	LEAKAGE TEST MEDIUM:	LEAKAGE PRESS(barg)	INSULATION CLASS:	PAINT CODE/COATING:	PIPING CLASS:	REF.PIPING PLAN NO.:
1:DELETE.	15.0	410.0	water	36.0	H6	B4	D24	MKP-VD-8500-237-505-A1
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.								
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.								
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.								
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.								
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.								
7:DELETE.								

1 2 3 4 5 6 7 8

A  
B  
C  
D  
E  
F





FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	3/4	PPSP1506A_OJ_S 0.8M
<b>FITTINGS</b>			
2	TEE EQUAL;SW;ASTM A105;ASME B16.11;CL3000	3/4 x 3/4	JTSFS1801GL3_0 1
3	ELBOW 90°;SW;ASTM A105;ASME B16.11;CL3000	3/4	JEQFS1801GL3_0 1
4	CAP;NPT;ASTM A105;ASME B16.11;CL3000	3/4	JKFFN1801GL3_0 1
<b>VALVES / IN-LINE ITEMS</b>			
5	GATE VALVE;BB;OS&Y;CL800;SW;A105;TrLm:13Cr/S TL;API602;SOLID WEDGE	3/4	Z51H1-800C1_OJ 2
6	GLOBE VALVE;BB;OS&Y;CL800;SW;A105;TrLm:13Cr/S TL;API602;SWIVEL PLUG	3/4	J51H1-800C1_OJ 1
7	TRAP;CL800;SW;BODY:A105;TrLm:304SS;See data table	3/4	TRAP68S01AF_OJ 1
<b>SUPPORTS</b>			
8	PIPING SUPPORT;ATTA	3/4	ATTA01_OJ:20 2

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSP1506A_OJ_S	<49>	59	3/4		PE/PE
PPSP1506A_OJ_S	<50>	119	3/4		PE/PE
PPSP1506A_OJ_S	<51>	110	3/4		PE/PE
PPSP1506A_OJ_S	<52>	100	3/4		PE/TH
PPSP1506A_OJ_S	<53>	120	3/4		TH/PE
PPSP1506A_OJ_S	<54>	81	3/4		PE/PE
PPSP1506A_OJ_S	<55>	99	3/4		PE/PE
PPSP1506A_OJ_S	<56>	100	3/4		PE/TH

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:  Middle East Kimiaye Pars Company

LIBRARY	HALDOR TOPSØE A/S	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
CONTRACTOR	TCC 中国天辰工程有限公司		CONTRACTOR DRAWING NO.	3	

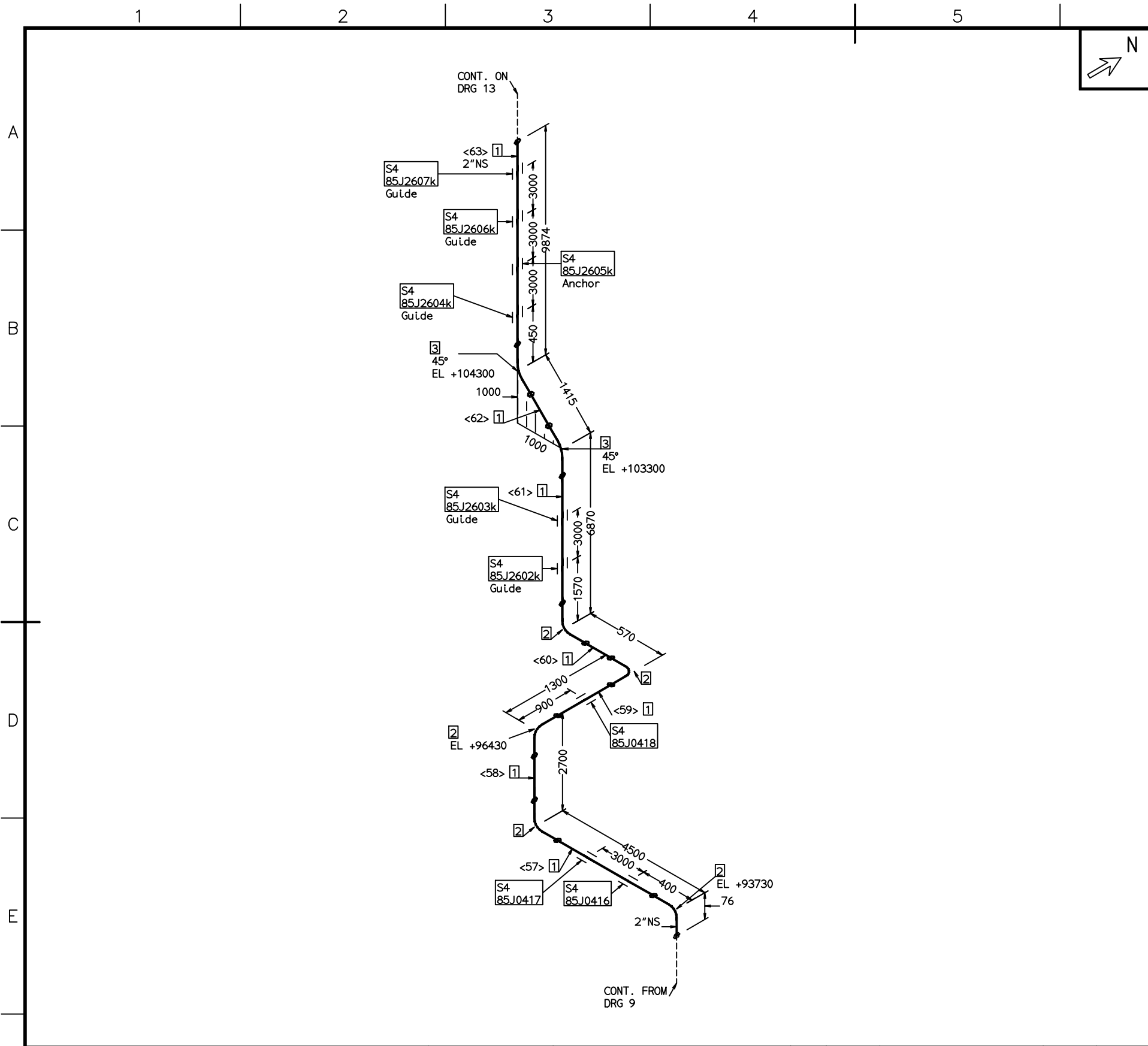
CONTRACTOR	江苏中圣高科技产业有限公司		SUB-CONTRACTOR DRAWING NO.	17013D85000PE00-12	
CONTRACTOR	JIANGSU SUNPOWER TECHNOLOGY CO., LTD		SHEET 11	TOTAL 15	

Isometric Drawing			PROJECT	ME Methanol Project		
2"-HPS-85-201-D24-H6			UNIT	Flare		
			PHASE	Detail Engineering		
SCALE	NO	SHEET 11	TOT. 15	SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3

**NOTES**

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha - E\sin\alpha + 3051408.46$ ;  $X=N\sin\alpha + E\cos\alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N,E IS ARCHITECTURE COORDINATE SYSTEM.  
 X,Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	15.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	36.0	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	D24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	2	PPSB1506A_02_S26.5M
<b>FITTINGS</b>			
2	ELBOW 90° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	2	JELSB1506D_02_ 5
3	ELBOW 45° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	2	JEKSB1506D_02_ 2
<b>SUPPORTS</b>			
4	PIPING SUPPORT;ATTA	2	ATTA01_02:50 9

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH (INS)	N.S. (INS)	REMARKS	END PREP.
PPSB1506A_02_S <57>	4:50	4348	2		BE/BE
PPSB1506A_02_S <58>	4:50	2548	2		BE/BE
PPSB1506A_02_S <59>	4:50	1148	2		BE/BE
PPSB1506A_02_S <60>	4:50	418	2		BE/BE
PPSB1506A_02_S <61>	4:50	6762	2		BE/BE
PPSB1506A_02_S <62>	4:50	1351	2		BE/BE
PPSB1506A_02_S <63>	4:50	9842	2		BE/BE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

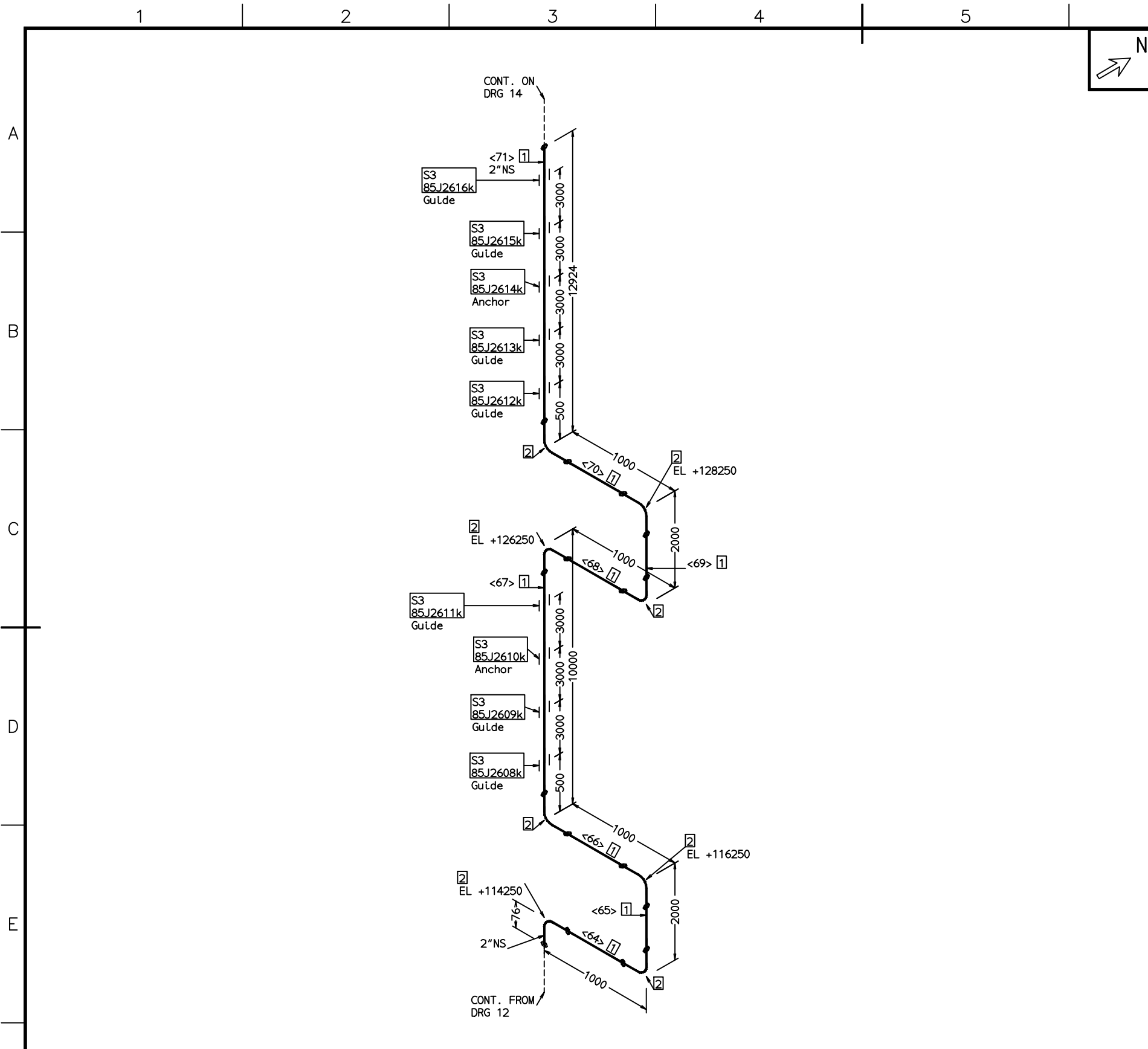
 TCC 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 12 TOTAL 15
 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 12 TOTAL 15

Isometric Drawing 2"-HPS-85-201-D24-H6	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 12	TOT. 15
SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3

NOTES	DESIGN PRESS.(barg):	DESIGN TEMP(°C):	LEAKAGE TEST MEDIUM:	LEAKAGE PRESS(barg)	INSULATION CLASS:	PAINT CODE/COATING:	PIPING CLASS:	REF.PIPING PLAN NO.:
1:DELETE.	15.0	410.0	water	36.0	H6	B4	D24	MKP-VD-8500-237-505-A1
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.								
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.								
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.								
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.								
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.								
7:DELETE.								

REV.	DATE	DESCRIPTION	DESIGN	CHECK
3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY

SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
—●—	—X—	—E—	—E—	—□—	—=	—---	—---



NOTES

1:DELETE.  
 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.  
 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.  
 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.  
 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.  
 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$   
 N,E IS ARCHITECTURE COORDINATE SYSTEM.  
 X,Y IS SURVEYING COORDINATE SYSTEM.  
 7:DELETE.

DESIGN PRESS.(barg):	15.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	36.0	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	D24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	2	PPSB1506A_02_S29.8M
<b>FITTINGS</b>			
2	ELBOW 90° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	2	JELSB1506D_02_8
<b>SUPPORTS</b>			
3	PIPING SUPPORT;ATTA	2	ATTA01_02:50 9

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. BE/BE
PPSB1506A_02_S <64>	4:50	848	2		BE/BE
PPSB1506A_02_S <65>	4:50	1848	2		BE/BE
PPSB1506A_02_S <66>	4:50	848	2		BE/BE
PPSB1506A_02_S <67>	4:50	9848	2		BE/BE
PPSB1506A_02_S <68>	4:50	848	2		BE/BE
PPSB1506A_02_S <69>	4:50	1848	2		BE/BE
PPSB1506A_02_S <70>	4:50	848	2		BE/BE
PPSB1506A_02_S <71>	4:50	12848	2		BE/BE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



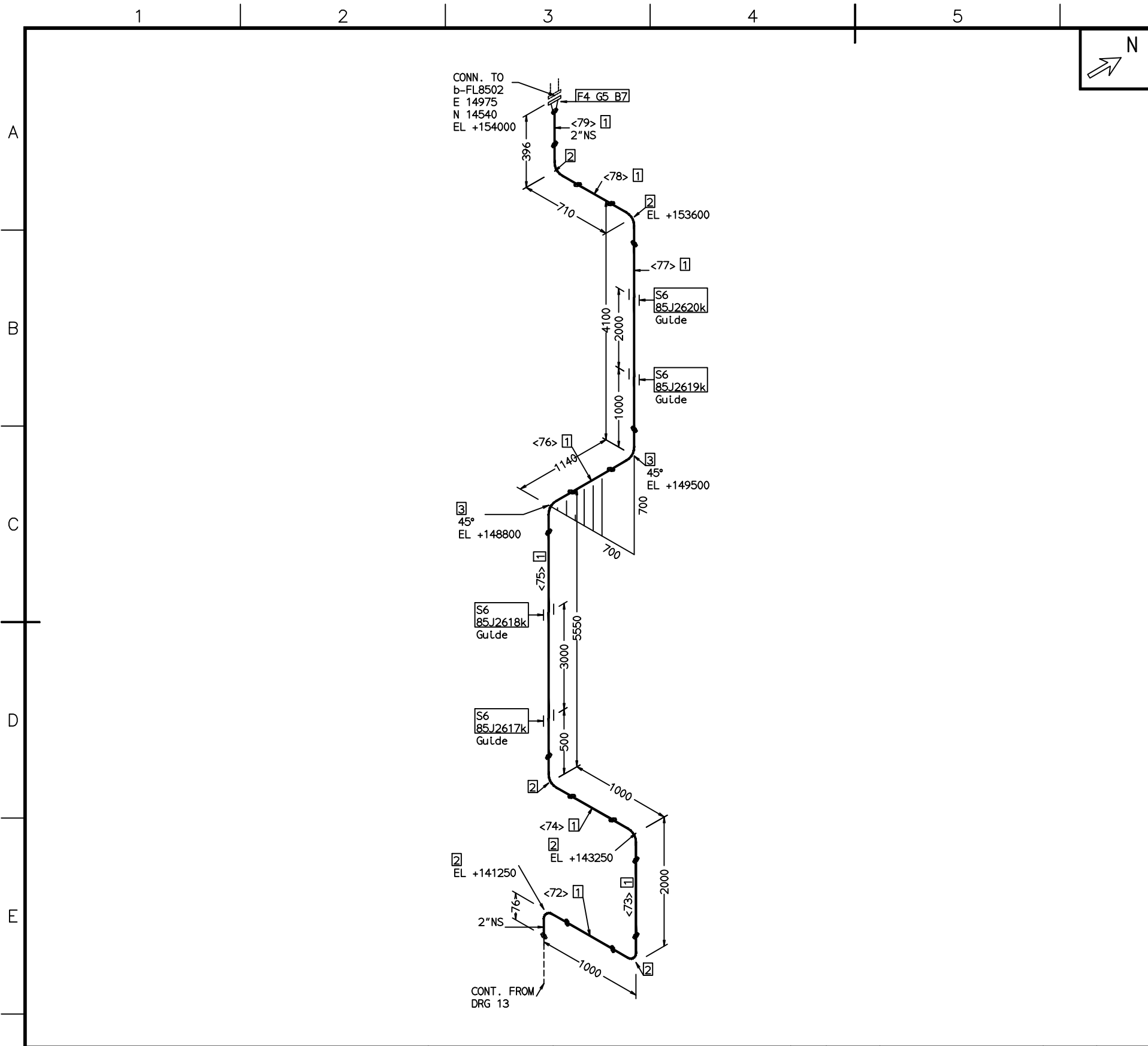
Middle East  
Kimiaye Pars Company

LIBRARY	HALDOR TOPSØE A/S	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
CONTRACTOR	TCC 中国天辰工程有限公司				3

CONTRACTOR	TCC 中国天辰工程有限公司	CONTRACTOR DRAWING NO.	MKP-11-DE-9000-FE-REQ-237
SUB-CONTRACTOR	江苏中圣高科技产业有限公司	SUB-CONTRACTOR DRAWING NO.	17013D85000PE00-12
	JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SHEET 13	TOTAL 15

Isometric Drawing				PROJECT	ME Methanol Project
2"-HPS-85-201-D24-H6				UNIT	Flare
				PHASE	Detail Engineering
SCALE NO	SHEET 13	TOT. 15	SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3





FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	2	PPSB1506A_02_S14.7M
<b>FITTINGS</b>			
2	ELBOW 90° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	2	JELSB1506D_02_ 6
3	ELBOW 45° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	2	JEKSB1506D_02_ 2
<b>FLANGES</b>			
4	FLANGE;WN;CL300;RF;A105;ASME B16.5;SCH40	2	FFW63R1801H_02 1
<b>GASKETS</b>			
5	GASKET SS316L WND FLEXIBLE GRAPHITE, SS3161R & CS CR,SPIRAL WND, RF, CL300, ASMEB16.20, ASME B16.5,T=4.5mm.	2	GSD63A1SGD_02: 1
<b>SUPPORTS</b>			
6	PIPING SUPPORT;ATTA	2	ATTA01_02:50 4

ERECTION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>BOLTS</b>			
7	105 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 8

\*\*\*\*\*  
\* CONT. ON DRG 15 \*  
\*\*\*\*\*

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



**Middle East  
Kimiaye Pars Company**

	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 14 TOTAL 15
	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 14 TOTAL 15

Isometric Drawing 2"-HPS-85-201-D24-H6	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 14	TOT. 15
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	DESIGN TEMP.(°C):	LEAKAGE TEST MEDIUM:	LEAKAGE PRESS(barg)	INSULATION CLASS:	PAINT CODE/COATING:	PIPING CLASS:	REF.PIPING PLAN NO.:
1:DELETE.	15.0	410.0	water	36.0	H6	B4	D24	MKP-VD-8500-237-505-A1
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.								
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.								
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.								
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.								
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.								
7:DELETE.								

\*\*\*\*\*  
 \* CONT. FROM DRG 14 \*  
 \*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSB1506A_02_S <72>	4:50	848	2		BE/BE
PPSB1506A_02_S <73>	4:50	1848	2		BE/BE
PPSB1506A_02_S <74>	4:50	848	2		BE/BE
PPSB1506A_02_S <75>	4:50	5442	2		BE/BE
PPSB1506A_02_S <76>	4:50	927	2		BE/BE
PPSB1506A_02_S <77>	4:50	3992	2		BE/BE
PPSB1506A_02_S <78>	4:50	478	2		BE/BE
PPSB1506A_02_S <79>	4:50	250	2		BE/BE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
 Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 15 TOTAL 15

 <b>江苏中圣高科技产业有限公司</b> <small>JIANGSU SUNPOWER TECHNOLOGY CO., LTD</small>	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 15 TOTAL 15

Isometric Drawing 2"-HPS-85-201-D24-H6	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 15	TOT. 15
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	15.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E_s\ln\alpha +3051408.46; X=N_s\ln\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
	LEAKAGE PRESS(barg)	36.0	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
	INSULATION CLASS:	H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
	PAINT CODE/COATING:	B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
	PIPING CLASS:	D24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

1 2 3 4 5 6 7 8

A

B

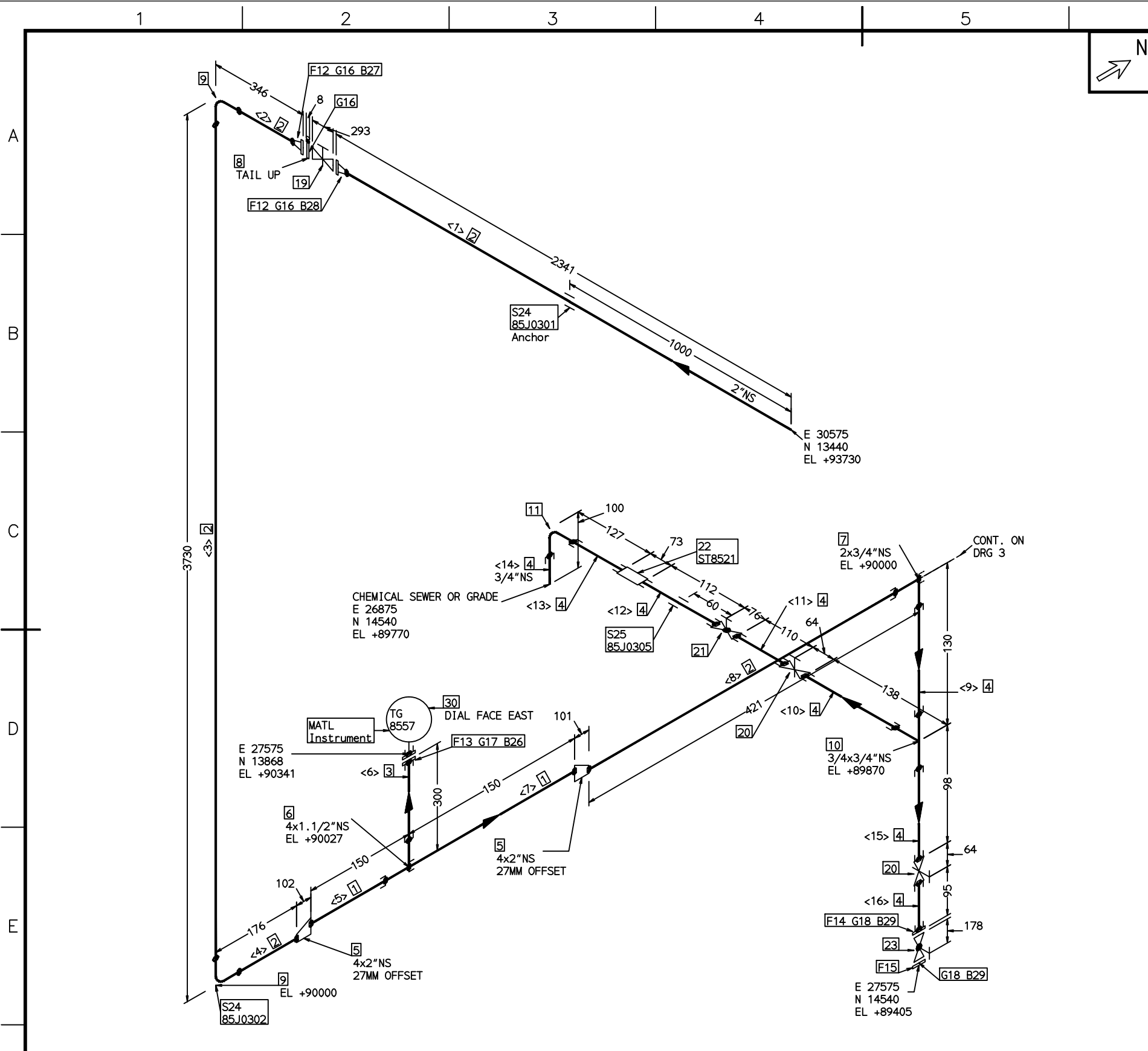
C

D

E

F


1 2 3 4 5 6 7 8



FABRICATION MATERIALS				
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>PIPE</b>				
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH80	4	PPSB1506A_04_S 0.3M	
2	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH80	2	PPSB1506A_02_S 6.6M	
3	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH160	1.1/2	PPSP1506A_1G_A 0.2M	
4	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH160	3/4	PPSP1506A_OJ_A 0.8M	
<b>FITTINGS</b>				
5	REDUCER ECC.;SMLS;BW;ASTM A234 WPB;ASME B16.9;SCH80XSCH80	4 x 2	JRESB1506D_040	2
6	SOCKETOLET;SW;ASTM A105;MSS SP-97;CL6000	4 x 1.1/2	JOOFS18010L6_0	1
7	SOCKETOLET;SW;ASTM A105;MSS SP-97;CL6000	2 x 3/4	JOOFS18010L6_0	1
8	FIGURE 8;CL600;RF;ASTM A515 Gr.70;ASME B16.48	2	BBG66P1801K_02	1
9	ELBOW 90°;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH80	2	JELSB1506D_02_	2
10	TEE EQUAL;SW;ASTM A105;ASME B16.11;CL6000	3/4 x 3/4	JTSFS1801GL6_0	1
11	ELBOW 90°;SW;ASTM A105;ASME B16.11;CL6000	3/4	JEQFS1801GL6_0	1
<b>FLANGES</b>				
12	FLANGE;WN;CL600;RF;A105;ASME B16.5;SCH80	2	FFW63R1801H_02	2
13	FLANGE;SW;CL600;RF;A105;ASME B16.5	1.1/2	FFS63R1801H_1G	1
14	FLANGE;SW;CL600;RF;A105;ASME B16.5	3/4	FFS63R1801H_OJ	1
15	BL FLANGE;CL600;RF;A105;ASME B16.5	3/4	FFB66R1801H_OJ	1
<b>GASKETS</b>				
16	SS316L WND FLEXIBLE GRAPHITE, SS316 IR & CS CR, SPIRAL WND, RF, CL600, ASME B16.20, ASME B16.5, T=4.5mm.	2	GSD66A4SGD_02:	3
17	SS316L WND FLEXIBLE GRAPHITE, SS316 IR & CS CR, SPIRAL WND, RF, CL600, ASME B16.20, ASME B16.5, T=4.5mm.	1.1/2	GSD66A4SGD_1G:	1
18	SS316L WND FLEXIBLE GRAPHITE, SS316 IR & CS CR, SPIRAL WND, RF, CL600, ASME B16.20, ASME B16.5, T=4.5mm.	3/4	GSD66A4SGD_OJ:	2
<b>VALVES / IN-LINE ITEMS</b>				
19	GATE VALVE;BB;OS&Y;CL600;RF;ASTM A216-WCB;TrLm:STL/STL;API600;FLEXIBLE WEDGE	2	Z40Y1-600C2_02	1
20	GATE VALVE;BB;OS&Y;CL800;SW;A105;TrLm:STL/ST L;API602;SOLID WEDGE	3/4	Z51Y1-800C1_OJ	2
21	GLOBE VALVE;BB;OS&Y;CL800;SW;A105;TrLm:STL/ST L;API602;SWIVEL PLUG	3/4	J51Y1-800C1_OJ	1
22	TRAP;CL800;SW;BODY:A105;TrLm:304SS;See data table	3/4	TRAP68S02AF_OJ	1
23	GLOBE VALVE;BB;OS&Y;CL600;RF;A105;TrLm:STL/ST L;API602;SWIVEL PLUG	3/4	J41Y1-600C1_OJ	1

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

LIBRARY	HALDOR TOPSØE A/S	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
CONTRACTOR	TCC 中国天辰工程有限公司				3

CONTRACTOR DRAWING NO.	
MKP-11-DE-9000-FE-REQ-237	
SHEET 1	TOTAL 4
SUB-CONTRACTOR DRAWING NO.	
17013D85000PE00-12	
SHEET 1	TOTAL 4

Isometric Drawing		PROJECT	ME Methanol Project
2"-HPS-85-200-F24-H6		UNIT	Flare
		PHASE	Detail Engineering
SCALE NO	SHEET 1	TOT. 4	SIZE A3
OWNER DWG NO.		MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	52.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	122.0	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	F24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

SUPPORTS

24	PIPING SUPPORT;ATTA	2	ATTA01_02:50	2
25	PIPING SUPPORT;ATTA	3/4	ATTA01_0J:20	1

ERECTION MATERIALS

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
-------	-----------------------	------------	-----------	-----

BOLTS

26	125 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	3/4	LS3433A:M20	4
27	135 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16	8
28	125 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16	8
29	105 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16	8


INSTRUMENTS

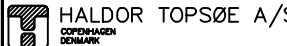
30	仪表 TG 8557	1.1/2		1
----	------------	-------	--	---

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. PE/BE
PPSB1506A_02_S	<1>	2262	2		PE/BE
PPSB1506A_02_S	<2>	191	2		BE/BE
PPSB1506A_02_S	<3>	3578	2		BE/BE
PPSB1506A_02_S	<4>	100	2		BE/BE
PPSB1506A_04_S	<5>	150	4		BE/PE
PPSP1506A_1G_A	<6>	200	1.1/2		PE/PE
PPSB1506A_04_S	<7>	150	4		PE/BE
PPSB1506A_02_S	<8>	421	2		BE/PE
PPSP1506A_0J_A	<9>	59	3/4		PE/PE
PPSP1506A_0J_A	<10>	119	3/4		PE/PE
PPSP1506A_0J_A	<11>	110	3/4		PE/PE
PPSP1506A_0J_A	<12>	112	3/4		PE/TH
PPSP1506A_0J_A	<13>	108	3/4		TH/PE
PPSP1506A_0J_A	<14>	81	3/4		PE/PE
PPSP1506A_0J_A	<15>	79	3/4		PE/PE
PPSB1506A_0J_A	<16>	88	3/4		BE/BE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:  Middle East Kimiaye Pars Company

CONTRACTOR:  HALDOR TOPSØE A/S

DOCUMENT NAME:   
 JOB NO.   
 DOC. NO.   
 REV. 3

CONTRACTOR:  TCC 中国天辰工程有限公司

CONTRACTOR DRAWING NO. MKP-11-DE-9000-FE-REQ-237

SHEET 2 TOTAL 4

SUB-CONTRACTOR DRAWING NO. 17013D85000PE00-12

SHEET 2 TOTAL 4

CONTRACTOR:  江苏中圣高科技产业有限公司

Isometric Drawing

2"-HPS-85-200-F24-H6

SCALE NO	SHEET 2	TOT. 4	SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3
----------	---------	--------	---------	---------------	------------------------

PROJECT	ME Methanol Project
UNIT	Flare
PHASE	Detail Engineering

REV.	DATE	DESCRIPTION	DESIGN	CHECK
3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY

DESIGN PRESS.(barg):	52.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	122.0	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	F24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1	●	⊗	⊥	—	—	—	—	

NOTES

1:DELETE.

2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.

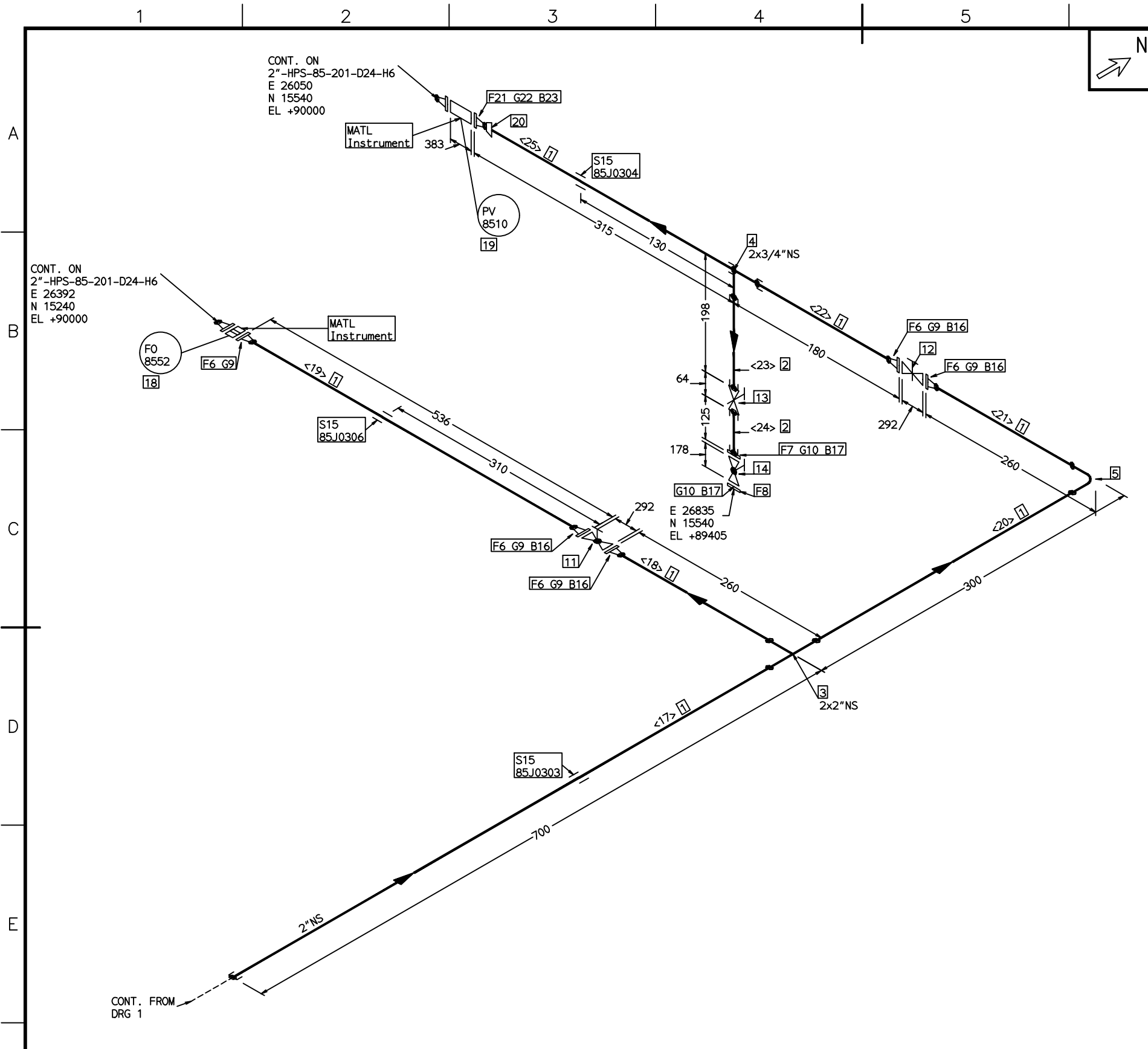
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.

4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.

5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.

6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036 °  
N.E IS ARCHITECTURE COORDINATE SYSTEM.  
X.Y IS SURVEYING COORDINATE SYSTEM.

7:DELETE.



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH80	2	PPSB1506A_02_S 1.8M
2	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH160	3/4	PPSP1506A_0J_A 0.3M
<b>FITTINGS</b>			
3	TEE EQUAL;SMLS;BW;ASTM A234 WPB;ASME B16.9;SCH80	2 x 2	JTSSB1506D_02_ 1
4	SOCKETOLET;SW;ASTM A105;MSS SP-97;CL6000	2 x 3/4	JOOFS18010L6_0 1
5	ELBOW 90°;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH80	2	JELSB1506D_02_ 1
20	SWG ECC;ASTM A234 WPB;SMLS BLEXPSE;MSS SP-95 S-160	2 x 1	I30352307 1
<b>FLANGES</b>			
6	FLANGE;WN;CL600;RF;A105;ASME B16.5;SCH80	2	FFW63R1801H_02 5
7	FLANGE;SW;CL600;RF;A105;ASME B16.5	3/4	FFS63R1801H_0J 1
8	BL FLANGE;CL600;RF;A105;ASME B16.5	3/4	FFB66R1801H_0J 1
21	FLANGE;SW;CL600;RF;A105;ASME B16.5;SCH160	1	I30554159 1
<b>GASKETS</b>			
9	SS316L WND FLEXIBLE GRAPHITE, SS316 IR & CS CR, SPIRAL WND, RF, CL600, ASME B16.20, ASME B16.5, T=4.5mm.	2	GSD66A4SGD_02: 5
10	SS316L WND FLEXIBLE GRAPHITE, SS316 IR & CS CR, SPIRAL WND, RF, CL600, ASME B16.20, ASME B16.5, T=4.5mm.	3/4	GSD66A4SGD_0J: 2
22	SP WOUND GASKET 316L-W, GLAPH-F CL600 THK 4.5mm	1	I25418389 1
<b>VALVES / IN-LINE ITEMS</b>			
11	GLOBE VALVE;BB;OS&Y;CL600;RF;ASTM A216-WCB;TrLm:STL/STL;BS1873;PARABOLIC DISC	2	J41Y1-600C2_02 1
12	GATE VALVE;BB;OS&Y;CL600;RF;ASTM A216-WCB;TrLm:STL/STL;API600;FLEXIBLE WEDGE	2	Z40Y1-600C2_02 1
13	GATE VALVE;BB;OS&Y;CL800;SW;A105;TrLm:STL/ST L;API602;SOLID WEDGE	3/4	Z51Y1-800C1_0J 1
14	GLOBE VALVE;BB;OS&Y;CL600;RF;A105;TrLm:STL/ST L;API602;SWIVEL PLUG	3/4	J41Y1-600C1_0J 1
<b>SUPPORTS</b>			
15	PIPING SUPPORT;ATTA	2	ATTA01_02:50 3

\*\*\*\*\*  
 THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>OPERATIONS DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.
	MKP-11-DE-9000-FE-REQ-237
	SHEET 3 TOTAL 4
 <b>江苏中圣高科技产业有限公司</b> <small>JIANGSU SUNPOWER TECHNOLOGY CO., LTD</small>	SUB-CONTRACTOR DRAWING NO.
	17013D85000PE00-12
	SHEET 3 TOTAL 4

Isometric Drawing 2"-HPS-85-200-F24-H6	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 3	TOT. 4
	SIZE A3	OWNER DWG NO.
		MKP-VD-8500-237-506-A3

NOTES

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha - E\sin\alpha + 3051408.46$ ;  $X=N\sin\alpha + E\cos\alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N.E IS ARCHITECTURE COORDINATE SYSTEM.  
 X.Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	52.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	122.0	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	F24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

A

B

C

D

E

F

\*\*\*\*\*  
\* CONT. FROM DRG 3 \*  
\*\*\*\*\*

ERECTOR MATERIALS

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>BOLTS</b>				
16	125 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16	32
17	105 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16	8
23	95 F-Th Bolt&2 HEAVY HEX NUTS ASTM A193 B7/A194 2H GALVANISED	5/8	Item:15244	4
<b>INSTRUMENTS</b>				
18	ORIFICE600RF > ORIFICE PLATE 3MM & 6MM #600 FO 8552	2		1
19	CV600RF FISHER TYPE CTRL VALVE CL600RF PV 8510	1		1

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSB1506A_02_S	<17>	637	2		PE/BE
PPSB1506A_02_S	<18>	117	2		BE/BE
PPSB1506A_02_S	<19>	378	2		BE/BE
PPSB1506A_02_S	<20>	160	2		BE/BE
PPSB1506A_02_S	<21>	105	2		BE/BE
PPSB1506A_02_S	<22>	101	2		BE/PE
PPSP1506A_0J_A	<23>	146	3/4		PE/PE
PPSP1506A_0J_A	<24>	116	3/4		PE/PE
PPSB1506A_02_S	<25>	235	2		PE/BE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

HALDOR TOPSØE A/S  
COPENHAGEN DENMARK

DOCUMENT NAME: \_\_\_\_\_

JOB NO. \_\_\_\_\_ DOC. NO. \_\_\_\_\_

REV. 3

**TCC 中国天辰工程有限公司**  
CHINA TIANCHEN ENGINEERING CORPORATION

CONTRACTOR DRAWING NO.  
MKP-11-DE-9000-FE-REQ-237

SHEET 4 TOTAL 4

**江苏中圣高科技产业有限公司**  
JIANGSU SUNPOWER TECHNOLOGY CO., LTD

SUB-CONTRACTOR DRAWING NO.  
17013D85000PE00-12

SHEET 4 TOTAL 4

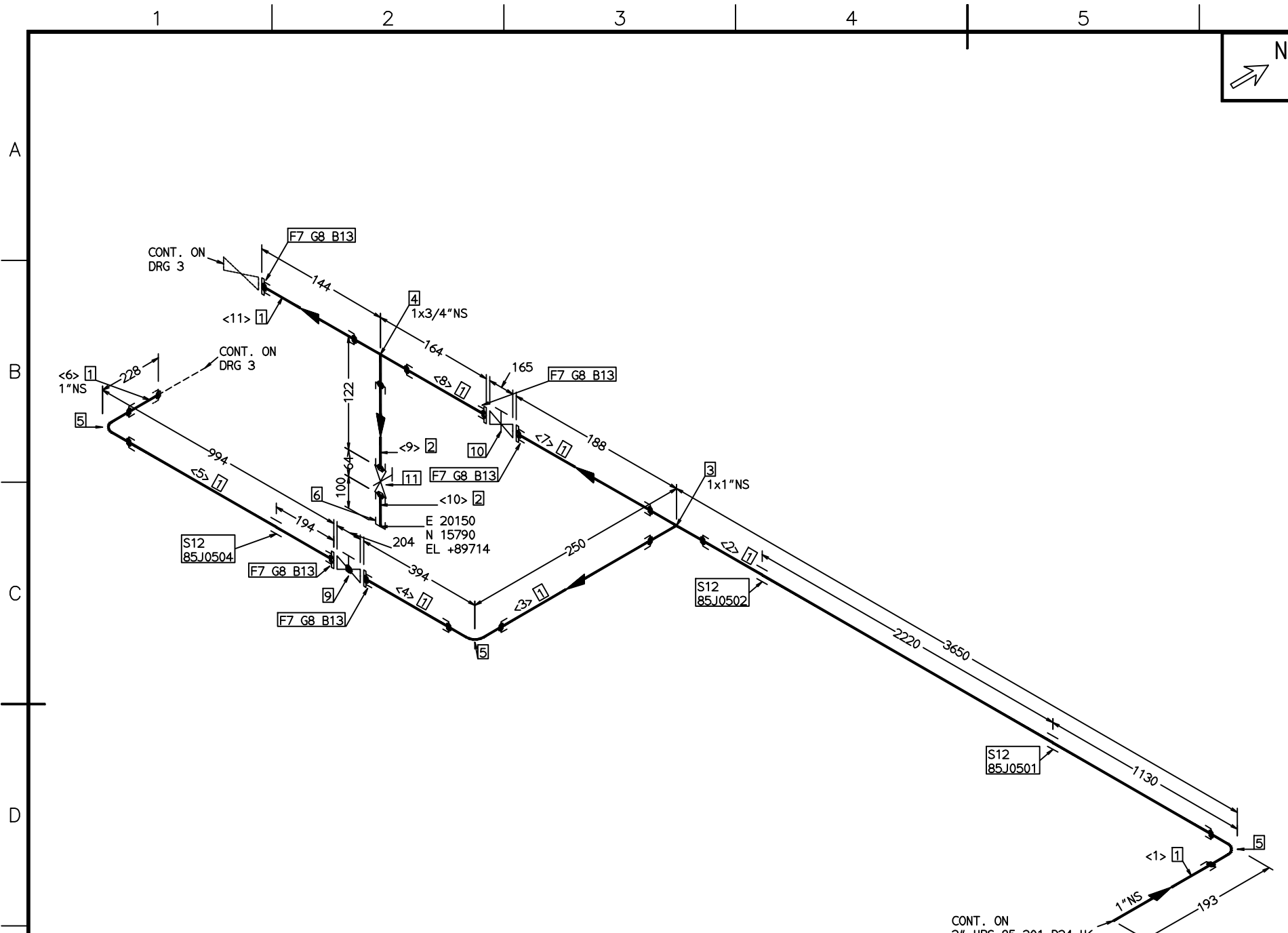
Isometric Drawing  
2"-HPS-85-200-F24-H6

PROJECT	ME Methanol Project
UNIT	Flare
PHASE	Detail Engineering
OWNER DWG NO.	MKP-VD-8500-237-506-A3

SCALE NO SHEET 4 TOT. 4 SIZE A3

NOTES	DESIGN PRESS.(barg):	DESIGN TEMP(°C):	LEAKAGE TEST MEDIUM:	LEAKAGE PRESS(barg)	INSULATION CLASS:	PAINT CODE/COATING:	PIPING CLASS:	REF.PIPING PLAN NO.:
1:DELETE.	52.0	410.0	water	122.0	H6	B4	F24	MKP-VD-8500-237-505-A1
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.								
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.								
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.								
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.								
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.								
7:DELETE.								


REV.	DATE	DESCRIPTION	DESIGN	CHECK
3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY



FABRICATION MATERIALS				
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>PIPE</b>				
1	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	1	PPSP1506A_01_S 6.0M	
2	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	3/4	PPSP1506A_0J_S 0.2M	
<b>FITTINGS</b>				
3	TEE EQUAL;SW;ASTM A105;ASME B16.11;CL3000	1 x 1	JTSFS1801GL3_0	1
4	TEE REDU;SW;ASTM A105;ASME B16.11;CL3000	1 x 3/4	JTRFS1801GL3_0	1
5	ELBOW 90°;SW;ASTM A105;ASME B16.11;CL3000	1	JEQFS1801GL3_0	3
6	CAP;NPT;ASTM A105;ASME B16.11;CL3000	3/4	JKFFN1801GL3_0	1
<b>FLANGES</b>				
7	FLANGE;SW;CL300;RF;A105;ASME B16.5	1	FFS63R1801H_01	5
<b>GASKETS</b>				
8	GASKET SS316L WND FLEXIBLE GRAPHITE, SS3161R & CS CR,SPIRAL WND, RF, CL300, ASMEB16.20, ASME B16.5,T=4.5mm.	1	GSD63A1SGD_01:	5
<b>VALVES / IN-LINE ITEMS</b>				
9	GLOBE VALVE;BB;OS&Y;CL300;RF;A105;TrLm:13Cr/S TL;API602;SWIVEL PLUG	1	J41H1-300C1_01	1
10	GATE VALVE;BB;OS&Y;CL300;RF;A105;TrLm:13Cr/S TL;API602;SOLID WEDGE	1	Z41H1-300C1_01	1
11	GLOBE VALVE;BB;OS&Y;CL800;SW;A105;TrLm:13Cr/S TL;API602;SOLID WEDGE	3/4	Z51H1-800C1_0J	1
<b>SUPPORTS</b>				
12	PIPING SUPPORT;ATTA	1	ATTA01_01:25	3
<b>ERECTION MATERIALS</b>				
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>BOLTS</b>				
13	95 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16	20

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程技术有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 1 TOTAL 4
 <b>江苏中圣高科技产业有限公司</b> SUNPOWER JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 1 TOTAL 4

Isometric Drawing				PROJECT	ME Methanol Project
1"-HPS-85-202-D24-H6				UNIT	Flare
				PHASE	Detail Engineering
SCALE NO	SHEET 1	TOT. 4	SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3

NOTES

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha - E\sin\alpha + 3051408.46$ ;  $X=N\sin\alpha + E\cos\alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N,E IS ARCHITECTURE COORDINATE SYSTEM.  
 X,Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	15.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE PRESS(barg)	36.0	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
INSULATION CLASS:	H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY
PAINT CODE/COATING:	B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK
SHOP WELD		FIELD WELD		SOCKET WELD		SCREWED JOINT
				COMPJ JOINT		PIPE SUPPORT
				LAGGED PIPE		TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1					

\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSP1506A_01_S	<1>	171	1		PE/PE
8:25					
PPSP1506A_01_S	<2>	3606	1		PE/PE
8:25					
PPSP1506A_01_S	<3>	206	1		PE/PE
8:25					
PPSP1506A_01_S	<4>	363	1		PE/PE
8:25					
PPSP1506A_01_S	<5>	963	1		PE/PE
8:25					
PPSP1506A_01_S	<6>	206	1		PE/PE
8:25					
PPSP1506A_01_S	<7>	157	1		PE/PE
8:25					
PPSP1506A_01_S	<8>	132	1		PE/PE
8:25					
PPSP1506A_0J_S	<9>	100	3/4		PE/PE
8:20					
PPSP1506A_0J_S	<10>	100	3/4		PE/TH
8:20					
PPSP1506A_01_S	<11>	112	1		PE/PE
8:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S COPENHAGEN DENMARK	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 TCC 中国天辰工程有限公司 CHINA TIANCHEN ENGINEERING CORPORATION	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 2 TOTAL 4

 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 2 TOTAL 4

Isometric Drawing 1"-HPS-85-202-D24-H6	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 4
SIZE	A3	OWNER DWG NO.
		MKP-VD-8500-237-506-A3

NOTES	DESIGN PRESS.(barg):	15.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE PRESS(barg)	36.0	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
	INSULATION CLASS:	H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
	PAINT CODE/COATING:	B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						

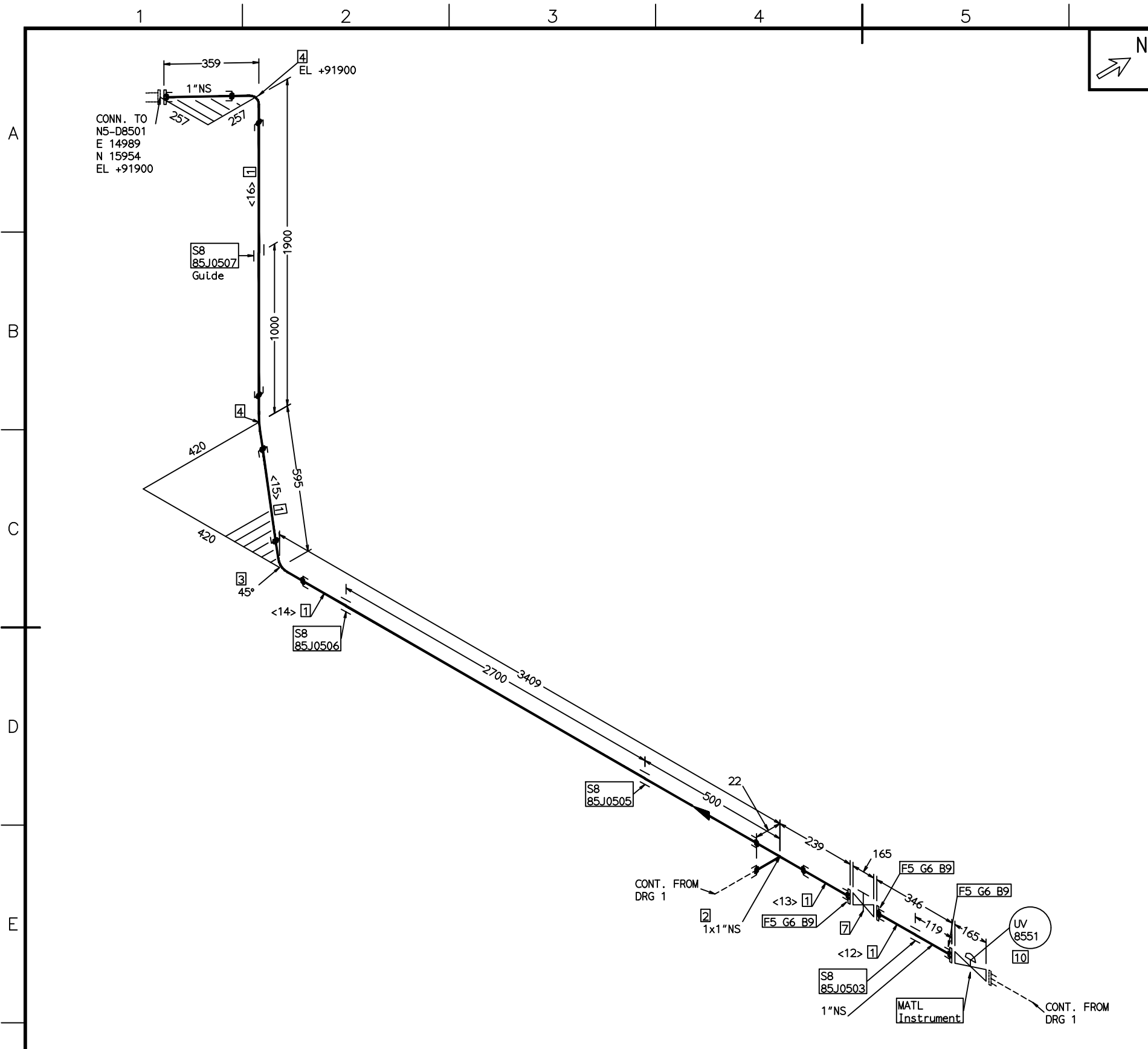
A  
B  
C  
D  
E  
F

A  
B  
C  
D  
E  
F

1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8





FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	1	PPSP1506A_01_S 6.6M
<b>FITTINGS</b>			
2	TEE EQUAL;SW;ASTM A105;ASME B16.11;CL3000	1 x 1	JTSFS1801GL3_0 1
3	ELBOW 45°;SW;ASTM A105;ASME B16.11;CL3000	1	JEPFS1801GL3_0 1
4	ELBOW 90°;SW;ASTM A105;ASME B16.11;CL3000	1	JEQFS1801GL3_0 2
<b>FLANGES</b>			
5	FLANGE;SW;CL300;RF;A105;ASME B16.5	1	FFS63R1801H_01 4
<b>GASKETS</b>			
6	GASKET SS316L WND FLEXIBLE GRAPHITE, SS3161R & CS CR,SPIRAL WND, RF, CL300, ASMEB16.20, ASME B16.5,T=4.5mm.	1	GSD63A1SGD_01: 4
<b>VALVES / IN-LINE ITEMS</b>			
7	GATE VALVE;BB;OS&Y;CL300;RF;A105;TrLm:13Cr/S TL;API602;SOLID WEDGE	1	Z41H1-300C1_01 1
<b>SUPPORTS</b>			
8	PIPING SUPPORT;ATTA	1	ATA01_01:25 4
<b>ERECTION MATERIALS</b>			
<b>BOLTS</b>			
9	95 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 16
<b>INSTRUMENTS</b>			
10	CV300RF FISHER TYPE CTRL VALVE CL300RF UV 8551	1	

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER: **Middle East Kimiaye Pars Company**

LIBRARY	HALDOR TOPSØE A/S	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
CONTRACTOR	TCC 中国天辰工程有限公司				3

CONTRACTOR	TCC 中国天辰工程有限公司	CONTRACTOR DRAWING NO.	MKP-11-DE-9000-FE-REQ-237
SUB-CONTRACTOR	江苏中圣高科技产业有限公司	SUB-CONTRACTOR DRAWING NO.	17013D85000PE00-12
	JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SHEET 3	TOTAL 4

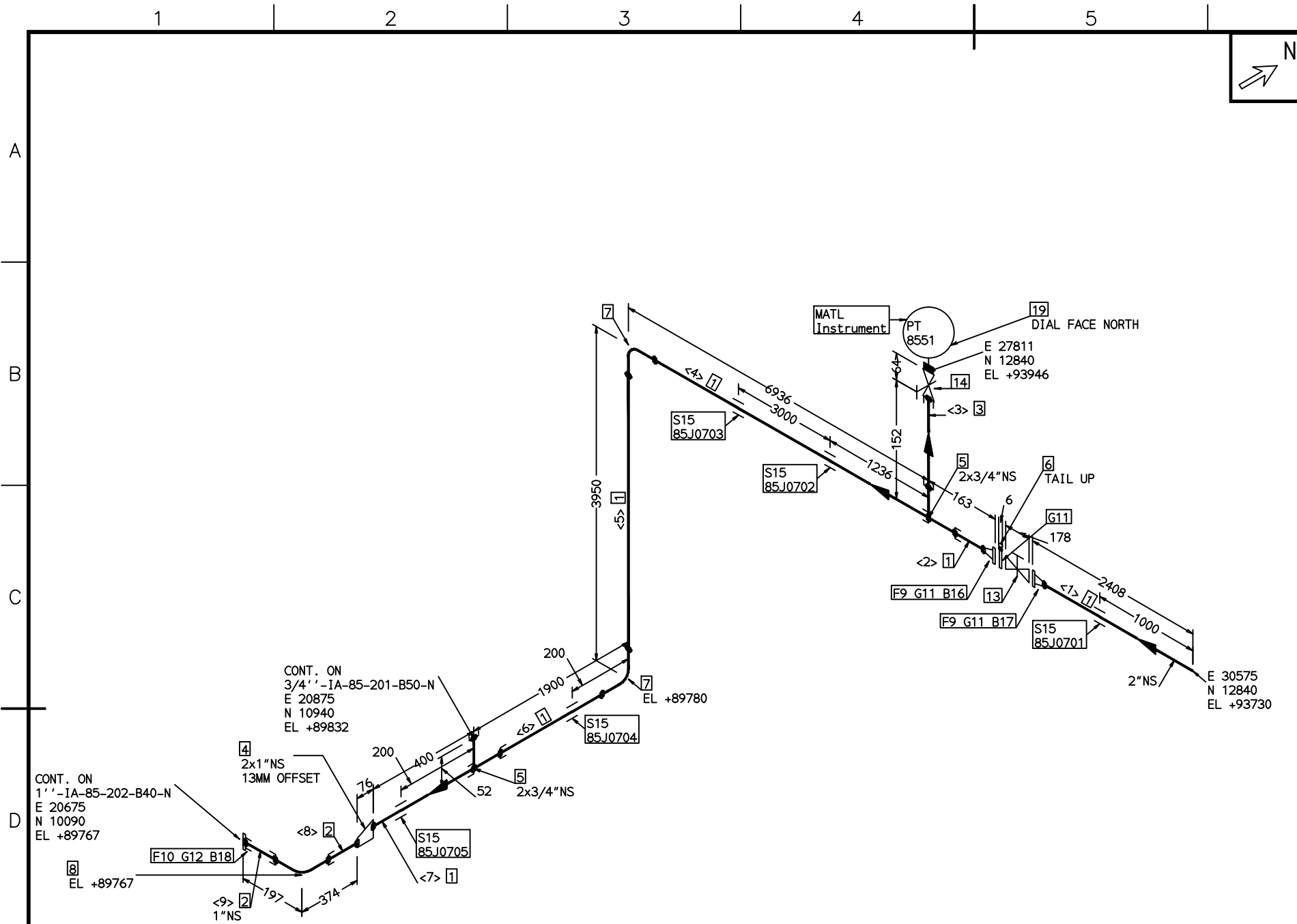
PROJECT	ME Methanol Project
UNIT	Flare
PHASE	Detail Engineering
OWNER DWG NO.	MKP-VD-8500-237-506-A3

**NOTES**

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y = N \cos \alpha - E \sin \alpha + 3051408.46$ ;  $X = N \sin \alpha + E \cos \alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N, E IS ARCHITECTURE COORDINATE SYSTEM.  
 X, Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	15.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
DESIGN TEMP(°C):	410.0	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE PRESS(barg)	36.0	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
INSULATION CLASS:	H6	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY
PAINT CODE/COATING:	B4	REV.	DATE	DESCRIPTION	DESIGN	CHECK
SHOP WELD		FIELD WELD		SOCKET WELD		SCREWED JOINT
						COMPJ JOINT
						PIPE SUPPORT
						LAGGED PIPE
						TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1					






FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;A312-TP304;ASME B36.19M;SCH10S	2	PPSB3501A_02_115.4M
2	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	1	PPSP3501A_01_4 0.6M
3	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	3/4	PPSP3501A_0J_4 0.1M
<b>FITTINGS</b>			
4	REDUCER ECC.;SMLS;BW;ASME A403-WP304;ASME B16.9;SCH10SCH40S	2 x 1	JRESB3601D_020 1
5	SOCKETOLET;SW;ASTM A182-F304;MSS SP-97;CL3000	2 x 3/4	JOOF338010L3_0 2
6	FIGURE 8;CL150;RF;ASTM A240 Gr.304;ASME B16.48	2	BBG62P3801K_02 1
7	ELBOW 90°;SMLS;LR;BW;ASME A403-WP304;ASME B16.9;SCH10S	2	JELSB3601D_02_2
8	ELBOW 90°;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEQFS3801GL3_0 1
<b>FLANGES</b>			
9	FLANGE;WN;CL150;RF;ASME A182 F304;ASME B16.5;SCH10S	2	FFW62R3801H_02 2
10	FLANGE;SW;CL150;RF;ASME A182 F304;ASME B16.5	1	FFS62R3801H_01 1
<b>GASKETS</b>			
11	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	2	GSD62A5SGD_02: 3
12	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	1	GSD62A5SGD_01: 1
<b>VALVES / IN-LINE ITEMS</b>			
13	GATE VALVE;BB;OS&Y;CL150;RF;A351-CF8;TrLm:30 4;API600;FLEXIBLE WEDGE	2	Z40E1-150P2_02 1
14	GATE VALVE;BB;OS&Y;CL800;SW;A182-F304;TrLm:3 04;API602;SOLID WEDGE	3/4	Z51E1-800P1_OJ 1
<b>SUPPORTS</b>			
15	PIPING SUPPORT;ATTA	2	ATTA01_02:50 5
<b>ERECTION MATERIALS</b>			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
***** * CONT. ON DRG 2 * *****			

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



**Middle East  
Kimiaye Pars Company**

	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 1 TOTAL 2
	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 1 TOTAL 2

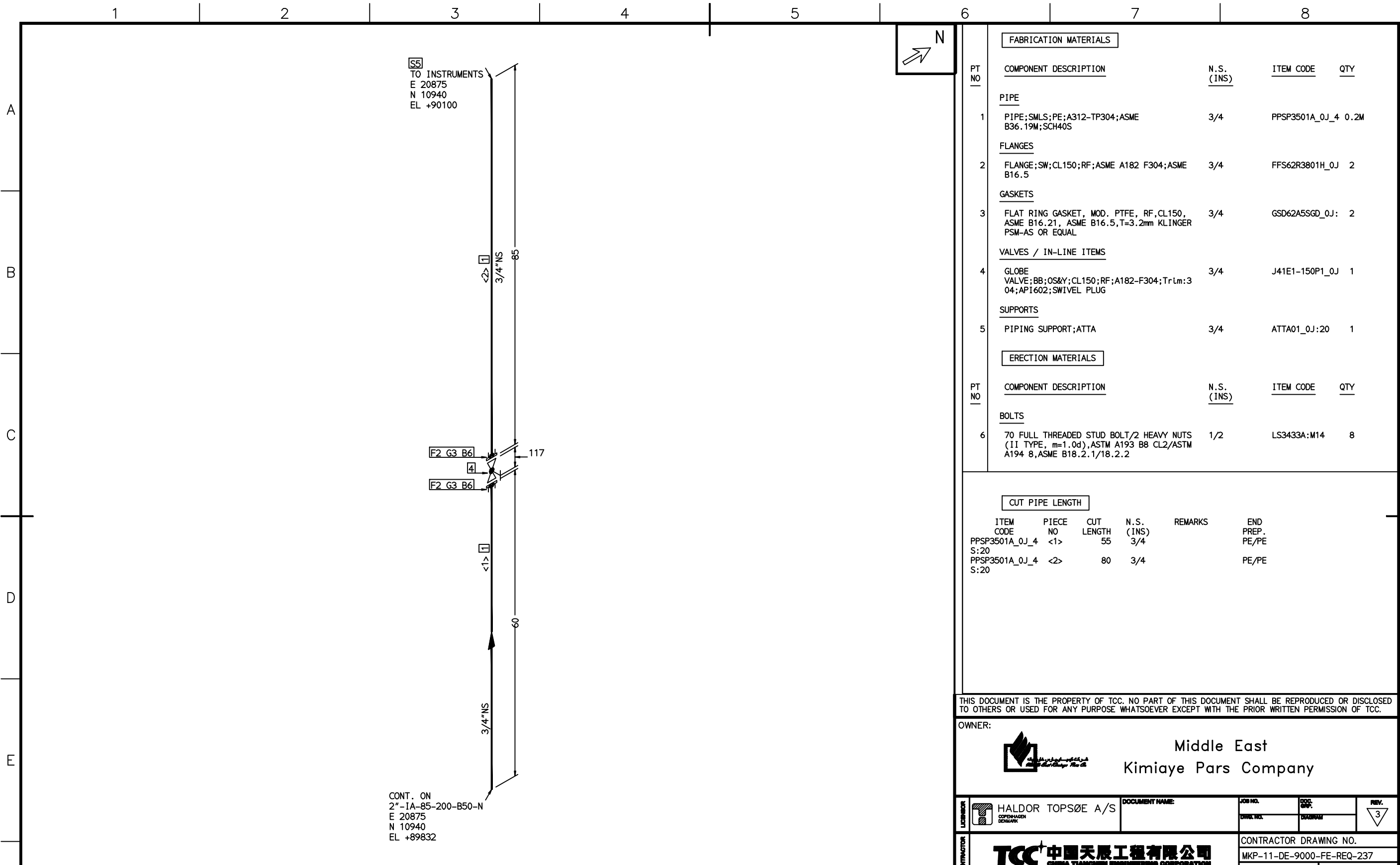
Isometric Drawing 2"-IA-85-200-B50-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 1	TOT. 2
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

**NOTES**

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha - E\sin\alpha + 3051408.46$ ;  $X=N\sin\alpha + E\cos\alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N,E IS ARCHITECTURE COORDINATE SYSTEM.  
 X,Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	10.5	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	15.75	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								





FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	3/4	PPSP3501A_OJ_4 0.2M
<b>FLANGES</b>			
2	FLANGE;SW;CL150;RF;ASME A182 F304;ASME B16.5	3/4	FFS62R3801H_OJ 2
<b>GASKETS</b>			
3	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	3/4	GSD62A5SGD_OJ: 2
<b>VALVES / IN-LINE ITEMS</b>			
4	GLOBE VALVE;BB;OS&Y;CL150;RF;A182-F304;TrUm:3 04;AP1602;SWIVEL PLUG	3/4	J41E1-150P1_OJ 1
<b>SUPPORTS</b>			
5	PIPING SUPPORT;ATTA	3/4	ATTA01_OJ:20 1

ERECTION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>BOLTS</b>			
6	70 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 8

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH (INS)	N.S. (INS)	REMARKS	END PREP. PE/PE
PPSP3501A_OJ_4	<1>	55	3/4		PE/PE
PPSP3501A_OJ_4	<2>	80	3/4		PE/PE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

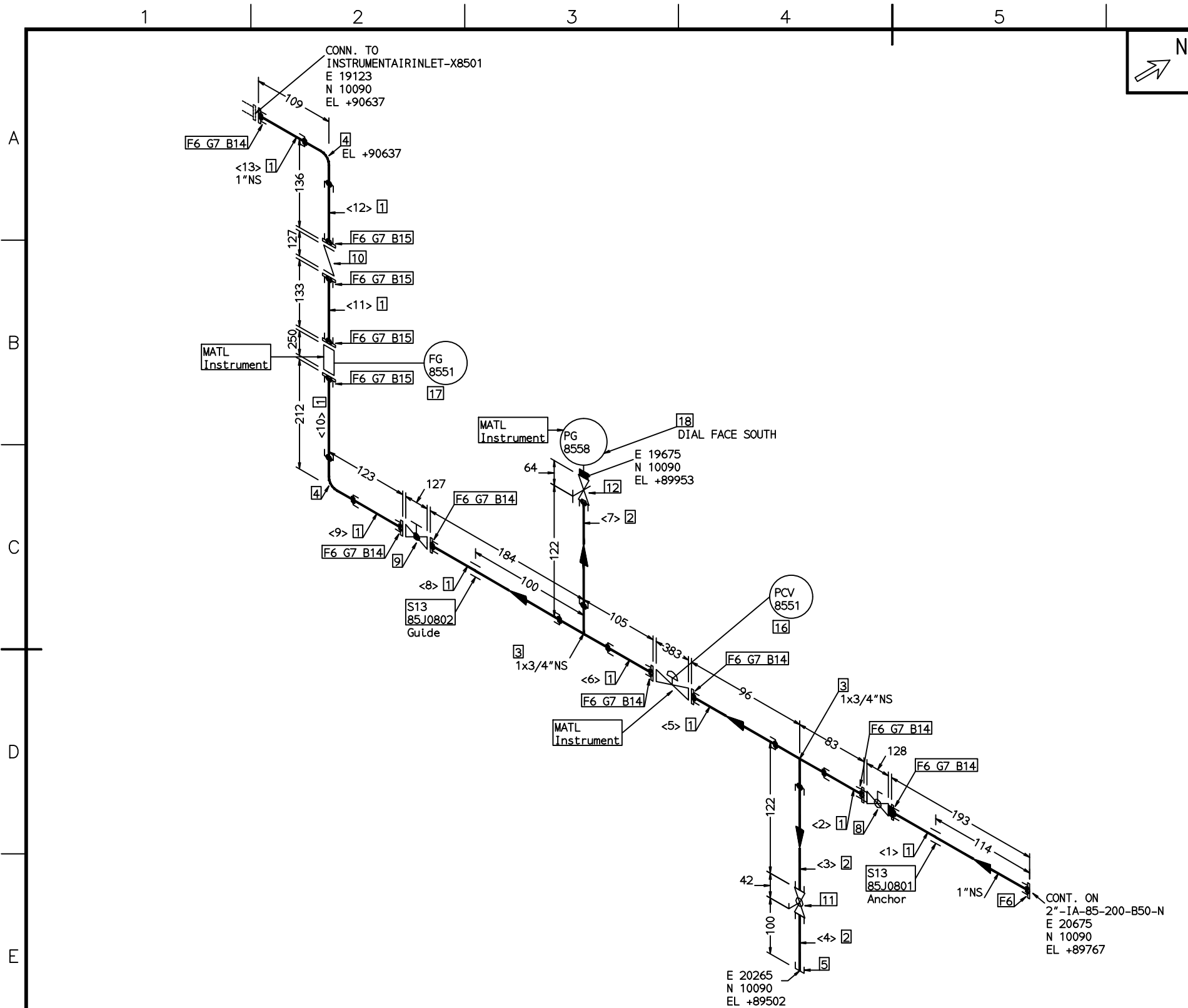
LIBRARY	HALDOR TOPSØE A/S	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
CONTRACTOR	TCC 中国天辰工程有限公司				3

CONTRACTOR	TCC 中国天辰工程有限公司	CONTRACTOR DRAWING NO.	MKP-11-DE-9000-FE-REQ-237
SUB-CONTRACTOR	江苏中圣高科技产业有限公司	SUB-CONTRACTOR DRAWING NO.	17013D85000PE00-12
	JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SHEET 1	TOTAL 1

Isometric Drawing				PROJECT	ME Methanol Project
3/4'-IA-85-201-B50-N				UNIT	Flare
				PHASE	Detail Engineering
SCALE	NO	SHEET 1	TOT. 1	OWNER DWG NO.	MKP-VD-8500-237-506-A3


NOTES	DESIGN PRESS.(barg):	10.5	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	15.75	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036 ° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

CONT. ON  
2'-IA-85-200-B50-N  
E 20875  
N 10940  
EL +89832





FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;A312-TP304L;ASME B36.19M;SCH40S	1	PPSP3502A_01_4 1.2M
2	PIPE;SMLS;PE;A312-TP304L;ASME B36.19M;SCH40S	3/4	PPSP3502A_OJ_4 0.3M
<b>FITTINGS</b>			
3	TEE REDU;SW;ASME A182-F304L;ASME B16.11;CL3000	1 x 3/4	JTRFS3802GL3_0 2
4	ELBOW 90°;SW;ASME A182-F304L;ASME B16.11;CL3000	1	JEQFS3802GL3_0 2
5	CAP;NPT;ASME A182-F304L;ASME B16.11;CL3000	3/4	JKFFN3802GL3_0 1
<b>FLANGES</b>			
6	FLANGE;SW;CL150;RF;ASME A182 F304L;ASME B16.5	1	FFS62R3802H_01 12
<b>GASKETS</b>			
7	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5, T=3.2mm KLINGER PSM-AS OR EQUAL.	1	GSD62A6SGD_01: 11
<b>VALVES / IN-LINE ITEMS</b>			
8	BALL VALVE;A182-F304L;BALL:SS304,PTFE SEAT;CL150;RF;FLOATING,FULL BORE,SPLIT BODY,API608;ANTIC STATIC AND FIRE SAFE	1	Q41F1-150P3_01 1
9	NEDDLE VALVE;BB;OS&Y;CL150;RF;A182-F304L;TrLm:304L;API602	1	VBD62R3502ECA 1
10	CHECK VALVE;BC;LIFT;CL150;RF;A182-F304L;TrLm:304L;API602	1	H41E1-150P3_01 1
11	BALL VALVE;A182-F304L;BALL:SS304,PTFE SEAT;CL600;SW;FLOATING,FULL BORE,SPLIT BODY,API608;ANTIC STATIC AND FIRE SAFE	3/4	Q41F1-600C1_OJ 1
12	GATE VALVE;BB;OS&Y;CL800;SW;A182-F304L;TrLm:304L;API602;SOLID WEDGE	3/4	Z51E1-800P3_OJ 1
<b>SUPPORTS</b>			
13	PIPING SUPPORT;ATTA	1	ATTA01_01:25 2
<b>ERECTION MATERIALS</b>			
<b>BOLTS</b>			
14	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 28

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:  Middle East Kimiaye Pars Company

LIBRARY: HALDOR TOPSØE A/S

CONTRACTOR:  TCC 中国天辰工程技术有限公司

CONTRACTOR:  江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD

CONTRACTOR DRAWING NO.	MKP-11-DE-9000-FE-REQ-237
SHEET 1	TOTAL 2
SUB-CONTRACTOR DRAWING NO.	17013D85000PE00-12
SHEET 1	TOTAL 2


PROJECT	ME Methanol Project
UNIT	Flare
PHASE	Detail Engineering
OWNER DWG NO.	MKP-VD-8500-237-506-A3

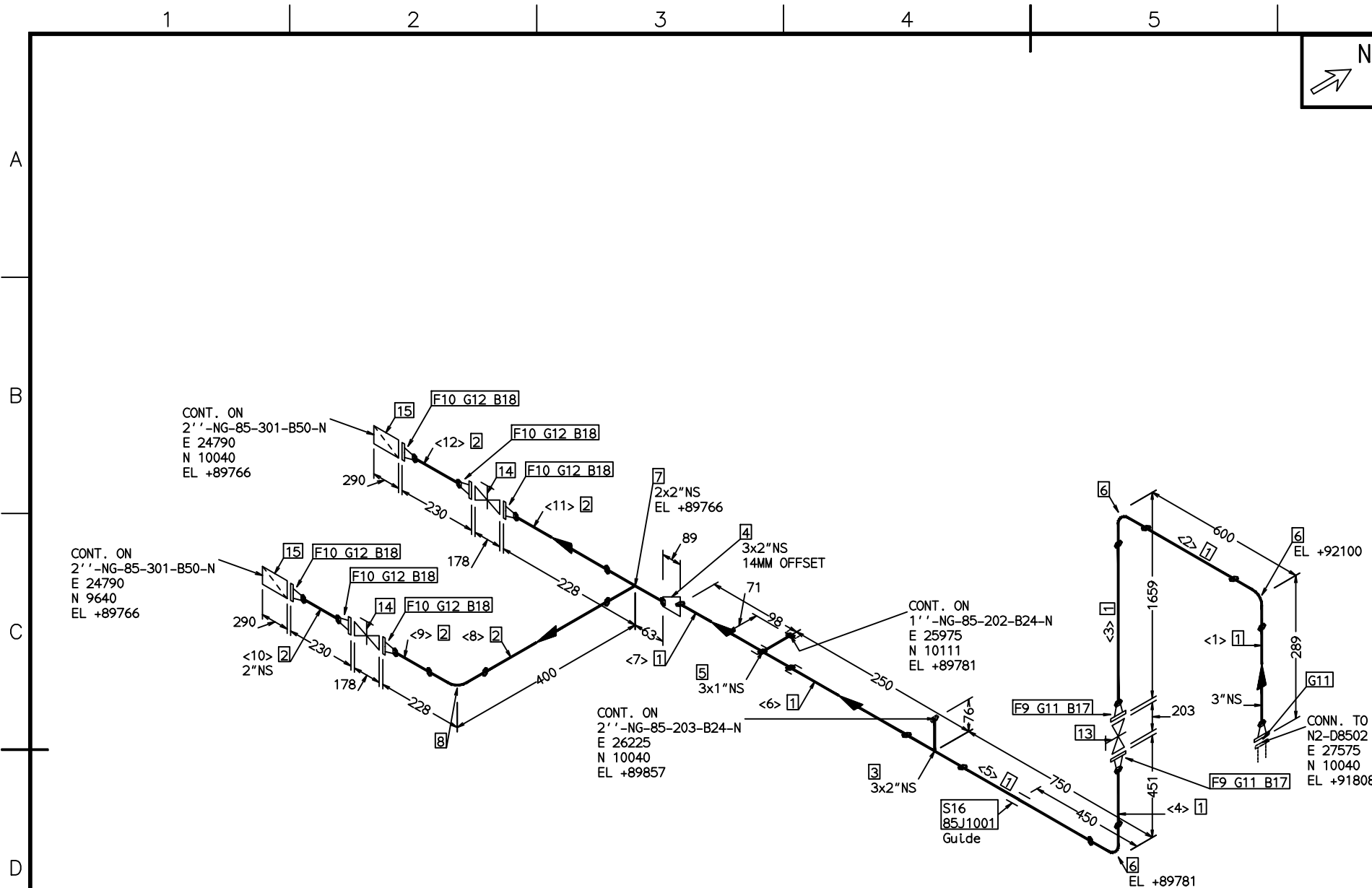
SCALE	NO	SHEET 1	TOT. 2	SIZE A3
-------	----	---------	--------	---------

**NOTES**

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y = N \cos \alpha - E \sin \alpha + 3051408.46$ ;  $X = N \sin \alpha + E \cos \alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N, E IS ARCHITECTURE COORDINATE SYSTEM.  
 X, Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	10.5	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE PRESS(barg)	15.75	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY
PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK
SHOP WELD		FIELD WELD		SOCKET WELD		SCREWED JOINT
				COMPJ JOINT		PIPE SUPPORT
				LAGGED PIPE		TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1					


						<p>***** * CONT. FROM DRG 1 * ***** LS3433A:M14 16</p>																																																																																																																																																																			
						<p>15 70 FULL THREADED STUD BOLT/2 HEAVY NUTS 1/2 (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2</p>																																																																																																																																																																			
						<p>INSTRUMENTS</p>																																																																																																																																																																			
						<p>16 CV150RF FISHER TYPE CTRL VALVE CL150RF 1 1</p>																																																																																																																																																																			
						<p>17 PCV 8551 1 1</p>																																																																																																																																																																			
						<p>18 Flowmeter150RF FG 8551 3/4 1 仪表 PG 8558</p>																																																																																																																																																																			
						<p>CUT PIPE LENGTH</p>																																																																																																																																																																			
						<table border="1"> <thead> <tr> <th>ITEM CODE</th> <th>PIECE NO</th> <th>CUT LENGTH</th> <th>N.S. (INS)</th> <th>REMARKS</th> <th>END PREP.</th> </tr> </thead> <tbody> <tr> <td>PPSP3502A_01_4</td> <td>&lt;1&gt;</td> <td>183</td> <td>1</td> <td></td> <td>PE/PE</td> </tr> <tr> <td>S:25</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSP3502A_01_4</td> <td>&lt;2&gt;</td> <td>56</td> <td>1</td> <td></td> <td>PE/PE</td> </tr> <tr> <td>S:25</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSP3502A_0J_4</td> <td>&lt;3&gt;</td> <td>100</td> <td>3/4</td> <td></td> <td>PE/TH</td> </tr> <tr> <td>S:20</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSP3502A_0J_4</td> <td>&lt;4&gt;</td> <td>100</td> <td>3/4</td> <td></td> <td>TH/TH</td> </tr> <tr> <td>S:20</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSP3502A_01_4</td> <td>&lt;5&gt;</td> <td>69</td> <td>1</td> <td></td> <td>PE/PE</td> </tr> <tr> <td>S:25</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSP3502A_01_4</td> <td>&lt;6&gt;</td> <td>79</td> <td>1</td> <td></td> <td>PE/PE</td> </tr> <tr> <td>S:25</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSP3502A_0J_4</td> <td>&lt;7&gt;</td> <td>100</td> <td>3/4</td> <td></td> <td>PE/PE</td> </tr> <tr> <td>S:20</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSP3502A_01_4</td> <td>&lt;8&gt;</td> <td>157</td> <td>1</td> <td></td> <td>PE/PE</td> </tr> <tr> <td>S:25</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSP3502A_01_4</td> <td>&lt;9&gt;</td> <td>97</td> <td>1</td> <td></td> <td>PE/PE</td> </tr> <tr> <td>S:25</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSP3502A_01_4</td> <td>&lt;10&gt;</td> <td>185</td> <td>1</td> <td></td> <td>PE/PE</td> </tr> <tr> <td>S:25</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSP3502A_01_4</td> <td>&lt;11&gt;</td> <td>123</td> <td>1</td> <td></td> <td>PE/PE</td> </tr> <tr> <td>S:25</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSP3502A_01_4</td> <td>&lt;12&gt;</td> <td>109</td> <td>1</td> <td></td> <td>PE/PE</td> </tr> <tr> <td>S:25</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PPSP3502A_01_4</td> <td>&lt;13&gt;</td> <td>82</td> <td>1</td> <td></td> <td>PE/PE</td> </tr> <tr> <td>S:25</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.	PPSP3502A_01_4	<1>	183	1		PE/PE	S:25						PPSP3502A_01_4	<2>	56	1		PE/PE	S:25						PPSP3502A_0J_4	<3>	100	3/4		PE/TH	S:20						PPSP3502A_0J_4	<4>	100	3/4		TH/TH	S:20						PPSP3502A_01_4	<5>	69	1		PE/PE	S:25						PPSP3502A_01_4	<6>	79	1		PE/PE	S:25						PPSP3502A_0J_4	<7>	100	3/4		PE/PE	S:20						PPSP3502A_01_4	<8>	157	1		PE/PE	S:25						PPSP3502A_01_4	<9>	97	1		PE/PE	S:25						PPSP3502A_01_4	<10>	185	1		PE/PE	S:25						PPSP3502A_01_4	<11>	123	1		PE/PE	S:25						PPSP3502A_01_4	<12>	109	1		PE/PE	S:25						PPSP3502A_01_4	<13>	82	1		PE/PE	S:25					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.																																																																																																																																																																				
PPSP3502A_01_4	<1>	183	1		PE/PE																																																																																																																																																																				
S:25																																																																																																																																																																									
PPSP3502A_01_4	<2>	56	1		PE/PE																																																																																																																																																																				
S:25																																																																																																																																																																									
PPSP3502A_0J_4	<3>	100	3/4		PE/TH																																																																																																																																																																				
S:20																																																																																																																																																																									
PPSP3502A_0J_4	<4>	100	3/4		TH/TH																																																																																																																																																																				
S:20																																																																																																																																																																									
PPSP3502A_01_4	<5>	69	1		PE/PE																																																																																																																																																																				
S:25																																																																																																																																																																									
PPSP3502A_01_4	<6>	79	1		PE/PE																																																																																																																																																																				
S:25																																																																																																																																																																									
PPSP3502A_0J_4	<7>	100	3/4		PE/PE																																																																																																																																																																				
S:20																																																																																																																																																																									
PPSP3502A_01_4	<8>	157	1		PE/PE																																																																																																																																																																				
S:25																																																																																																																																																																									
PPSP3502A_01_4	<9>	97	1		PE/PE																																																																																																																																																																				
S:25																																																																																																																																																																									
PPSP3502A_01_4	<10>	185	1		PE/PE																																																																																																																																																																				
S:25																																																																																																																																																																									
PPSP3502A_01_4	<11>	123	1		PE/PE																																																																																																																																																																				
S:25																																																																																																																																																																									
PPSP3502A_01_4	<12>	109	1		PE/PE																																																																																																																																																																				
S:25																																																																																																																																																																									
PPSP3502A_01_4	<13>	82	1		PE/PE																																																																																																																																																																				
S:25																																																																																																																																																																									
						<p>THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.</p>																																																																																																																																																																			
						<p>OWNER:</p>  <p>Middle East Kimiaye Pars Company</p>																																																																																																																																																																			
						<p>HALDOR TOPSØE A/S COPENHAGEN DENMARK</p>																																																																																																																																																																			
						<p>CONTRACTOR DRAWING NO. MKP-11-DE-9000-FE-REQ-237 SHEET 2 TOTAL 2</p>																																																																																																																																																																			
						<p>江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD</p>																																																																																																																																																																			
						<p>SUB-CONTRACTOR DRAWING NO. 17013D85000PE00-12 SHEET 2 TOTAL 2</p>																																																																																																																																																																			
						<p>Isometric Drawing 1''-IA-85-202-840-N</p>																																																																																																																																																																			
						<p>PROJECT: ME Methanol Project UNIT: Flare PHASE: Detail Engineering</p>																																																																																																																																																																			
						<p>SCALE NO SHEET 2 TOT. 2 SIZE A3 OWNER DWG NO. MKP-VD-8500-237-506-A3</p>																																																																																																																																																																			
<p>NOTES</p> <p>1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.</p>		<p>DESIGN PRESS.(barg): 10.5</p>	<p>DESIGN TEMP(°C): 85</p>	<p>LEAKAGE TEST MEDIUM: water</p>	<p>LEAKAGE PRESS(barg) 15.75</p>	<p>INSULATION CLASS: NA</p>	<p>PAINT CODE/COATING: NA</p>	<p>PIPING CLASS: B40</p>	<p>REF.PIPING PLAN NO.: MKP-VD-8500-237-505-A1</p>																																																																																																																																																																
		<p>REV. DATE DESCRIPTION DESIGN CHECK</p>	<p>SHOP WELD FIELD WELD SOCKET WELD SCREWED JOINT COMPN JOINT PIPE SUPPORT LAGGED PIPE TRACED PIPE</p>	<p>3 11.12.2019 FINAL ISSUE GENGYF BAIY</p>	<p>2 29.11.2018 FINAL ISSUE GENGYF BAIY</p>	<p>1 08.11.2018 FINAL ISSUE GENGYF BAIY</p>	<p>0 14.12.2017 FINAL ISSUE GENGYF BAIY</p>	<p>A 17.07.2017 ISSUED FOR REVIEW GENGYF BAIY</p>																																																																																																																																																																	



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	3	PPSB1506A_03_S 3.1M
2	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	2	PPSB1506A_02_S 0.7M
<b>FITTINGS</b>			
3	TEE REDU;SMLS;BW;ASTM A234 WPB;ASME B16.9;SCH40XSCH40	3 x 2	JTRSB1506D_030 1
4	REDUCER ECC.;SMLS;BW;ASTM A234 WPB;ASME B16.9;SCH40XSCH40	3 x 2	JRESB1506D_030 1
5	SOCKETOLET;SW;ASTM A105;MSS SP-97;CL3000	3 x 1	JOOFS18010L3_0 1
6	ELBOW 90°;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	3	JELSB1506D_03_3
7	TEE EQUAL;SMLS;BW;ASTM A234 WPB;ASME B16.9;SCH40	2 x 2	JTSSB1506D_02_1
8	ELBOW 90°;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	2	JELSB1506D_02_1
<b>FLANGES</b>			
9	FLANGE;WN;CL150;RF;A105;ASME B16.5;SCH40	3	FFW62R1801H_03 2
10	FLANGE;WN;CL150;RF;A105;ASME B16.5;SCH40	2	FFW62R1801H_02 6
<b>GASKETS</b>			
11	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5, T=3.2mm KLINGER PSM-AS OR EQUAL	3	GSD62A4SGD_03: 3
12	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5, T=3.2mm KLINGER PSM-AS OR EQUAL	2	GSD62A4SGD_02: 6
<b>VALVES / IN-LINE ITEMS</b>			
13	GATE VALVE;BB;OS&Y;CL150;RF;ASTM A216-WCB;TrLm:13Cr/STL;API600;FLEXIBLE WEDGE	3	Z40H1-150C2_03 1
14	GATE VALVE;BB;OS&Y;CL150;RF;ASTM A216-WCB;TrLm:13Cr/STL;API600;FLEXIBLE WEDGE	2	Z40H1-150C2_02 2
15	STRAINERS;CL150;RF;SRY;BODY:CS,TrLm:304S S;MFR'S STD	2	SY41E1-150C2_0 2
<b>SUPPORTS</b>			
16	PIPING SUPPORT;ATTA	3	ATTA01_03:80 1
<b>ERECTION MATERIALS</b>			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
***** * CONT. ON DRG 2 * *****			

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



**Middle East  
Kimiaye Pars Company**

LIBRARY	HALDOR TOPSØE A/S	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
CONTRACTOR	TCC 中国天辰工程有限公司 CHINA TIANCHEN ENGINEERING CORPORATION				3

CONTRACTOR	江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	CONTRACTOR DRAWING NO.	MKP-11-DE-9000-FE-REQ-237
		SHEET 1	TOTAL 2
		SUB-CONTRACTOR DRAWING NO.	17013D85000PE00-12
		SHEET 1	TOTAL 2

Isometric Drawing				PROJECT	ME Methanol Project
3''-NG-85-201-B24-N				UNIT	Flare
				PHASE	Detail Engineering
SCALE NO	SHEET 1	TOT. 2	SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3

**NOTES**

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y = N \cos \alpha - E \sin \alpha + 3051408.46$ ;  $X = N \sin \alpha + E \cos \alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N, E IS ARCHITECTURE COORDINATE SYSTEM.  
 X, Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY
PAINT CODE/COATING:	A1	REV.	DATE	DESCRIPTION	DESIGN	CHECK
SHOP WELD		FIELD WELD		SOCKET WELD		SCREWED JOINT
COMPJ		PIPE SUPPORT		LAGGED PIPE		TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1					



\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

BOLTS			
17	105 FULL THREADED STUD BOLT/2 HEAVY NUTS 5/8 (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	LS3433A:M16	8
18	95 FULL THREADED STUD BOLT/2 HEAVY NUTS 5/8 (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	LS3433A:M16	24

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. BE/BE
PPSB1506A_03_S	<1>	105	3		BE/BE
4:80					
PPSB1506A_03_S	<2>	372	3		BE/BE
4:80					
PPSB1506A_03_S	<3>	1475	3		BE/BE
4:80					
PPSB1506A_03_S	<4>	267	3		BE/BE
4:80					
PPSB1506A_03_S	<5>	550	3		BE/BE
4:80					
PPSB1506A_03_S	<6>	164	3		BE/PE
4:80					
PPSB1506A_02_S	<8>	260	2		BE/BE
4:50					
PPSB1506A_02_S	<9>	89	2		BE/BE
4:50					
PPSB1506A_02_S	<10>	104	2		BE/BE
4:50					
PPSB1506A_02_S	<11>	101	2		BE/BE
4:50					
PPSB1506A_02_S	<12>	104	2		BE/BE
4:50					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



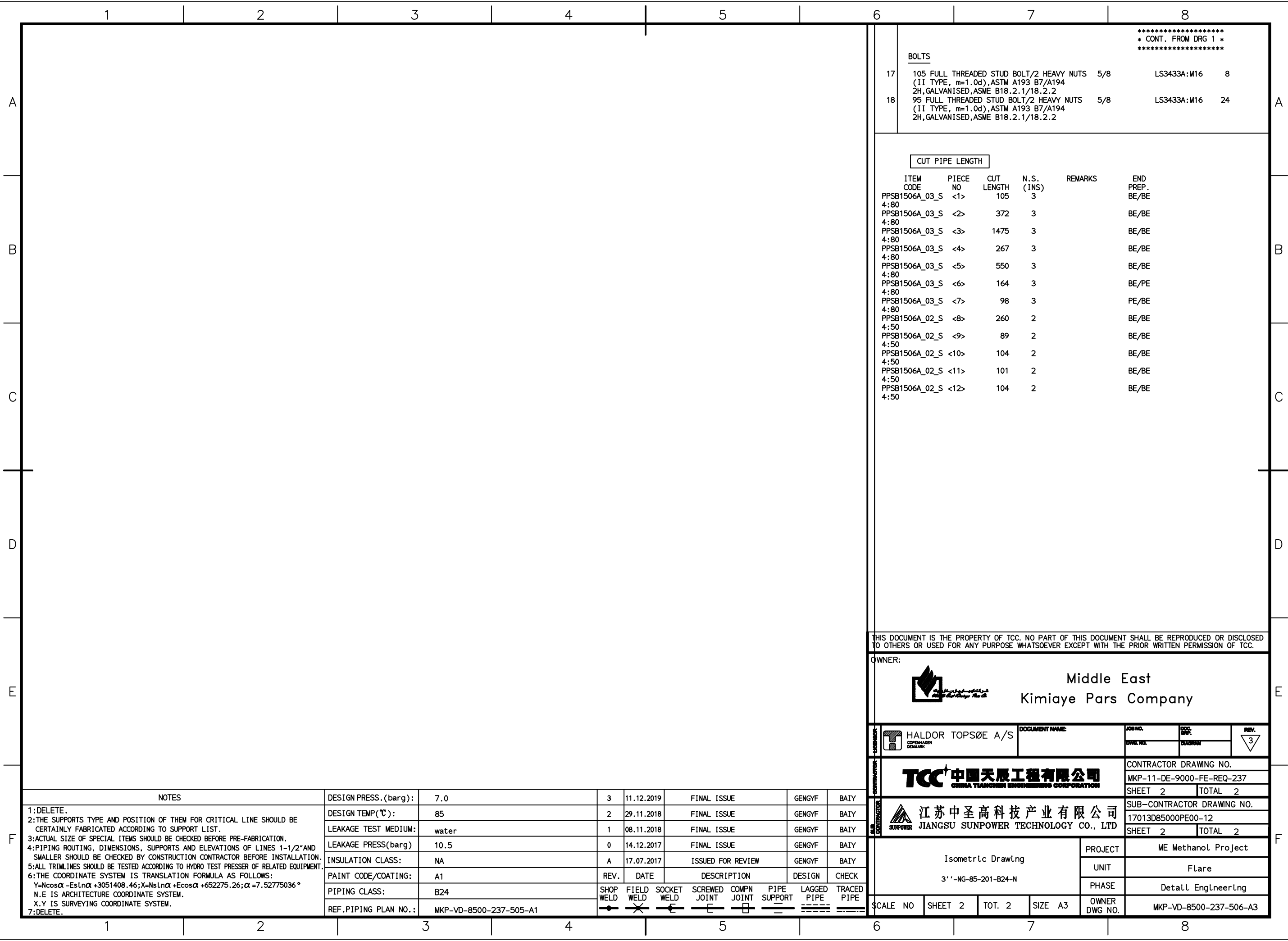
**Middle East  
Kimiaye Pars Company**

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC 中国天辰工程有限公司</b> <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 2 TOTAL 2
 <b>江苏中圣高科技产业有限公司</b> <small>JIANGSU SUNPOWER TECHNOLOGY CO., LTD</small>	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 2 TOTAL 2

Isometric Drawing 3''-NG-85-201-B24-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 2
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
	PAINT CODE/COATING:	A1	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						





\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSP1506A_01_S	<1>	506	1		PE/PE
8:25					
PPSP1506A_01_S	<2>	157	1		PE/PE
8:25					
PPSP1506A_01_S	<3>	100	1		PE/PE
8:25					
PPSP1506A_01_S	<4>	126	1		PE/PE
8:25					
PPSP1506A_01_S	<5>	557	1		PE/PE
8:25					
PPSP1506A_01_S	<6>	1362	1		PE/PE
8:25					
PPSP1506A_01_S	<7>	163	1		PE/PE
8:25					
PPSP1506A_0J_S	<8>	107	1		PE/PE
8:25					
PPSP1506A_0J_S	<9>	127	3/4		PE/PE
8:20					
PPSP1506A_0J_S	<10>	100	3/4		PE/TH
8:20					
PPSP1506A_01_S	<11>	159	1		PE/PE
8:25					
PPSP1506A_01_S	<12>	210	1		PE/PE
8:25					
PPSP1506A_01_S	<13>	157	1		PE/PE
8:25					
PPSP1506A_01_S	<14>	825	1		PE/PE
8:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

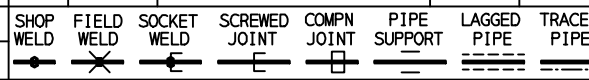
 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

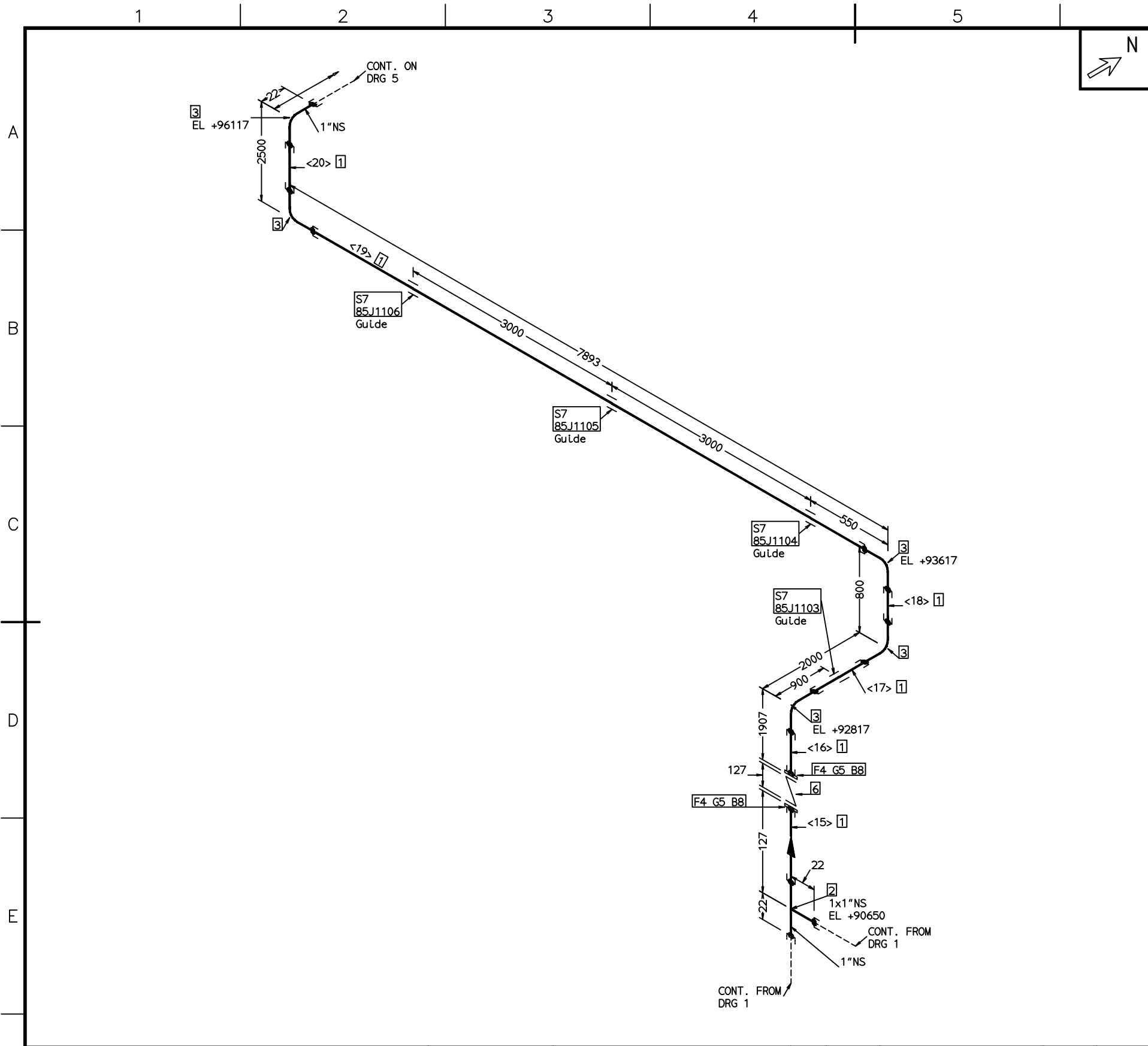
 TCC 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 2 TOTAL 6

 江苏中圣高科技产业有限公司 <small>JIANGSU SUNPOWER TECHNOLOGY CO., LTD</small>	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 2 TOTAL 6

Isometric Drawing 1''-NG-85-202-B24-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 6
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
	PAINT CODE/COATING:	A1	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						






FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	1	PPSP1506A_01_S15.0M
<b>FITTINGS</b>			
2	TEE EQUAL;SW;ASTM A105;ASME B16.11;CL3000	1 x 1	JTSFS1801GL3_0 1
3	ELBOW 90°;SW;ASTM A105;ASME B16.11;CL3000	1	JEQFS1801GL3_0 5
<b>FLANGES</b>			
4	FLANGE;SW;CL150;RF;A105;ASME B16.5	1	FFS62R1801H_01 2
<b>GASKETS</b>			
5	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5, T=3.2mm KLINGER PSM-AS OR EQUAL	1	GSD62A4SGD_01: 2
<b>VALVES / IN-LINE ITEMS</b>			
6	CHECK VALVE;BC;LIFT;CL150;RF;A105;TrLm:13Cr/ST L;API602	1	H41H1-150C1_01 1
<b>SUPPORTS</b>			
7	PIPING SUPPORT;ATTA	1	ATTA01_01:25 4
<b>ERECTION MATERIALS</b>			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>BOLTS</b>			
8	70 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 8

\*\*\*\*\*  
\* CONT. ON DRG 4 \*  
\*\*\*\*\*

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 TCC 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.
	MKP-11-DE-9000-FE-REQ-237
	SHEET 3 TOTAL 6
 江苏中圣高科技产业有限公司 SUNPOWER JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.
	17013D85000PE00-12
	SHEET 3 TOTAL 6

Isometric Drawing 1''-NG-85-202-B24-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 3	TOT. 6
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y = N \cos \alpha - E \sin \alpha + 3051408.46$ ;  $X = N \sin \alpha + E \cos \alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N, E IS ARCHITECTURE COORDINATE SYSTEM.  
 X, Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	A1	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								


\*\*\*\*\*  
\* CONT. FROM DRG 3 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSP1506A_01_S <15>	8:25	100	1		PE/PE
PPSP1506A_01_S <16>	8:25	1880	1		PE/PE
PPSP1506A_01_S <17>	8:25	1955	1		PE/PE
PPSP1506A_01_S <18>	8:25	755	1		PE/PE
PPSP1506A_01_S <19>	8:25	7849	1		PE/PE
PPSP1506A_01_S <20>	8:25	2456	1		PE/PE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

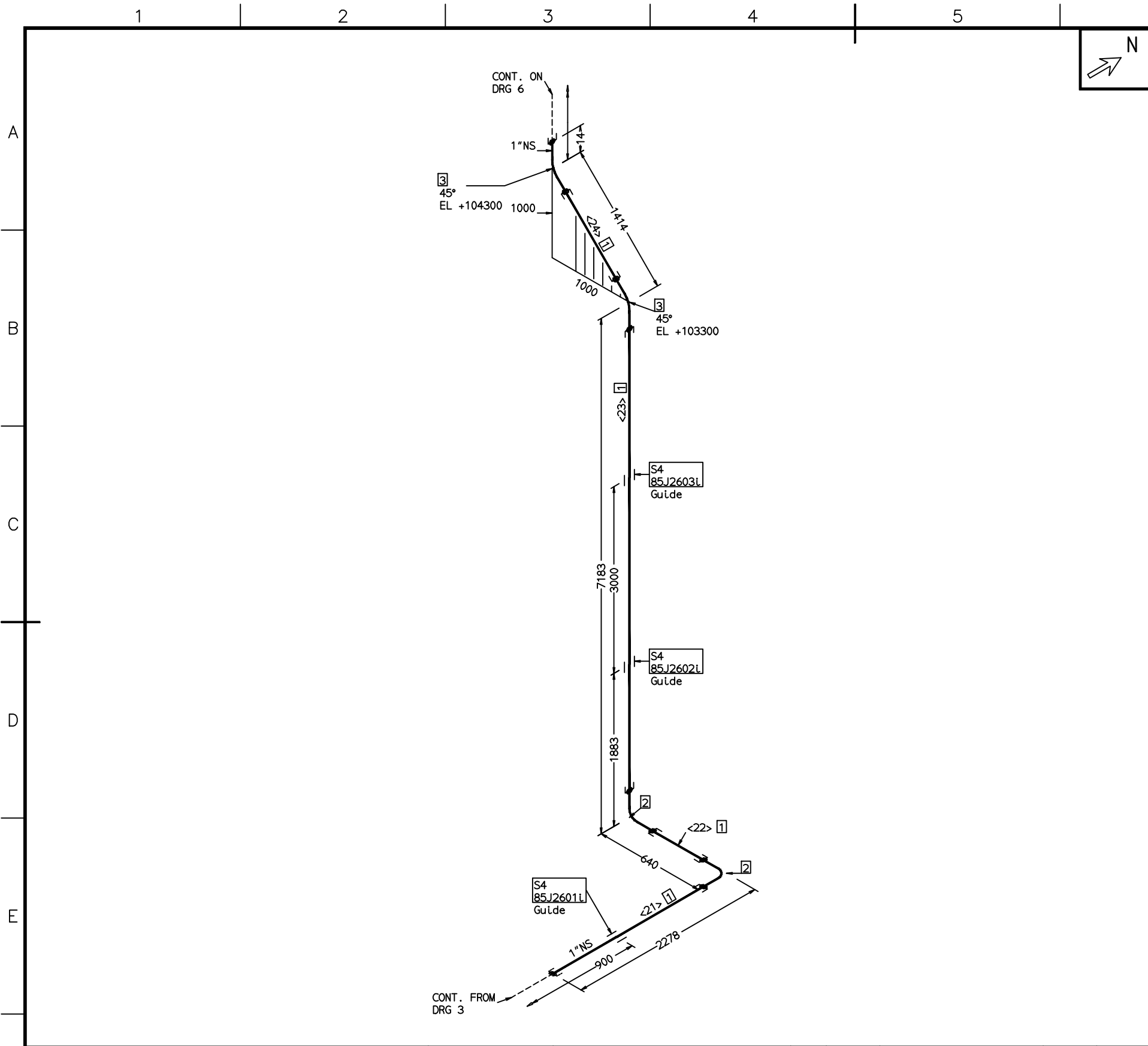
 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 TCC 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 4 TOTAL 6

 江苏中圣高科技产业有限公司 <small>JIANGSU SUNPOWER TECHNOLOGY CO., LTD</small>	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 4 TOTAL 6

Isometric Drawing 1''-NG-85-202-B24-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 4	TOT. 6
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
	PAINT CODE/COATING:	A1	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
	PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1	◆	✗	⊥	⊥	⊥	⊥	⊥	⊥



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	1	PPSP1506A_01_S11.4M
<b>FITTINGS</b>			
2	ELBOW 90° ;SW;ASTM A105;ASME B16.11;CL3000	1	JEQFS1801GL3_0 2
3	ELBOW 45° ;SW;ASTM A105;ASME B16.11;CL3000	1	JEPFS1801GL3_0 2
<b>SUPPORTS</b>			
4	PIPING SUPPORT;ATTA	1	ATTA01_01:25 3

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSP1506A_01_S <21>	8:25	2255	1		PE/PE
PPSP1506A_01_S <22>	8:25	595	1		PE/PE
PPSP1506A_01_S <23>	8:25	7147	1		PE/PE
PPSP1506A_01_S <24>	8:25	1386	1		PE/PE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

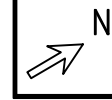
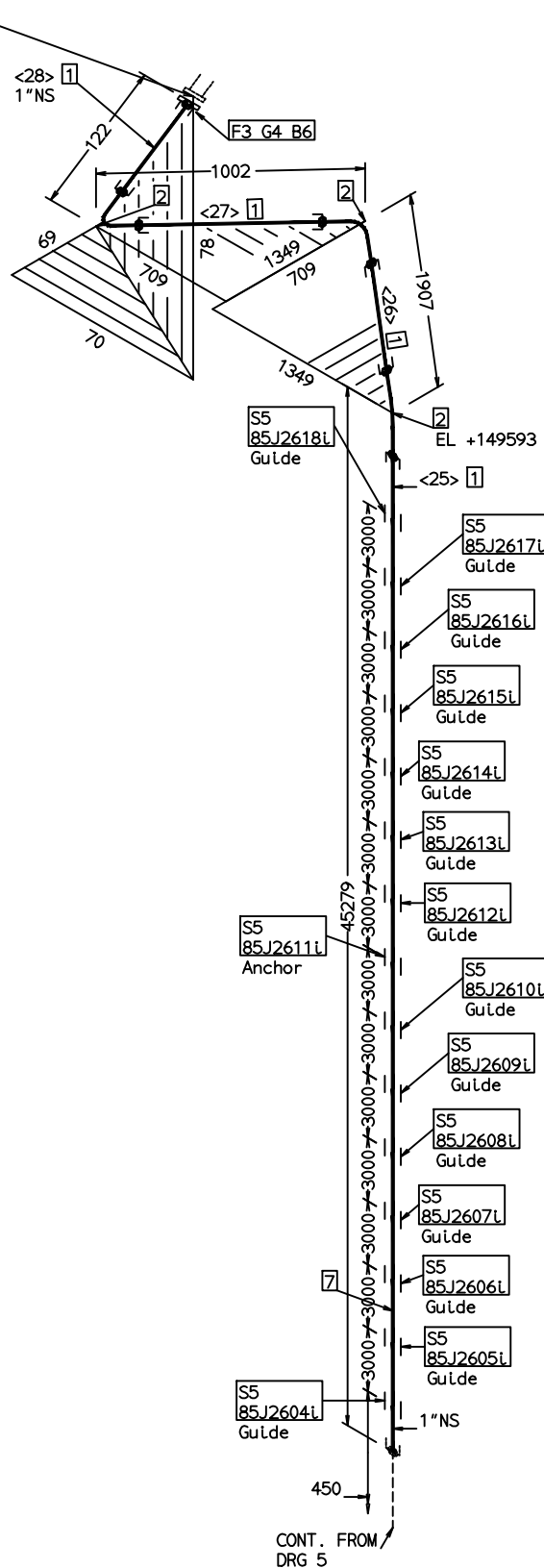
 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 5 TOTAL 6
 <b>江苏中圣高科技产业有限公司</b> JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 5 TOTAL 6

Isometric Drawing 1''-NG-85-202-B24-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 5	TOT. 6
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	A1	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

CONN. TO  
N4-FL8503  
E 12604  
N 15511  
EL +149671



**FABRICATION MATERIALS**

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>PIPE</b>				
1	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	1	PPSP1506A_01_S48.2M	
<b>FITTINGS</b>				
2	ELBOW 90° ;SW;ASTM A105;ASME B16.11;CL3000	1	JEQFS1801GL3_0	3
<b>FLANGES</b>				
3	FLANGE;SW;CL150;RF;A105;ASME B16.5	1	FFS62R1801H_01	1
<b>GASKETS</b>				
4	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	1	GSD62A4SGD_01:	1
<b>SUPPORTS</b>				
5	PIPING SUPPORT;ATTA	1	ATTA01_01:25	15
<b>ERECTION MATERIALS</b>				
<b>BOLTS</b>				
6	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (11 TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	1/2	LS3433A:M14	4
7	FULL COUPLING-ASTM A105 SW-CL3000 ASME B16.11	1	I25443801	6

**CUT PIPE LENGTH**

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. PE/PE
PPSP1506A_01_S	<25>	45257	1		PE/PE
PPSP1506A_01_S	<26>	1863	1		PE/PE
PPSP1506A_01_S	<27>	958	1		PE/PE
PPSP1506A_01_S	<28>	95	1		PE/PE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

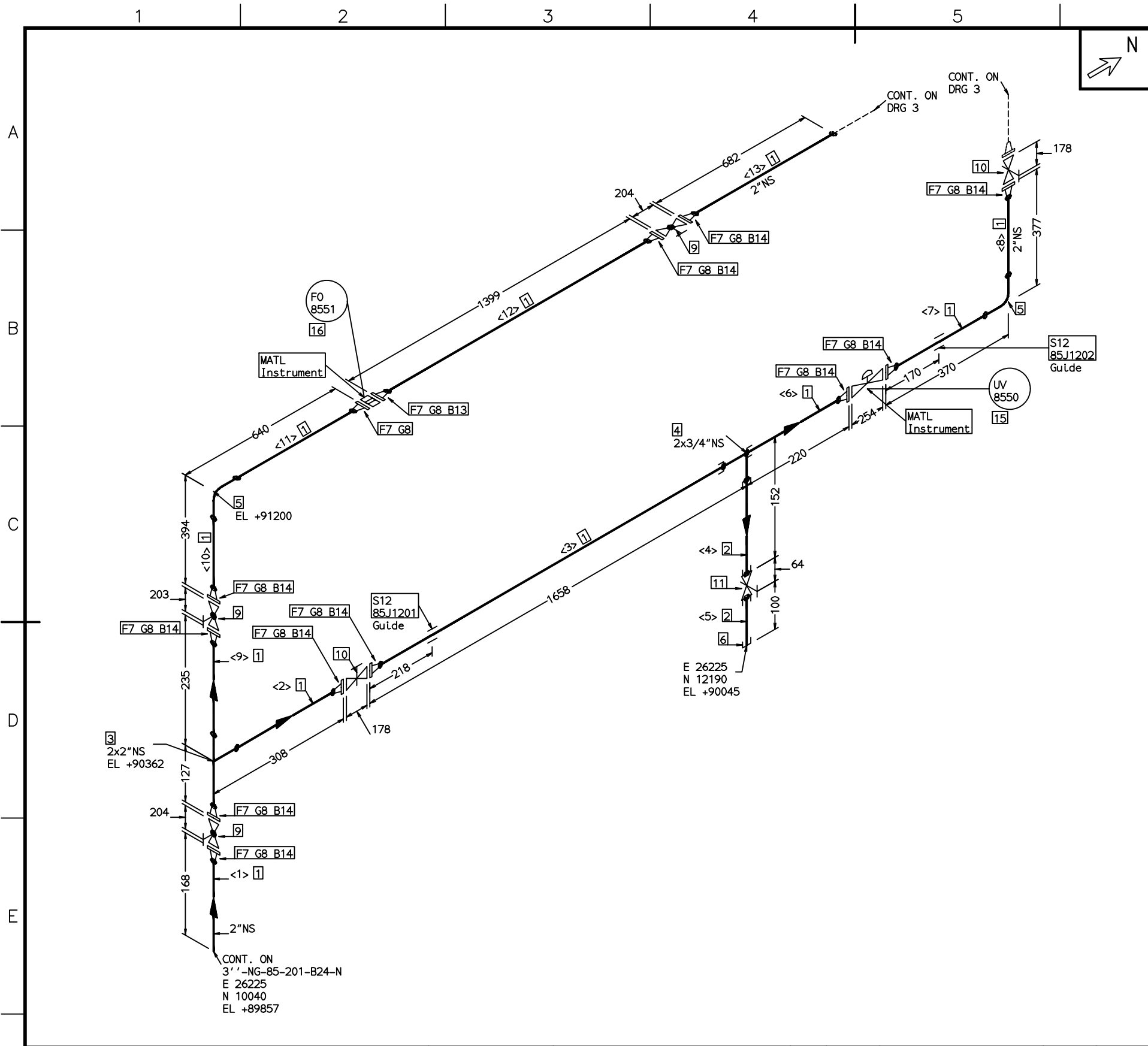
TCC 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 6 TOTAL 6
江苏中圣高科技产业有限公司 SUNPOWER JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 6 TOTAL 6

**NOTES**

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha - E\sin\alpha + 3051408.46$ ;  $X=N\sin\alpha + E\cos\alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N.E IS ARCHITECTURE COORDINATE SYSTEM.  
 X.Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY
PAINT CODE/COATING:	A1	REV.	DATE	DESCRIPTION	DESIGN	CHECK
SHOP WELD		FIELD WELD		SOCKET WELD		SCREWED JOINT
				COMPJ JOINT		PIPE SUPPORT
				LAGGED PIPE		TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1					

Isometric Drawing				PROJECT	ME Methanol Project
1''-NG-85-202-B24-N				UNIT	Flare
				PHASE	Detail Engineering
SCALE NO	SHEET 6	TOT. 6	SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	2	PPSB1506A_02_S 5.3M
2	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	3/4	PPSP1506A_0J_S 0.2M
<b>FITTINGS</b>			
3	TEE EQUAL;SMLS;BW;ASTM A234 WPB;ASME B16.9;SCH40	2 x 2	JTSSB1506D_02_ 1
4	SOCKETOLET;SW;ASTM A105;MSS SP-97;CL3000	2 x 3/4	JOOFS18010L3_0 1
5	ELBOW 90°;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	2	JELSB1506D_02_ 2
6	CAP;NPT;ASTM A105;ASME B16.11;CL3000	3/4	JKFFN1801GL3_0 1
<b>FLANGES</b>			
7	FLANGE;WN;CL150;RF;A105;ASME B16.5;SCH40	2	FFW62R1801H_02 13
<b>GASKETS</b>			
8	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	2	GSD2A4SGD_02: 13
<b>VALVES / IN-LINE ITEMS</b>			
9	GLOBE VALVE;BB;OS&Y;CL150;RF;ASTM A216-WCB;TrLm:13Cr/STL;BS1873;PARABOLIC DISC	2	J41H1-150C2_02 3
10	GATE VALVE;BB;OS&Y;CL150;RF;ASTM A216-WCB;TrLm:13Cr/STL;API600;FLEXIBLE WEDGE	2	Z40H1-150C2_02 2
11	GATE VALVE;BB;OS&Y;CL800;SW;A105;TrLm:13Cr/STL;API602;SOLID WEDGE	3/4	Z51H1-800C1_0J 1
<b>SUPPORTS</b>			
12	PIPING SUPPORT;ATTA	2	ATTA01_02:50 2
<b>ERECTION MATERIALS</b>			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>BOLTS</b>			
13	100 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 4
14	95 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 44

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:  Middle East Kimiaye Pars Company

LIBRARIAN	HALDOR TOPSØE A/S	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
CONTRACTOR	 TCC 中国天辰工程有限公司	CONTRACTOR DRAWING NO.	3		

CONTRACTOR	 江苏中圣高科技产业有限公司	SUB-CONTRACTOR DRAWING NO.	17013D85000PE00-12		
CONTRACTOR	JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SHEET 1	TOTAL	5	

Isometric Drawing				PROJECT	ME Methanol Project
2''-NG-85-203-B24-N				UNIT	Flare
				PHASE	Detail Engineering
SCALE	NO	SHEET	TOT.	OWNER DWG NO.	MKP-VD-8500-237-506-A3

**NOTES**

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha - E\sin\alpha + 3051408.46$ ;  $X=N\sin\alpha + E\cos\alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N,E IS ARCHITECTURE COORDINATE SYSTEM.  
 X,Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP.(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	A1	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								



1 2 3 4 5 6 7 8

INSTRUMENTS

15	CV150RF FISHER TYPE CTRL VALVE CL150RF	2	1
16	ORIFICE150RF > ORIFICE PLATE 3MM & 6MM #150 FO 8551	2	1

\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. PE/BE
PPSB1506A_02_S <1>		105	2		PE/BE
4:50					
PPSB1506A_02_S <2>		181	2		BE/BE
4:50					
PPSB1506A_02_S <3>		1595	2		BE/PE
4:50					
PPSP1506A_0J_S <4>		100	3/4		PE/PE
8:20					
PPSP1506A_0J_S <5>		100	3/4		PE/TH
8:20					
PPSB1506A_02_S <6>		157	2		PE/BE
4:50					
PPSB1506A_02_S <7>		230	2		BE/BE
4:50					
PPSB1506A_02_S <8>		237	2		BE/BE
4:50					
PPSB1506A_02_S <9>		109	2		BE/BE
4:50					
PPSB1506A_02_S <10>		254	2		BE/BE
4:50					
PPSB1506A_02_S <11>		500	2		BE/BE
4:50					
PPSB1506A_02_S <12>		1273	2		BE/BE
4:50					
PPSB1506A_02_S <13>		619	2		BE/PE
4:50					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.
	MKP-11-DE-9000-FE-REQ-237

 <b>江苏中圣高科技产业有限公司</b> <small>JIANGSU SUNPOWER TECHNOLOGY CO., LTD</small>	SUB-CONTRACTOR DRAWING NO.
	17013D85000PE00-12

Isometric Drawing 2''-NG-85-203-B24-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 5
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N,E IS ARCHITECTURE COORDINATE SYSTEM. X,Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
	PAINT CODE/COATING:	A1	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						

1 2 3 4 5 6 7 8

A

B

C

D

E

F

A

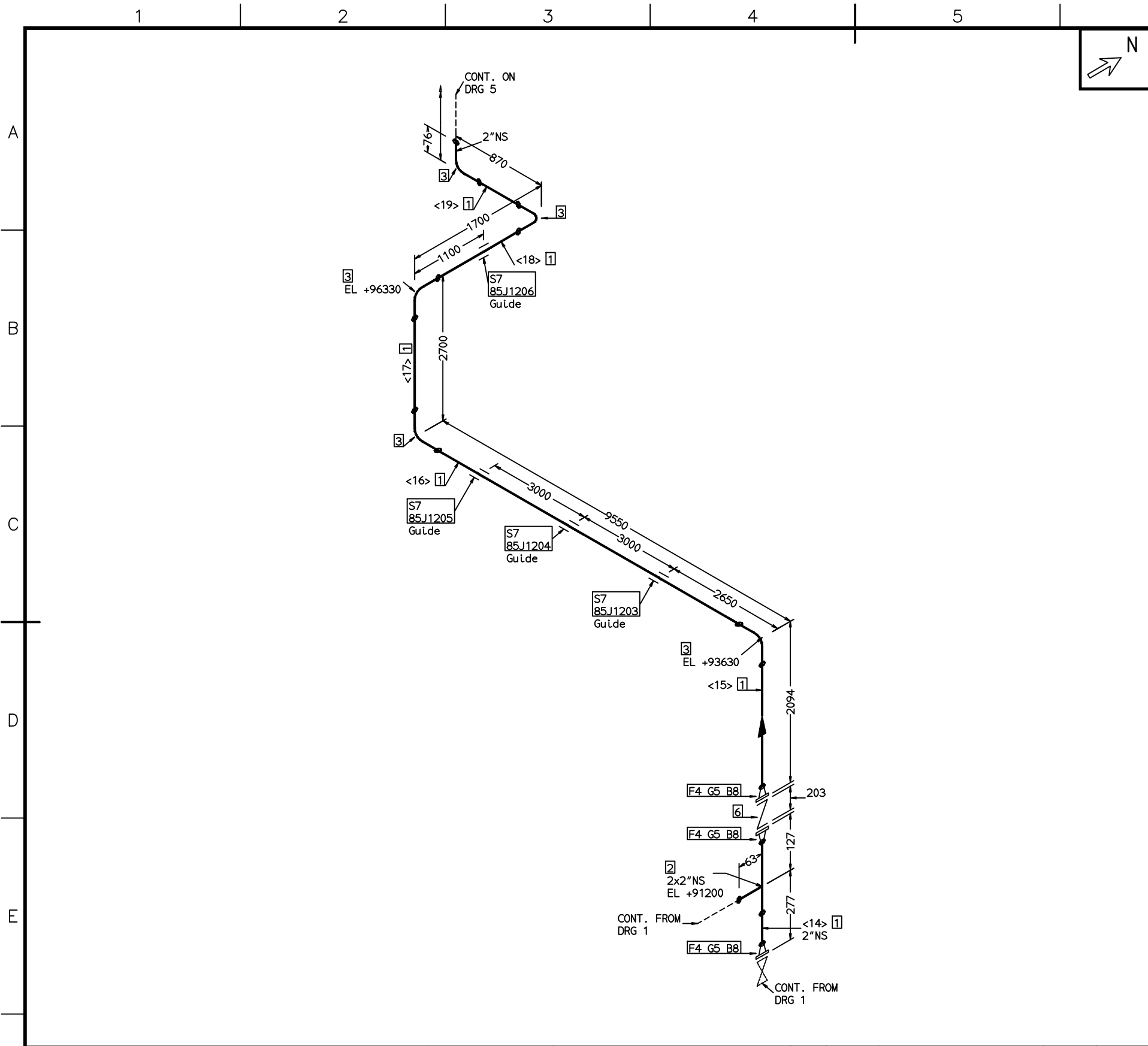
B

C

D

E

F



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	2	PPSB1506A_02_S16.4M
<b>FITTINGS</b>			
2	TEE EQUAL;SMLS;BW;ASTM A234 WPB;ASME B16.9;SCH40	2 x 2	JTSSB1506D_02_ 1
3	ELBOW 90° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	2	JELSB1506D_02_ 5
<b>FLANGES</b>			
4	FLANGE;WN;CL150;RF;A105;ASME B16.5;SCH40	2	FFW62R1801H_02 3
<b>GASKETS</b>			
5	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	2	GSD62A4SGD_02: 3
<b>VALVES / IN-LINE ITEMS</b>			
6	CHECK VALVE;BC;SwLng;CL150;RF;ASTM A216-WCB;TrLm:13Cr/STL;BS1868	2	H44H1-150C2_02 1
<b>SUPPORTS</b>			
7	PIPING SUPPORT;ATTA	2	ATTA01_02:50 4

ERECTION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>BOLTS</b>			
8	95 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 12

\*\*\*\*\*  
\* CONT. ON DRG 4 \*  
\*\*\*\*\*

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 TCC 中国天辰工程技术有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.
	MKP-11-DE-9000-FE-REQ-237
	SHEET 3 TOTAL 5
 江苏中圣高科技产业有限公司 SUNPOWER JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.
	17013D85000PE00-12
	SHEET 3 TOTAL 5

Isometric Drawing				PROJECT	ME Methanol Project
2''-NG-85-203-B24-N				UNIT	Flare
				PHASE	Detail Engineering
SCALE NO	SHEET 3	TOT. 5	SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	A1	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

\*\*\*\*\*  
\* CONT. FROM DRG 3 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSB1506A_02_S <14>	4:50	151	2		BE/BE
PPSB1506A_02_S <15>	4:50	1954	2		BE/BE
PPSB1506A_02_S <16>	4:50	9398	2		BE/BE
PPSB1506A_02_S <17>	4:50	2548	2		BE/BE
PPSB1506A_02_S <18>	4:50	1548	2		BE/BE
PPSB1506A_02_S <19>	4:50	718	2		BE/BE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 4 TOTAL 5

 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 4 TOTAL 5

Isometric Drawing 2''-NG-85-203-B24-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 4	TOT. 5
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
	1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E_s\ln\alpha +3051408.46; X=N_s\ln\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY		
LEAKAGE TEST MEDIUM:		water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)		10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:		NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:		A1	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:		B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:		MKP-VD-8500-237-505-A1								

A  
B  
C  
D  
E  
F

A  
B  
C  
D  
E  
F

1 2 3 4 5 6 7 8

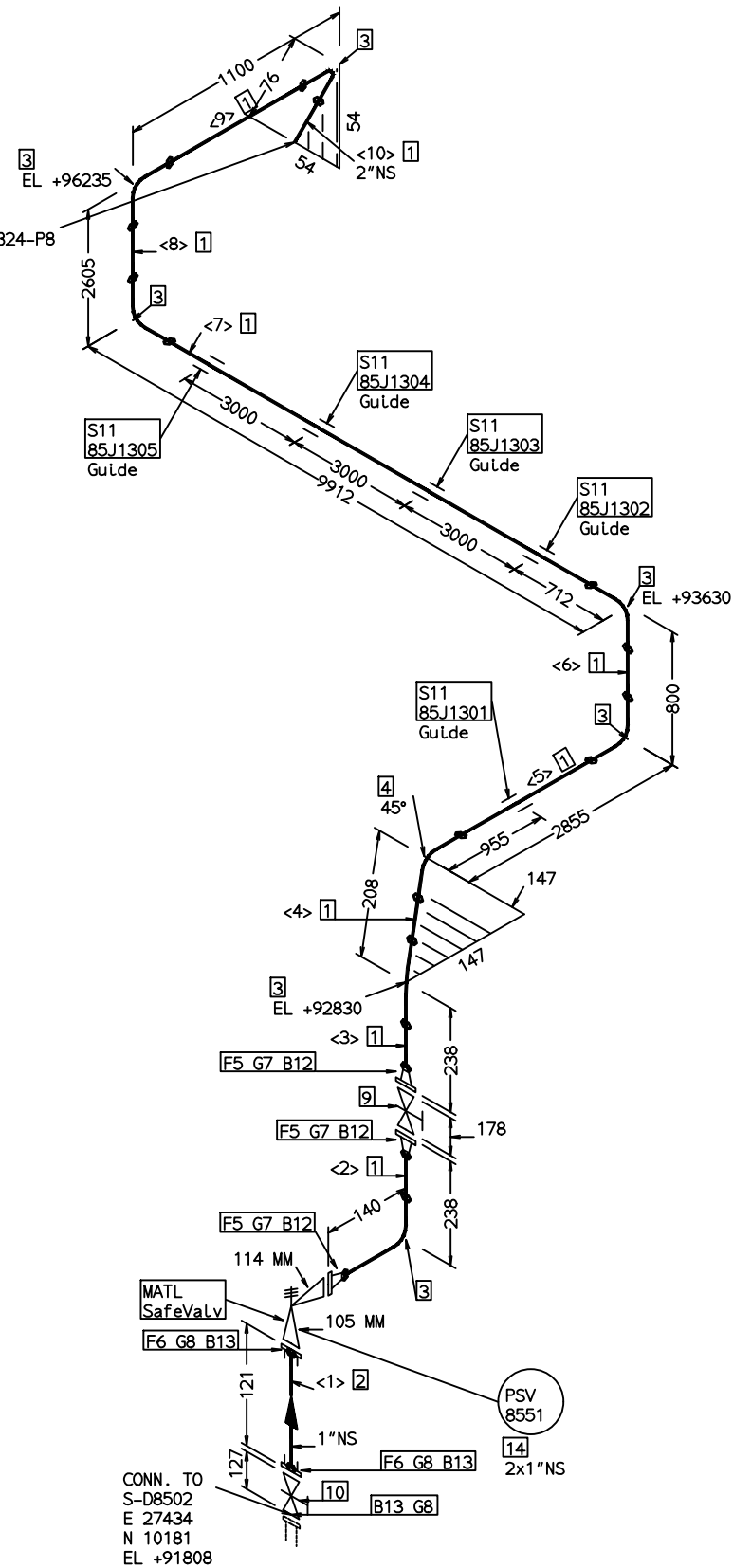
1 2 3 4 5 6 7 8



1 2 3 4 5 6 7 8

A  
B  
C  
D  
E  
F

CONT. ON  
64"-FLG-85-200-B24-P8  
E 16761  
N 14540  
EL +95621



CONN. TO  
S-D8502  
E 27434  
N 10181  
EL +91808

FABRICATION MATERIALS

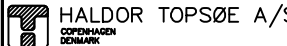


PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>PIPE</b>				
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	2	PPSB1506A_02_S17.7M	
2	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	1	PPSP1506A_01_S 0.2M	
<b>FITTINGS</b>				
3	ELBOW 90° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	2	JELSB1506D_02_ 7	
4	ELBOW 45° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	2	JEKSB1506D_02_ 1	
<b>FLANGES</b>				
5	FLANGE;WN;CL150;RF;A105;ASME B16.5;SCH40	2	FFW62R1801H_02 3	
6	FLANGE;SW;CL150;RF;A105;ASME B16.5	1	FFS62R1801H_01 2	
<b>GASKETS</b>				
7	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	2	GSD62A4SGD_02: 3	
8	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	1	I29559667 3	
<b>VALVES / IN-LINE ITEMS</b>				
9	GATE VALVE;BB;OS&Y;CL150;RF;ASTM A216-WCB;TrLm:13Cr/STL;API600;FLEXIBLE WEDGE	2	Z40H1-150C2_02 1	
10	GATE VALVE;BB;OS&Y;CL150;RF;A105;TrLm:13Cr/STL;API602;SOLID WEDGE	1	Z41H1-150C1_01 1	
<b>SUPPORTS</b>				
11	PIPING SUPPORT;ATTA	2	ATTA01_02:50 5	

ERECTION MATERIALS

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>BOLTS</b>				
12	95 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 12	
13	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 12	
<b>INSTRUMENTS</b>				
14	SAFE VALVE,150#RF/150#RF PSV 8551	2 x 1		1

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:  Middle East Kimiaye Pars Company

 HALDOR TOPSØE A/S  
 TCC 中国天辰工程技术有限公司  
 江苏中圣高科技产业有限公司  
 CONTRACTOR DRAWING NO. MKP-11-DE-9000-FE-REQ-237  
 SUB-CONTRACTOR DRAWING NO. 17013D85000PE00-12  
 SHEET 1 TOTAL 2

NOTES

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha -E\sin\alpha +3051408.46$ ;  $X=N\sin\alpha +E\cos\alpha +652275.26$ ;  $\alpha =7.52775036^\circ$   
 N.E IS ARCHITECTURE COORDINATE SYSTEM.  
 X.Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY
PAINT CODE/COATING:	A1	REV.	DATE	DESCRIPTION	DESIGN	CHECK
SHOP WELD						
FIELD WELD						
SOCKET WELD						
SCREWED JOINT						
COMPJN JOINT						
PIPE SUPPORT						
LAGGED PIPE						
TRACED PIPE						
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1					

Isometric Drawing  
 2''-NG-85-204-B24-N  
 PROJECT: ME Methanol Project  
 UNIT: Flare  
 PHASE: Detail Engineering  
 SCALE NO: SHEET 1 TOT. 2 SIZE A3  
 OWNER DWG NO: MKP-VD-8500-237-506-A3

1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8

\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. PE/PE
PPSP1506A_01_S	<1>	111	1		
8:25					
PPSB1506A_02_S	<2>	99	2		BE/BE
4:50					
PPSB1506A_02_S	<3>	99	2		BE/BE
4:50					
PPSB1506A_02_S	<4>	100	2		BE/BE
4:50					
PPSB1506A_02_S	<5>	2747	2		BE/BE
4:50					
PPSB1506A_02_S	<6>	648	2		BE/BE
4:50					
PPSB1506A_02_S	<7>	9759	2		BE/BE
4:50					
PPSB1506A_02_S	<8>	2453	2		BE/BE
4:50					
PPSB1506A_02_S	<9>	947	2		BE/BE
4:50					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 2 TOTAL 2
 <b>江苏中圣高科技产业有限公司</b> JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 2 TOTAL 2

Isometric Drawing 2''-NG-85-204-B24-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 2
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

A

B

C

D

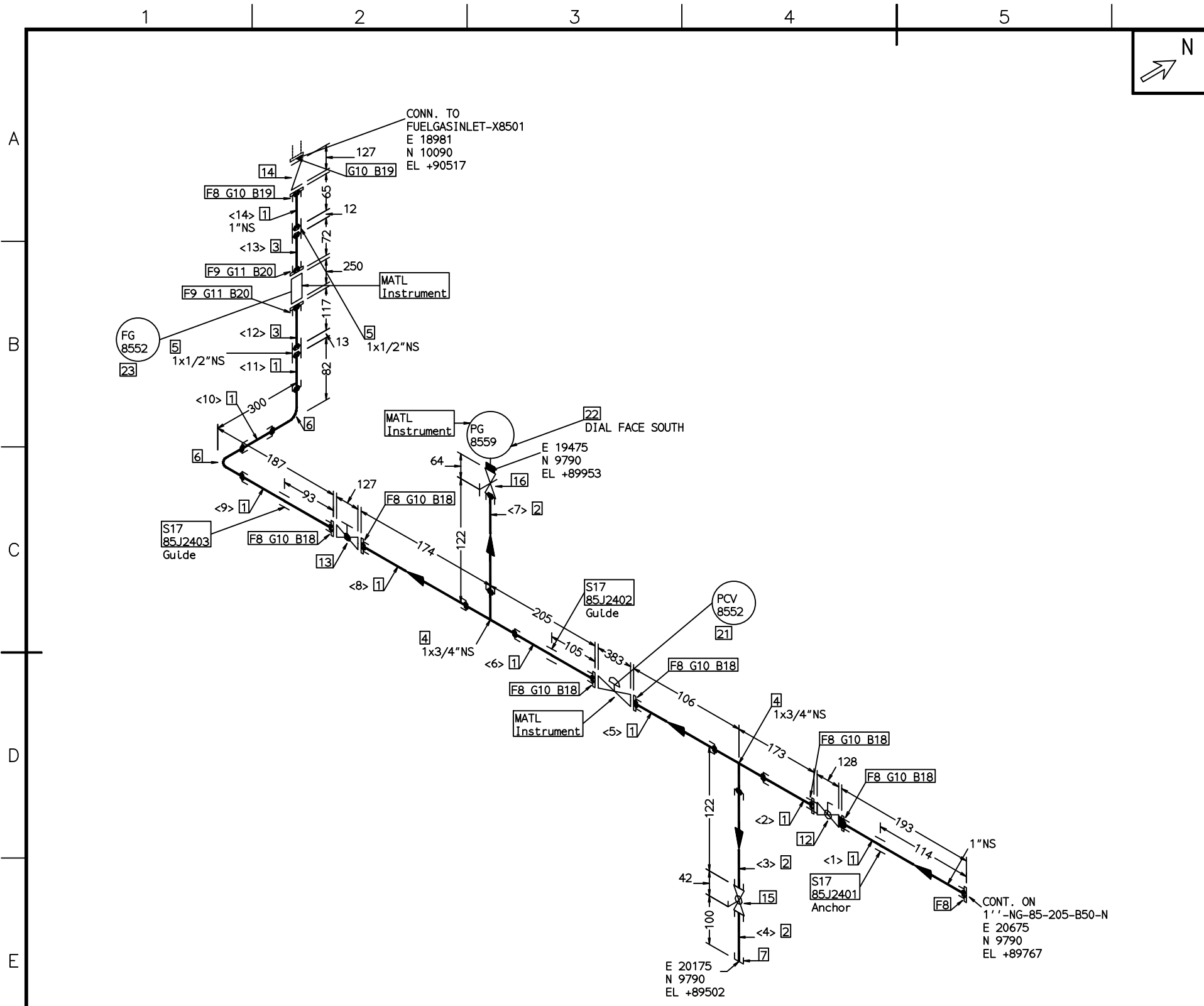
E

F

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E_s\ln\alpha +3051408.46; X=N_s\ln\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
	PAINT CODE/COATING:	A1	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						

1 2 3 4 5 6 7 8





FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;A312-TP304L;ASME B36.19M;SCH40S	1	PPSP3502A_01_4 1.3M
2	PIPE;SMLS;PE;A312-TP304L;ASME B36.19M;SCH40S	3/4	PPSP3502A_0J_4 0.3M
3	PIPE;SMLS;PE;A312-TP304L;ASME B36.19M;SCH40S	1/2	PPSP3502A_0G_4 0.2M
<b>FITTINGS</b>			
4	TEE REDU;SW;ASME A182-F304L;ASME B16.11;CL3000	1 x 3/4	JTRFS3802GL3_0 2
5	COUPLING REDU;SW;ASME A182-F304L;ASME B16.11;CL3000	1 x 1/2	JCRFS3802GL3_0 2
6	ELBOW 90°;SW;ASME A182-F304L;ASME B16.11;CL3000	1	JEQFS3802GL3_0 2
7	CAP;NPT;ASME A182-F304L;ASME B16.11;CL3000	3/4	JKFFN3802GL3_0 1
<b>FLANGES</b>			
8	FLANGE;SW;CL150;RF;ASME A182 F304L;ASME B16.5	1	FFS62R3802H_01 8
9	FLANGE;SW;CL150;RF;ASME A182 F304L;ASME B16.5	1/2	FFS62R3802H_0G 2
<b>GASKETS</b>			
10	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5, T=3.2mm KLINGER PSM-AS OR EQUAL.	1	GSD62A6SGD_01: 8
11	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5, T=3.2mm KLINGER PSM-AS OR EQUAL.	1/2	GSD62A6SGD_0G: 2
<b>VALVES / IN-LINE ITEMS</b>			
12	BALL VALVE;A182-F304L,BALL:SS304,PTFE SEAT;CL150;RF;FLOATING, FULL BORE, SPLIT BODY,API608;ANTIC STATIC AND FIRE SAFE	1	Q41F1-150P3_01 1
13	VALVE;BB;OS&Y;CL150;RF;A182-F304L;TrLm: 304L;API602	1	VBD62R3502ECA 1
14	CHECK VALVE;BC;LIFT;CL150;RF;A182-F304L;TrLm: 304L;API602	1	H41E1-150P3_01 1
15	BALL VALVE;A182-F304L,BALL:SS304,PTFE SEAT;CL600;SW;FLOATING, FULL BORE, SPLIT BODY,API608;ANTIC STATIC AND FIRE SAFE	3/4	Q41F1-600C1_0J 1
16	GATE VALVE;BB;OS&Y;CL800;SW;A182-F304L;TrLm: 304L;API602;SOLID WEDGE	3/4	Z51E1-800P3_0J 1
<b>SUPPORTS</b>			
17	PIPING SUPPORT;ATTA	1	ATTA01_01:25 3 ***** * CONT. ON DRG 2 * *****

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:  Middle East Kimiaye Pars Company

LIBRARY	HALDOR TOPSØE A/S	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
CONTRACTOR	TCC 中国天辰工程有限公司	CONTRACTOR DRAWING NO.	MKP-11-DE-9000-FE-REQ-237	SHEET 1	TOTAL 2
SUB-CONTRACTOR	江苏中圣高科技产业有限公司	SUB-CONTRACTOR DRAWING NO.	17013D85000PE00-12	SHEET 1	TOTAL 2

PROJECT	ME Methanol Project
UNIT	Flare
PHASE	Detail Engineering
OWNER DWG NO.	MKP-VD-8500-237-506-A3

SCALE	NO	SHEET 1	TOT. 2	SIZE A3	
Isometric Drawing	1'-NG-85-215-B40-N	PROJECT	ME Methanol Project	UNIT	Flare

**NOTES**

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y = N \cos \alpha - E \sin \alpha + 3051408.46$ ;  $X = N \sin \alpha + E \cos \alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N, E IS ARCHITECTURE COORDINATE SYSTEM.  
 X, Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY
PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK
SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJ JOINT	PIPE SUPPORT	LAGGED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1	TRACED PIPE				



\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

ERECTION MATERIALS

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>BOLTS</b>				
18	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14	24
19	70 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14	8
20	65 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14	8
<b>INSTRUMENTS</b>				
21	CV150RF FISHER TYPE CTRL VALVE CL150RF PCV 8552	1		1
22	仪表 PG 8559	3/4		1
23	Flowmeter150RF FG 8552	1/2		1

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. PE/PE
PPSP3502A_01_4	<1>	183	1		PE/PE
S:25					
PPSP3502A_01_4	<2>	146	1		PE/PE
S:25					
PPSP3502A_0J_4	<3>	100	3/4		PE/TH
S:20					
PPSP3502A_0J_4	<4>	100	3/4		TH/TH
S:20					
PPSP3502A_01_4	<5>	79	1		PE/PE
S:25					
PPSP3502A_01_4	<6>	179	1		PE/PE
S:25					
PPSP3502A_0J_4	<7>	100	3/4		PE/PE
S:20					
PPSP3502A_01_4	<8>	147	1		PE/PE
S:25					
PPSP3502A_01_4	<9>	161	1		PE/PE
S:25					
PPSP3502A_01_4	<10>	256	1		PE/PE
S:25					
PPSP3502A_01_4	<11>	60	1		PE/PE
S:25					
PPSP3502A_0G_4	<12>	111	1/2		PE/PE
S:15					
PPSP3502A_0G_4	<13>	65	1/2		PE/PE
S:15					
PPSP3502A_01_4	<14>	60	1		PE/PE
S:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

HALDOR TOPSØE A/S  
COPENHAGEN DENMARK

DOCUMENT NAME: \_\_\_\_\_

JOB NO. \_\_\_\_\_ DOC. NO. \_\_\_\_\_

REV. 3

**TCC 中国天辰工程有限公司**  
CHINA TIANCHEN ENGINEERING CORPORATION

CONTRACTOR DRAWING NO.  
MKP-11-DE-9000-FE-REQ-237

SHEET 2 TOTAL 2

**江苏中圣高科技产业有限公司**  
JIANGSU SUNPOWER TECHNOLOGY CO., LTD

SUB-CONTRACTOR DRAWING NO.  
17013D85000PE00-12

SHEET 2 TOTAL 2

Isometric Drawing  
1''-NG-85-215-B40-N

PROJECT	ME Methanol Project
UNIT	Flare
PHASE	Detail Engineering
OWNER DWG NO.	MKP-VD-8500-237-506-A3

SCALE NO SHEET 2 TOT. 2 SIZE A3

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B40	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

1 2 3 4 5 6 7 8

A

B

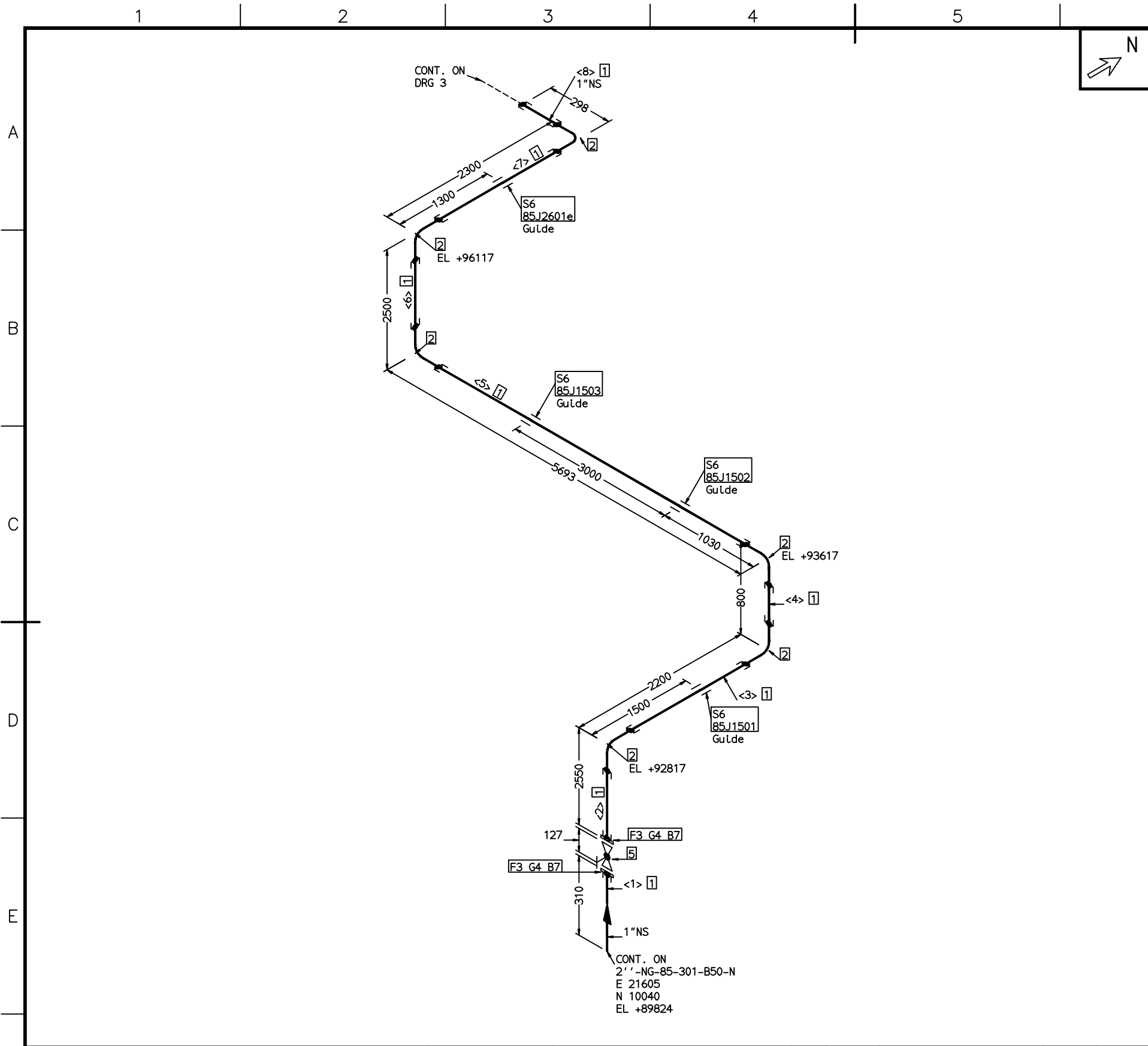
C

D

E

F

1 2 3 4 5 6 7 8



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	1	PPSP3501A_01_416.4M
<b>FITTINGS</b>			
2	ELBOW 90° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEQFS3801GL3_0 6
<b>FLANGES</b>			
3	FLANGE;SW;CL150;RF;ASME A182 F304;ASME B16.5	1	FFS62R3801H_01 2
<b>GASKETS</b>			
4	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	1	GSD62A5SGD_01: 2
<b>VALVES / IN-LINE ITEMS</b>			
5	GLOBE VALVE;BB;OS&Y;CL150;RF;A182-F304;Trim:3 04;API602;SWIVEL PLUG	1	J41E1-150P1_01 1
<b>SUPPORTS</b>			
6	PIPING SUPPORT;ATTA	1	ATTA01_01:25 4
<b>ERECTION MATERIALS</b>			
<b>BOLTS</b>			
7	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (11 TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 8

\*\*\*\*\*  
\* CONT. ON DRG 2 \*  
\*\*\*\*\*

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



**Middle East  
Kimiaye Pars Company**

	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 1 TOTAL 4
	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 1 TOTAL 4

Isometric Drawing 1''-NG-85-206-B50-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

SCALE NO	SHEET 1	TOT. 4	SIZE A3
----------	---------	--------	---------

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

1 2 3 4 5 6 7 8

\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSP3501A_01_4	<1>	305	1		PE/PE
S:25					
PPSP3501A_01_4	<2>	2523	1		PE/PE
S:25					
PPSP3501A_01_4	<3>	2156	1		PE/PE
S:25					
PPSP3501A_01_4	<4>	756	1		PE/PE
S:25					
PPSP3501A_01_4	<5>	5649	1		PE/PE
S:25					
PPSP3501A_01_4	<6>	2456	1		PE/PE
S:25					
PPSP3501A_01_4	<7>	2256	1		PE/PE
S:25					
PPSP3501A_01_4	<8>	275	1		PE/PE
S:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 2 TOTAL 4

	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 2 TOTAL 4

Isometric Drawing 1''-NG-85-206-B50-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 4
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

A

B

C

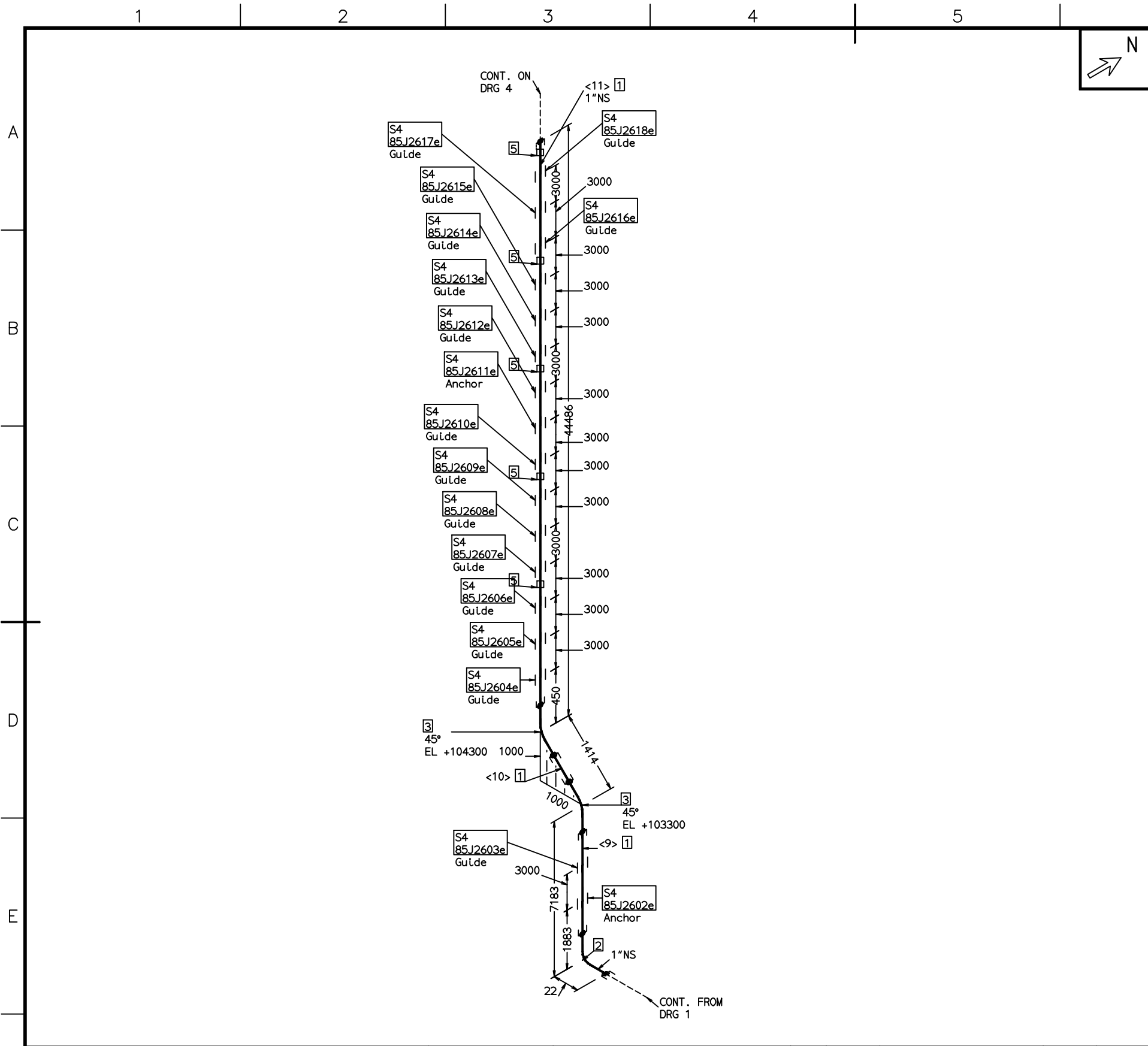
D

E

F

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1	●	✗	⊥	⊥	⊥	⊥	⊥	⊥

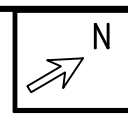
1 2 3 4 5 6 7 8



NOTES

1:DELETE.  
 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.  
 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.  
 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.  
 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.  
 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$   
 N,E IS ARCHITECTURE COORDINATE SYSTEM.  
 X,Y IS SURVEYING COORDINATE SYSTEM.  
 7:DELETE.

DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								



FABRICATION MATERIALS				
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>PIPE</b>				
1	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	1	PPSP3501A_01_453.1M	
<b>FITTINGS</b>				
2	ELBOW 90° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEQFS3801GL3_0	1
3	ELBOW 45° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEPFS3801GL3_0	2
<b>SUPPORTS</b>				
4	PIPING SUPPORT;ATTA	1	ATTA01_01:25	17
5	FULL COUPLING ASTM 182 GRADE F 304 SW CL3000 B16.11	1	I22460143	5

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. PE/PE
PPSP3501A_01_4	<9>	7147	1		PE/PE
PPSP3501A_01_4	<10>	1386	1		PE/PE
PPSP3501A_01_4	<11>	44471	1		PE/PE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:

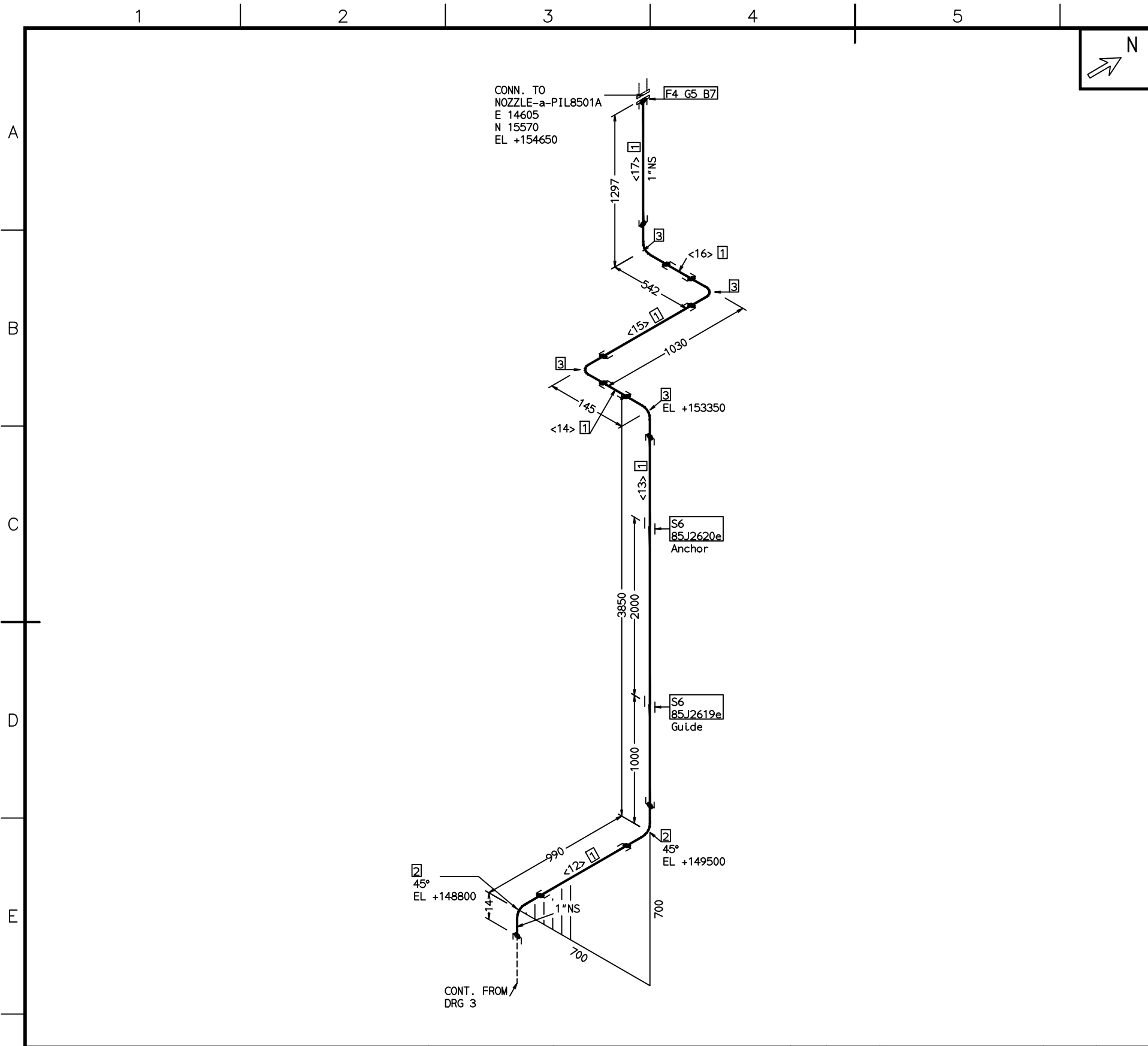


Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.
	MKP-11-DE-9000-FE-REQ-237
	SHEET 3 TOTAL 4
 <b>江苏中圣高科技产业有限公司</b> JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.
	17013D85000PE00-12
	SHEET 3 TOTAL 4

Isometric Drawing				PROJECT	ME Methanol Project
1''-NG-85-206-B50-N				UNIT	Flare
				PHASE	Detail Engineering
SCALE NO	SHEET 3	TOT. 4	SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	1	PPSP3501A_01_4 7.7M
<b>FITTINGS</b>			
2	ELBOW 45° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEPFS3801GL3_0 2
3	ELBOW 90° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEQFS3801GL3_0 4
<b>FLANGES</b>			
4	FLANGE;SW;CL150;RF;ASME A182 F304;ASME B16.5	1	FFS62R3801H_01 1
<b>GASKETS</b>			
5	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	1	GSD62A5SGD_01: 1
<b>SUPPORTS</b>			
6	PIPING SUPPORT;ATTA	1	ATTA01_01:25 2
<b>ERECTION MATERIALS</b>			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>BOLTS</b>			
7	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 4

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. PE/PE
PPSP3501A_01_4	<12>	962	1		PE/PE
S:25					
PPSP3501A_01_4	<13>	3813	1		PE/PE
S:25					
PPSP3501A_01_4	<14>	100	1		PE/PE
S:25					
PPSP3501A_01_4	<15>	986	1		PE/PE
S:25					
PPSP3501A_01_4	<16>	498	1		PE/PE
S:25					
PPSP3501A_01_4	<17>	1270	1		PE/PE
S:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:

Middle East  
Kimiaye Pars Company

LIBRARY	HALDOR TOPSØE A/S	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
CONTRACTOR	TCC 中国天辰工程有限公司	CONTRACTOR DRAWING NO.	MKP-11-DE-9000-FE-REQ-237	SHEET 4	TOTAL 4
CONTRACTOR	江苏中圣高科技产业有限公司	SUB-CONTRACTOR DRAWING NO.	17013D85000PE00-12	SHEET 4	TOTAL 4

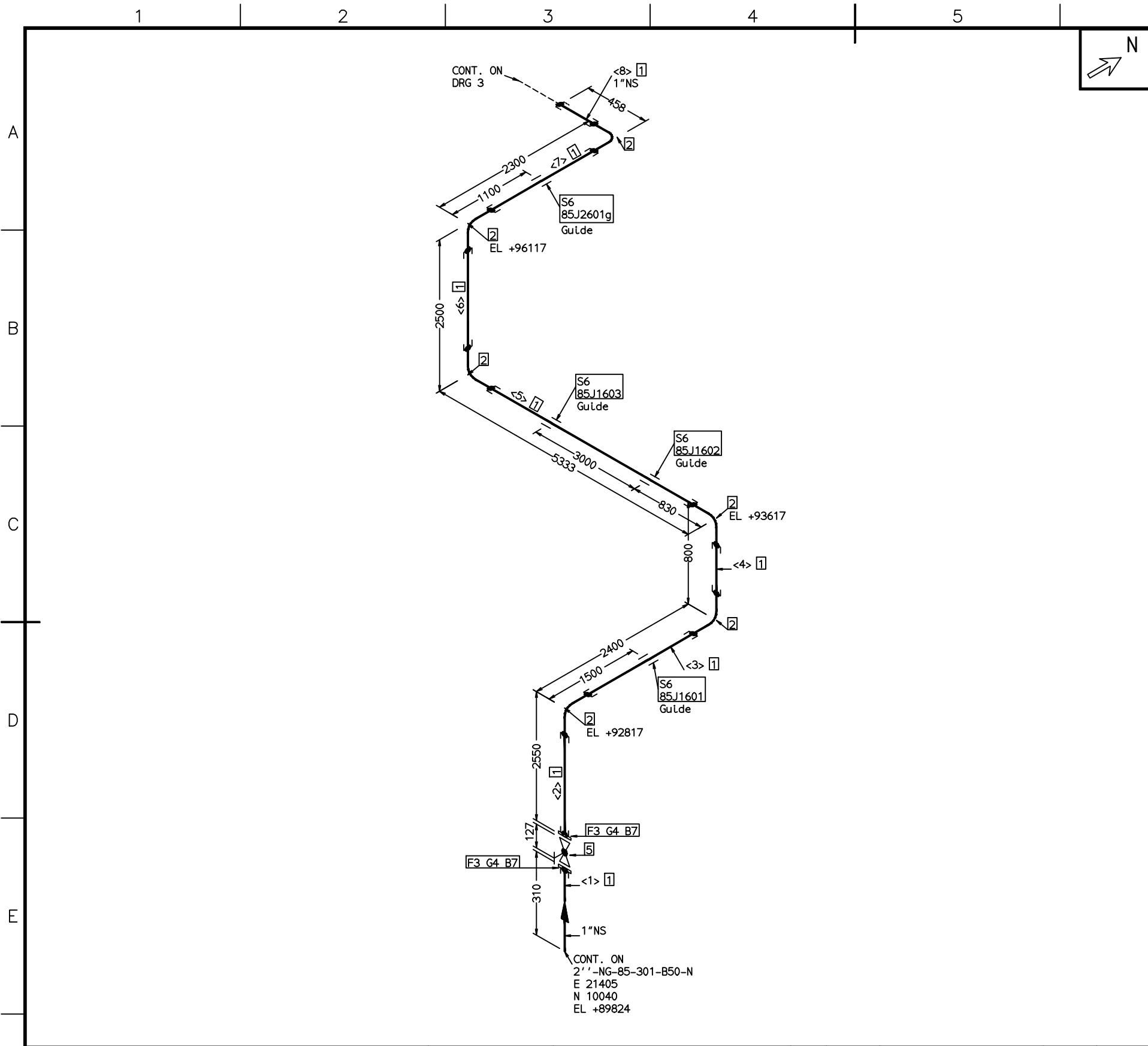
Isometric Drawing	PROJECT	ME Methanol Project
1'-'-NG-85-206-B50-N	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 4	TOT. 4
SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3

REV.	DATE	DESCRIPTION	DESIGN	CHECK
3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY

SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
—	—	—	—	—	—	—	—

DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY
PAINT CODE/COATING:	NA					
PIPING CLASS:	B50					
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1					

NOTES						
1:DELETE.						
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.						
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.						
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.						
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.						
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.						
7:DELETE.						



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	1	PPSP3501A_01_416.4M
<b>FITTINGS</b>			
2	ELBOW 90° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEQFS3801GL3_0 6
<b>FLANGES</b>			
3	FLANGE;SW;CL150;RF;ASME A182 F304;ASME B16.5	1	FFS62R3801H_01 2
<b>GASKETS</b>			
4	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	1	GSD62A5SGD_01: 2
<b>VALVES / IN-LINE ITEMS</b>			
5	GLOBE VALVE;BB;OS&Y;CL150;RF;A182-F304;Trim:3 04;API602;SWIVEL PLUG	1	J41E1-150P1_01 1
<b>SUPPORTS</b>			
6	PIPING SUPPORT;ATTA	1	ATTA01_01:25 4
<b>ERECTION MATERIALS</b>			
<b>BOLTS</b>			
7	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (11 TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 8
***** * CONT. ON DRG 2 * *****			

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



**Middle East  
Kimiaye Pars Company**

 <b>HALDOR TOPSØE A/S</b> <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC 中国天辰工程有限公司</b> <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 1 TOTAL 4
 <b>江苏中圣高科技产业有限公司</b> <small>JIANGSU SUNPOWER TECHNOLOGY CO., LTD</small>	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 1 TOTAL 4

Isometric Drawing 1''-NG-85-207-B50-N				PROJECT	ME Methanol Project
				UNIT	Flare
				PHASE	Detail Engineering
				OWNER DWG NO.	MKP-VD-8500-237-506-A3
SCALE NO	SHEET 1	TOT. 4	SIZE A3		

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

1 2 3 4 5 6 7 8

\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSP3501A_01_4	<1>	305	1		PE/PE
S:25					
PPSP3501A_01_4	<2>	2523	1		PE/PE
S:25					
PPSP3501A_01_4	<3>	2356	1		PE/PE
S:25					
PPSP3501A_01_4	<4>	756	1		PE/PE
S:25					
PPSP3501A_01_4	<5>	5289	1		PE/PE
S:25					
PPSP3501A_01_4	<6>	2456	1		PE/PE
S:25					
PPSP3501A_01_4	<7>	2256	1		PE/PE
S:25					
PPSP3501A_01_4	<8>	435	1		PE/PE
S:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 2 TOTAL 4

	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 2 TOTAL 4

Isometric Drawing 1''-NG-85-207-B50-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 4
SIZE	A3	OWNER DWG NO.
		MKP-VD-8500-237-506-A3

A

B

C

D

E

F

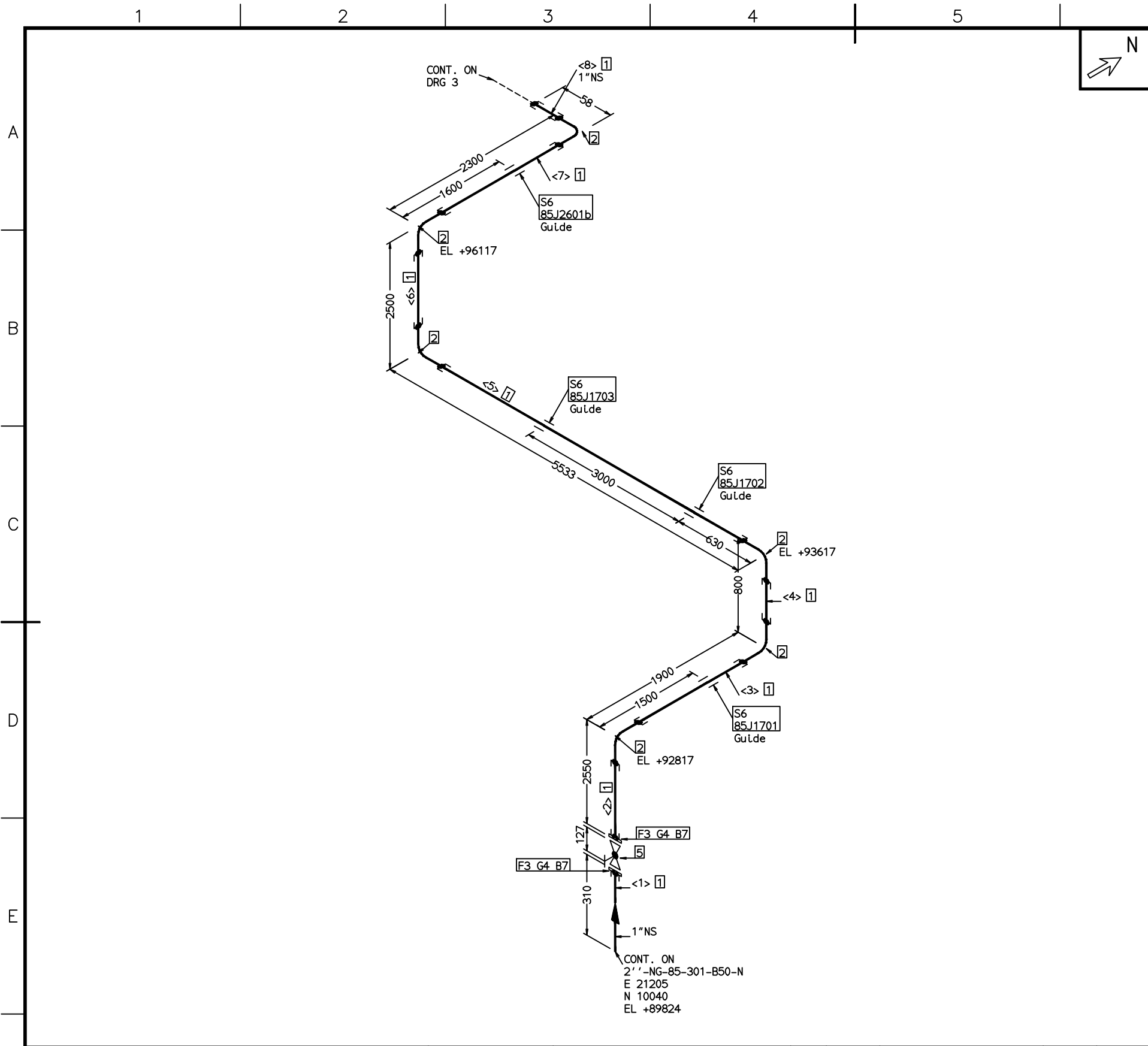
NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036 ° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1	●	×	⊥	⊥	⊥	⊥	⊥	⊥

1 2 3 4 5 6 7 8










FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	1	PPSP3501A_01_415.7M
<b>FITTINGS</b>			
2	ELBOW 90° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEQFS3801GL3_0 6
<b>FLANGES</b>			
3	FLANGE;SW;CL150;RF;ASME A182 F304;ASME B16.5	1	FFS62R3801H_01 2
<b>GASKETS</b>			
4	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	1	GSD62A5SGD_01: 2
<b>VALVES / IN-LINE ITEMS</b>			
5	GLOBE VALVE;BB;OS&Y;CL150;RF;A182-F304;Trim:304;API602;SWIVEL PLUG	1	J41E1-150P1_01 1
<b>SUPPORTS</b>			
6	PIPING SUPPORT;ATTA	1	ATTA01_01:25 4

ERECTION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>BOLTS</b>			
7	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (11 TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 8

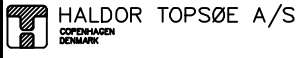
\*\*\*\*\*  
\* CONT. ON DRG 2 \*  
\*\*\*\*\*

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



**Middle East  
Kimiaye Pars Company**

 <p>HALDOR TOPSØE A/S CORPORATION DENMARK</p>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV. 3
--	----------------	---------	-----------	--------

 <p><b>TCC 中国天辰工程有限公司</b> CHINA TIANCHEN ENGINEERING CORPORATION</p>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 1 TOTAL 4
 <p><b>江苏中圣高科技产业有限公司</b> JIANGSU SUNPOWER TECHNOLOGY CO., LTD</p>	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 1 TOTAL 4

Isometric Drawing				PROJECT	ME Methanol Project
1''-NG-85-208-B50-N				UNIT	Flare
SCALE NO SHEET 1 TOT. 4 SIZE A3				PHASE	Detail Engineering
OWNER DWG NO.				MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY				
1:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY				
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY				
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY				
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY				
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK				
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE	
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1									

1 2 3 4 5 6 7 8

\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSP3501A_01_4	<1>	305	1		PE/PE
S:25					
PPSP3501A_01_4	<2>	2523	1		PE/PE
S:25					
PPSP3501A_01_4	<3>	1856	1		PE/PE
S:25					
PPSP3501A_01_4	<4>	756	1		PE/PE
S:25					
PPSP3501A_01_4	<5>	5489	1		PE/PE
S:25					
PPSP3501A_01_4	<6>	2456	1		PE/PE
S:25					
PPSP3501A_01_4	<7>	2256	1		PE/PE
S:25					
PPSP3501A_01_4	<8>	35	1		PE/PE
S:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 2 TOTAL 4

 <b>江苏中圣高科技产业有限公司</b> JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 2 TOTAL 4

Isometric Drawing 1''-NG-85-208-B50-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 4
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

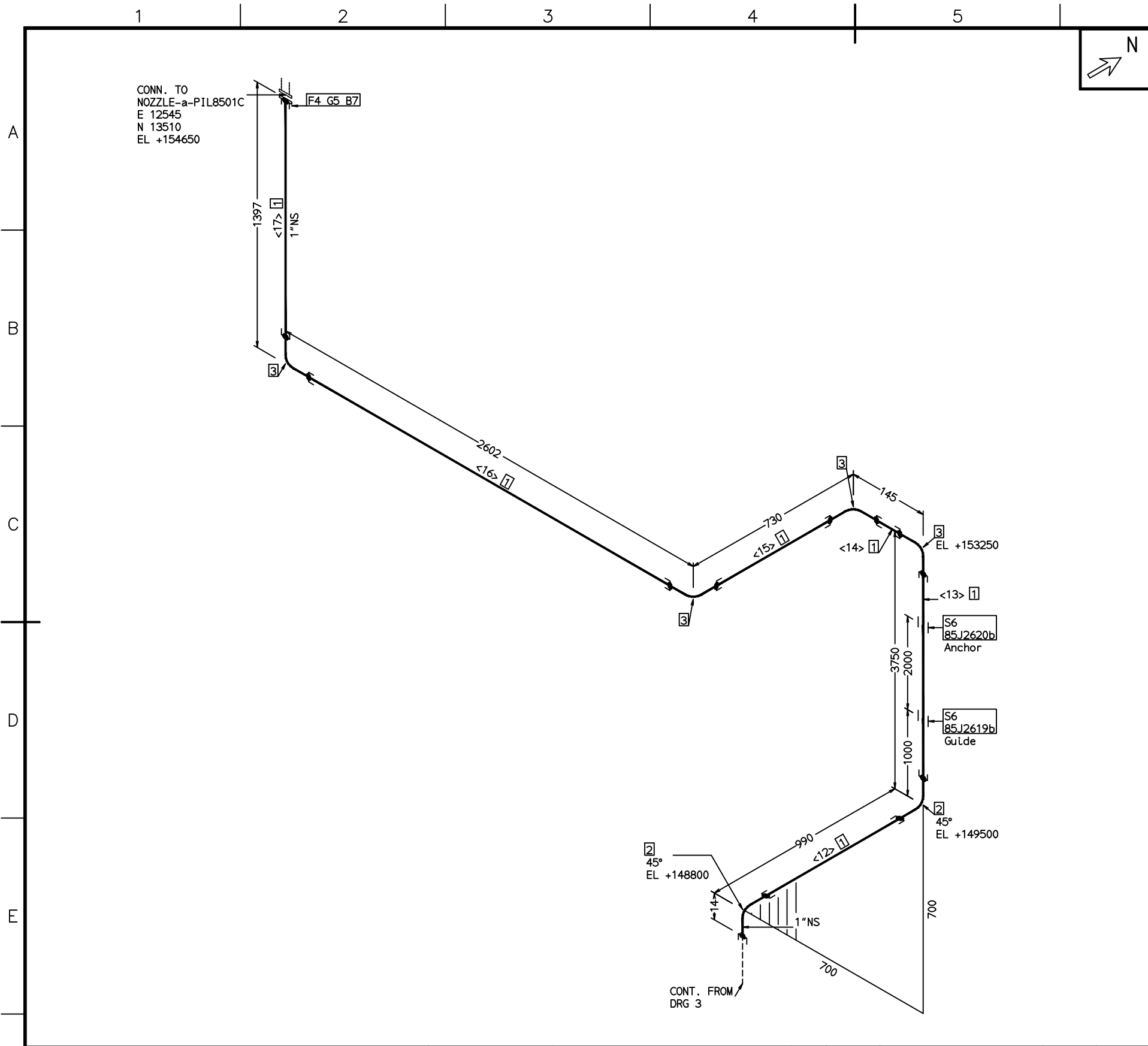
A  
B  
C  
D  
E  
F

A  
B  
C  
D  
E  
F

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						

1 2 3 4 5 6 7 8





FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	1	PPSP3501A_01_4 9.4M
<b>FITTINGS</b>			
2	ELBOW 45° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEPFS3801GL3_0 2
3	ELBOW 90° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEQFS3801GL3_0 4
<b>FLANGES</b>			
4	FLANGE;SW;CL150;RF;ASME A182 F304;ASME B16.5	1	FFS62R3801H_01 1
<b>GASKETS</b>			
5	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	1	GSD62A5SGD_01: 1
<b>SUPPORTS</b>			
6	PIPING SUPPORT;ATTA	1	ATTA01_01:25 2
<b>ERECTION MATERIALS</b>			
<b>BOLTS</b>			
7	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 4

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. PE/PE
PPSP3501A_01_4	<12>	962	1		PE/PE
S:25					
PPSP3501A_01_4	<13>	3713	1		PE/PE
S:25					
PPSP3501A_01_4	<14>	100	1		PE/PE
S:25					
PPSP3501A_01_4	<15>	685	1		PE/PE
S:25					
PPSP3501A_01_4	<16>	2557	1		PE/PE
S:25					
PPSP3501A_01_4	<17>	1370	1		PE/PE
S:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

LIBRARY	HALDOR TOPSØE A/S COPENHAGEN DENMARK	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
CONTRACTOR	TCC 中国天辰工程有限公司 CHINA TIANCHEN ENGINEERING CORPORATION		CONTRACTOR DRAWING NO.	MKP-11-DE-9000-FE-REQ-237	
CONTRACTOR	江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD		SUB-CONTRACTOR DRAWING NO.	17013D85000PE00-12	
			SHEET 4	TOTAL 4	

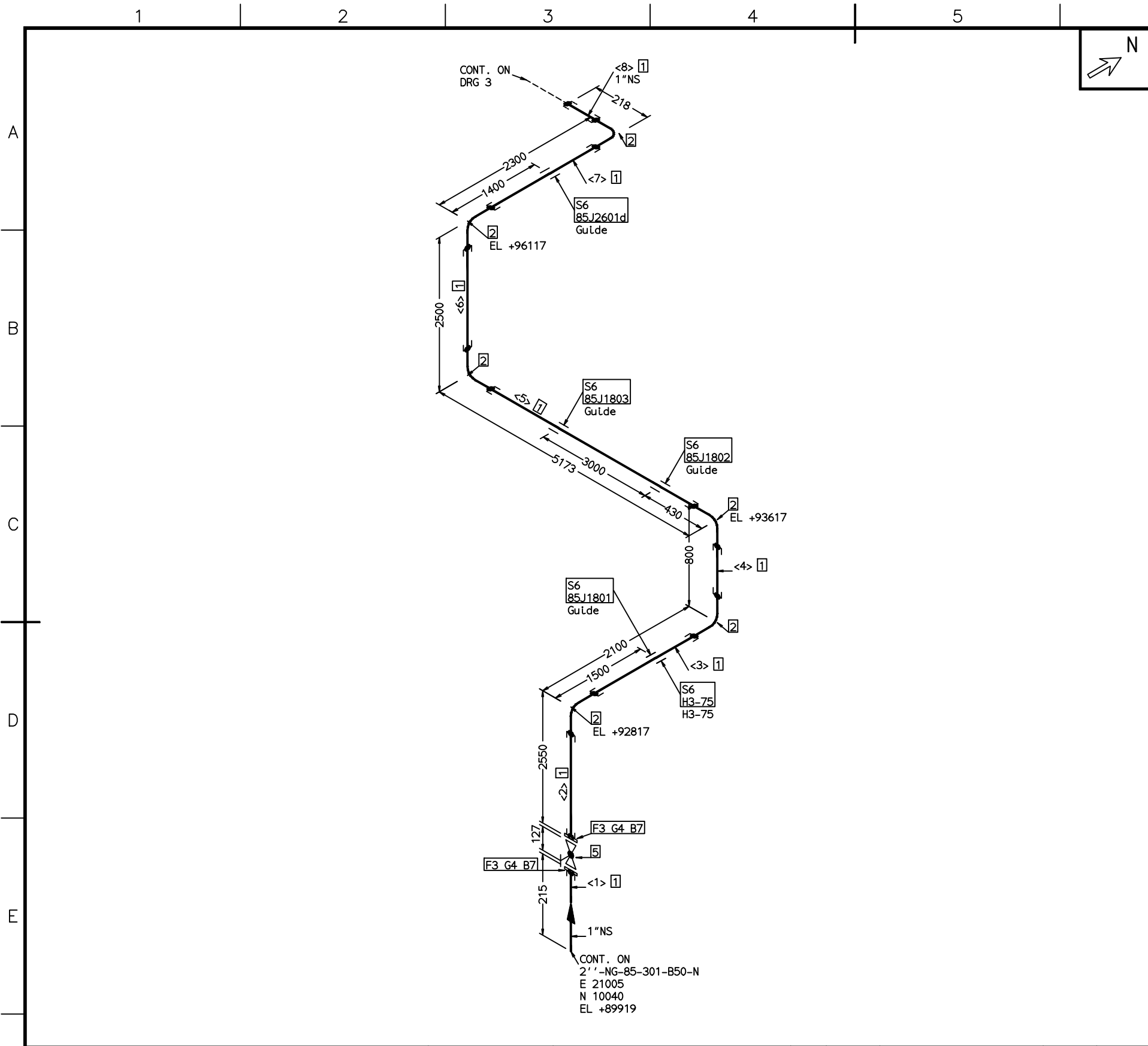
Isometric Drawing		PROJECT	ME Methanol Project
1"-NG-85-208-B50-N		UNIT	Flare
		PHASE	Detail Engineering
SCALE NO	SHEET 4	TOT. 4	SIZE A3
OWNER DWG NO.		MKP-VD-8500-237-506-A3	

REV.	DATE	DESCRIPTION	DESIGN	CHECK
3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY

SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
—	—	—	—	—	—	—	—

DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

NOTES		DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.		DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.		LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.		LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.		INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.		PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N,E IS ARCHITECTURE COORDINATE SYSTEM. X,Y IS SURVEYING COORDINATE SYSTEM.		PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.		REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	1	PPSP3501A_01_415.6M
<b>FITTINGS</b>			
2	ELBOW 90° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEQFS3801GL3_0 6
<b>FLANGES</b>			
3	FLANGE;SW;CL150;RF;ASME A182 F304;ASME B16.5	1	FFS62R3801H_01 2
<b>GASKETS</b>			
4	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	1	GSD62A5SGD_01: 2
<b>VALVES / IN-LINE ITEMS</b>			
5	GLOBE VALVE;BB;OS&Y;CL150;RF;A182-F304;Trim:3 04;API602;SWIVEL PLUG	1	J41E1-150P1_01 1
<b>SUPPORTS</b>			
6	PIPING SUPPORT;ATTA	1	ATTA01_01:25 5
<b>ERECTION MATERIALS</b>			
<b>BOLTS</b>			
7	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (11 TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 8
***** * CONT. ON DRG 2 * *****			

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



**Middle East  
Kimiaye Pars Company**

LICENSOR	HALDOR TOPSØE A/S COPENHAGEN DENMARK	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
					3

CONTRACTOR	 <b>TCC 中国天辰工程有限公司</b> CHINA TIANTHEN ENGINEERING CORPORATION	CONTRACTOR DRAWING NO.	
		MKP-11-DE-9000-FE-REQ-237	SHEET 1 TOTAL 4
SUB-CONTRACTOR	 <b>江苏中圣高科技产业有限公司</b> JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
		17013D85000PE00-12	SHEET 1 TOTAL 4

Isometric Drawing 1''-NG-85-209-B50-N				PROJECT	ME Methanol Project
				UNIT	Flare
SCALE NO SHEET 1 TOT. 4 SIZE A3				PHASE	Detail Engineering
				OWNER DWG NO.	MKP-VD-8500-237-506-A3

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSP3501A_01_4	<1>	210	1		PE/PE
S:25					
PPSP3501A_01_4	<2>	2524	1		PE/PE
S:25					
PPSP3501A_01_4	<3>	2056	1		PE/PE
S:25					
PPSP3501A_01_4	<4>	755	1		PE/PE
S:25					
PPSP3501A_01_4	<5>	5129	1		PE/PE
S:25					
PPSP3501A_01_4	<6>	2456	1		PE/PE
S:25					
PPSP3501A_01_4	<7>	2256	1		PE/PE
S:25					
PPSP3501A_01_4	<8>	195	1		PE/PE
S:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 2 TOTAL 4

 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 2 TOTAL 4

Isometric Drawing 1''-NG-85-209-B50-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 4
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E_s\ln\alpha +3051408.46; X=N_s\ln\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						

A  
B  
C  
D  
E  
F

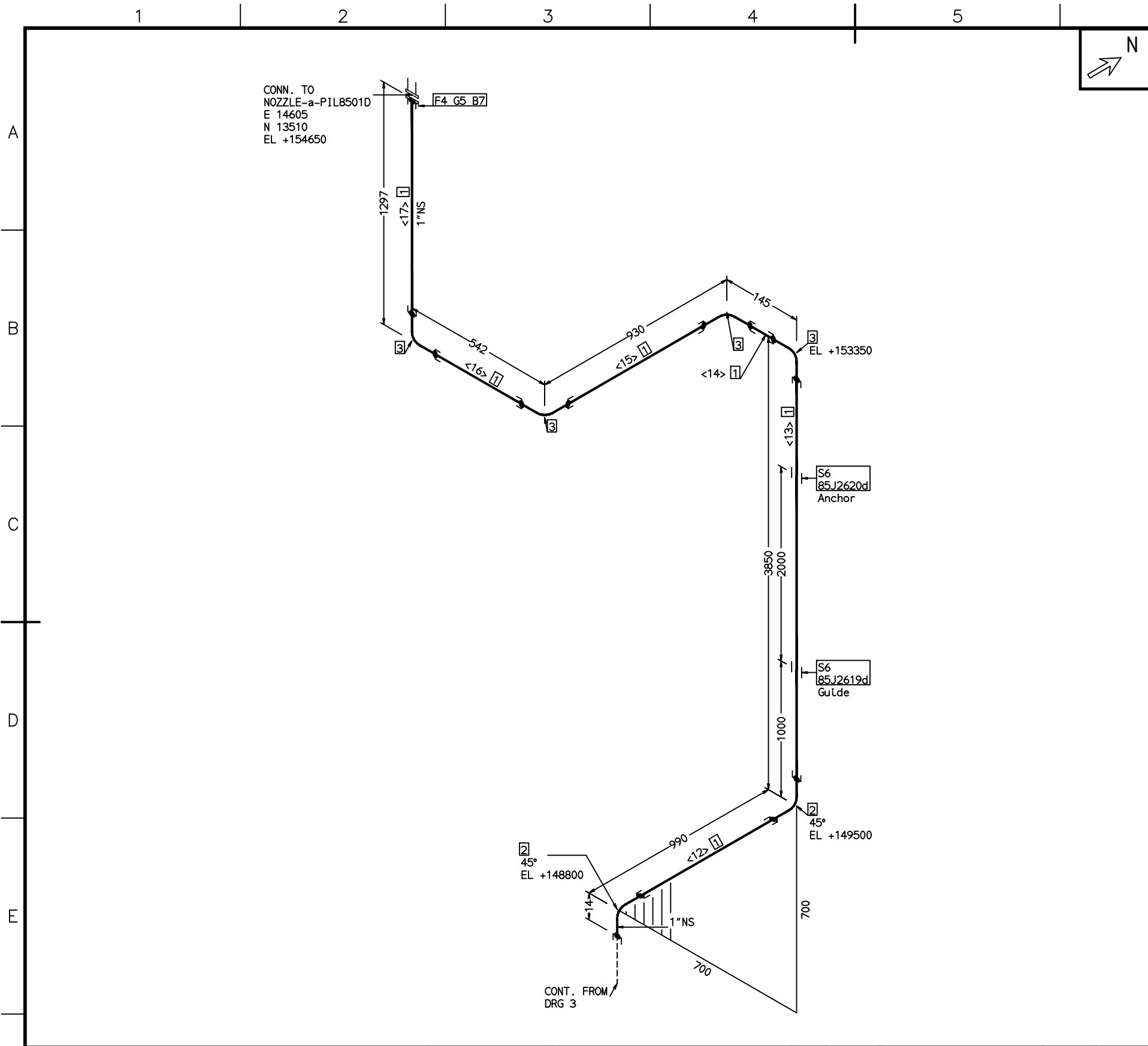
A  
B  
C  
D  
E  
F

1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8







FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	1	PPSP3501A_01_4 7.6M
<b>FITTINGS</b>			
2	ELBOW 45° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEPFS3801GL3_0 2
3	ELBOW 90° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEQFS3801GL3_0 4
<b>FLANGES</b>			
4	FLANGE;SW;CL150;RF;ASME A182 F304;ASME B16.5	1	FFS62R3801H_01 1
<b>GASKETS</b>			
5	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	1	GSD62A5SGD_01: 1
<b>SUPPORTS</b>			
6	PIPING SUPPORT;ATTA	1	ATTA01_01:25 2
<b>ERECTION MATERIALS</b>			
<b>BOLTS</b>			
7	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 4

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. PE/PE
PPSP3501A_01_4	<12>	962	1		PE/PE
S:25					
PPSP3501A_01_4	<13>	3814	1		PE/PE
S:25					
PPSP3501A_01_4	<14>	100	1		PE/PE
S:25					
PPSP3501A_01_4	<15>	885	1		PE/PE
S:25					
PPSP3501A_01_4	<16>	498	1		PE/PE
S:25					
PPSP3501A_01_4	<17>	1270	1		PE/PE
S:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>OPERATIONS DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV. 3
--	----------------	---------	----------	--------

 TCC 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO. MKP-11-DE-9000-FE-REQ-237
 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO. 17013D85000PE00-12
	SHEET 4 TOTAL 4

Isometric Drawing				PROJECT	ME Methanol Project
1''-NG-85-209-B50-N				UNIT	Flare
				PHASE	Detail Engineering
SCALE NO	SHEET 4	TOT. 4	SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								



1 2 3 4 5 6 7 8

\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSP3501A_01_4	<1>	470	1		PE/PE
S:25					
PPSP3501A_01_4	<2>	1806	1		PE/PE
S:25					
PPSP3501A_01_4	<3>	956	1		PE/PE
S:25					
PPSP3501A_01_4	<4>	756	1		PE/PE
S:25					
PPSP3501A_01_4	<5>	2079	1		PE/PE
S:25					
PPSP3501A_01_4	<6>	2456	1		PE/PE
S:25					
PPSP3501A_01_4	<7>	2256	1		PE/PE
S:25					
PPSP3501A_01_4	<8>	115	1		PE/PE
S:25					
PPSP3501A_01_4	<9>	7147	1		PE/PE
S:25					
PPSP3501A_01_4	<10>	1386	1		PE/PE
S:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 2 TOTAL 3

 <b>江苏中圣高科技产业有限公司</b> JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 2 TOTAL 3

Isometric Drawing 1''-NG-85-214-B50-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 3
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

A  
B  
C  
D  
E  
F

A  
B  
C  
D  
E  
F

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						

1 2 3 4 5 6 7 8





\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSP3501A_01_4	<1>	470	1		PE/PE
S:25					
PPSP3501A_01_4	<2>	1806	1		PE/PE
S:25					
PPSP3501A_01_4	<3>	756	1		PE/PE
S:25					
PPSP3501A_01_4	<4>	756	1		PE/PE
S:25					
PPSP3501A_01_4	<5>	2439	1		PE/PE
S:25					
PPSP3501A_01_4	<6>	2456	1		PE/PE
S:25					
PPSP3501A_01_4	<7>	2256	1		PE/PE
S:25					
PPSP3501A_01_4	<8>	7147	1		PE/PE
S:25					
PPSP3501A_01_4	<9>	1386	1		PE/PE
S:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

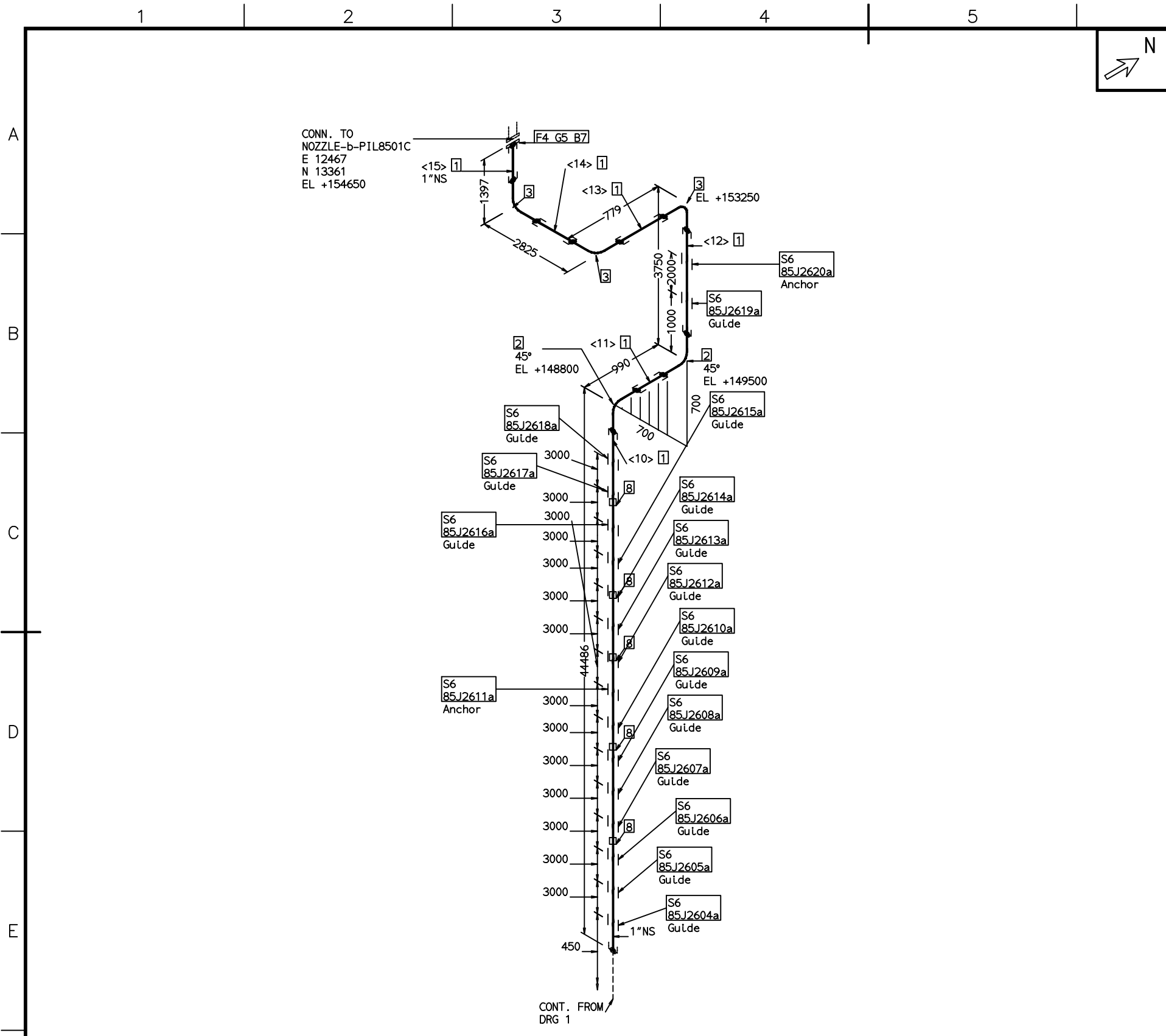
 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 2 TOTAL 3

 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 2 TOTAL 3

Isometric Drawing 1''-NG-85-213-B50-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 3
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
	PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1	●	✗	⊥	⊥	⊥	⊥	⊥	⊥



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	1	PPSP3501A_01_454.1M
<b>FITTINGS</b>			
2	ELBOW 45° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEPFS3801GL3_0 2
3	ELBOW 90° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEQFS3801GL3_0 3
<b>FLANGES</b>			
4	FLANGE;SW;CL150;RF;ASME A182 F304;ASME B16.5	1	FFS62R3801H_01 1
<b>GASKETS</b>			
5	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	1	GSD62A5SGD_01: 1
<b>SUPPORTS</b>			
6	PIPING SUPPORT;ATTA	1	ATTA01_01:25 17
<b>ERECTION MATERIALS</b>			
<b>BOLTS</b>			
7	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 4
8	FULL COUPLING ASTM A182 GRADE F 304 SW CL3000 B16.11	1	I22460143 5

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSP3501A_01_4	<10>	44471	1		PE/PE
S:25 PPSP3501A_01_4	<11>	962	1		PE/PE
S:25 PPSP3501A_01_4	<12>	3713	1		PE/PE
S:25 PPSP3501A_01_4	<13>	735	1		PE/PE
S:25 PPSP3501A_01_4	<14>	2780	1		PE/PE
S:25 PPSP3501A_01_4	<15>	1370	1		PE/PE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

HALDOR TOPSØE A/S  
DOCUMENT NAME:  
JOB NO. DOC. NO. REV. 3

**TCC 中国天辰工程有限公司**  
CONTRACTOR DRAWING NO.  
MKP-11-DE-9000-FE-REQ-237  
SHEET 3 TOTAL 3

**江苏中圣高科技产业有限公司**  
SUB-CONTRACTOR DRAWING NO.  
17013D85000PE00-12  
SHEET 3 TOTAL 3

Isometric Drawing				PROJECT	ME Methanol Project
1''-NG-85-213-B50-N				UNIT	Flare
				PHASE	Detail Engineering
SCALE NO	SHEET 3	TOT. 3	SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3

NOTES

1:DELETE.

2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.

3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.

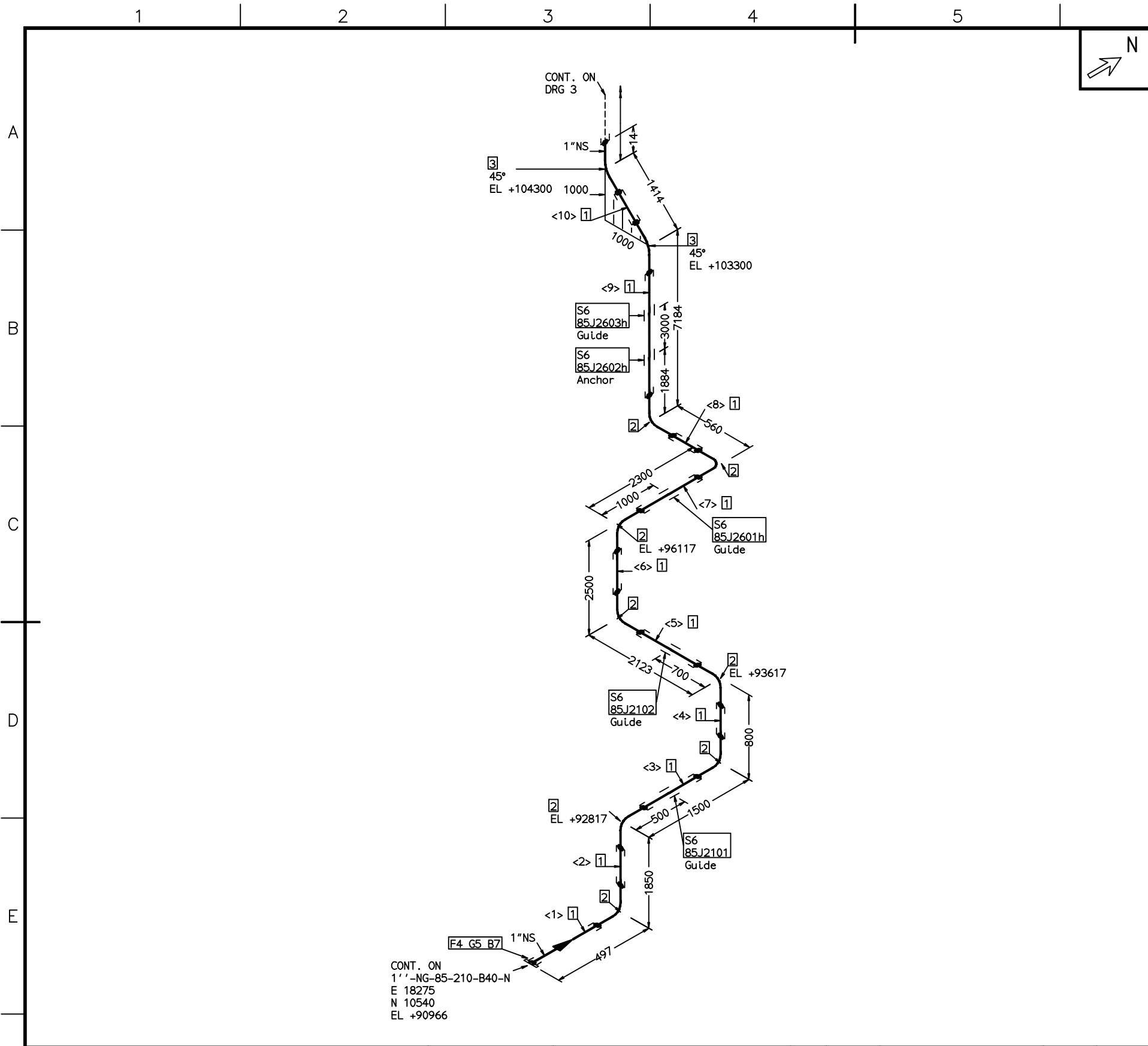
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.

5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.

6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036°  
N.E IS ARCHITECTURE COORDINATE SYSTEM.  
X.Y IS SURVEYING COORDINATE SYSTEM.

7:DELETE.


DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	1	PPSP3501A_01_420.4M
<b>FITTINGS</b>			
2	ELBOW 90° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEQFS3801GL3_0 8
3	ELBOW 45° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEPFS3801GL3_0 2
<b>FLANGES</b>			
4	FLANGE;SW;CL150;RF;ASME A182 F304;ASME B16.5	1	FFS62R3801H_01 1
<b>GASKETS</b>			
5	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	1	GSD62A5SGD_01: 1
<b>SUPPORTS</b>			
6	PIPING SUPPORT;ATTA	1	ATTA01_01:25 5
<b>ERECTION MATERIALS</b>			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>BOLTS</b>			
7	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 4
***** * CONT. ON DRG 2 * *****			

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



**Middle East  
Kimiaye Pars Company**

 <b>HALDOR TOPSØE A/S</b> <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC 中国天辰工程有限公司</b> <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 1 TOTAL 3
 <b>江苏中圣高科技产业有限公司</b> <small>JIANGSU SUNPOWER TECHNOLOGY CO., LTD</small>	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 1 TOTAL 3

Isometric Drawing 1''-NG-85-212-B50-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

SCALE NO	SHEET 1	TOT. 3	SIZE A3
----------	---------	--------	---------

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								



1 2 3 4 5 6 7 8

\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSP3501A_01_4	<1>	470	1		PE/PE
S:25					
PPSP3501A_01_4	<2>	1806	1		PE/PE
S:25					
PPSP3501A_01_4	<3>	1456	1		PE/PE
S:25					
PPSP3501A_01_4	<4>	756	1		PE/PE
S:25					
PPSP3501A_01_4	<5>	2079	1		PE/PE
S:25					
PPSP3501A_01_4	<6>	2456	1		PE/PE
S:25					
PPSP3501A_01_4	<7>	2256	1		PE/PE
S:25					
PPSP3501A_01_4	<8>	515	1		PE/PE
S:25					
PPSP3501A_01_4	<9>	7147	1		PE/PE
S:25					
PPSP3501A_01_4	<10>	1386	1		PE/PE
S:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 2 TOTAL 3

 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 2 TOTAL 3

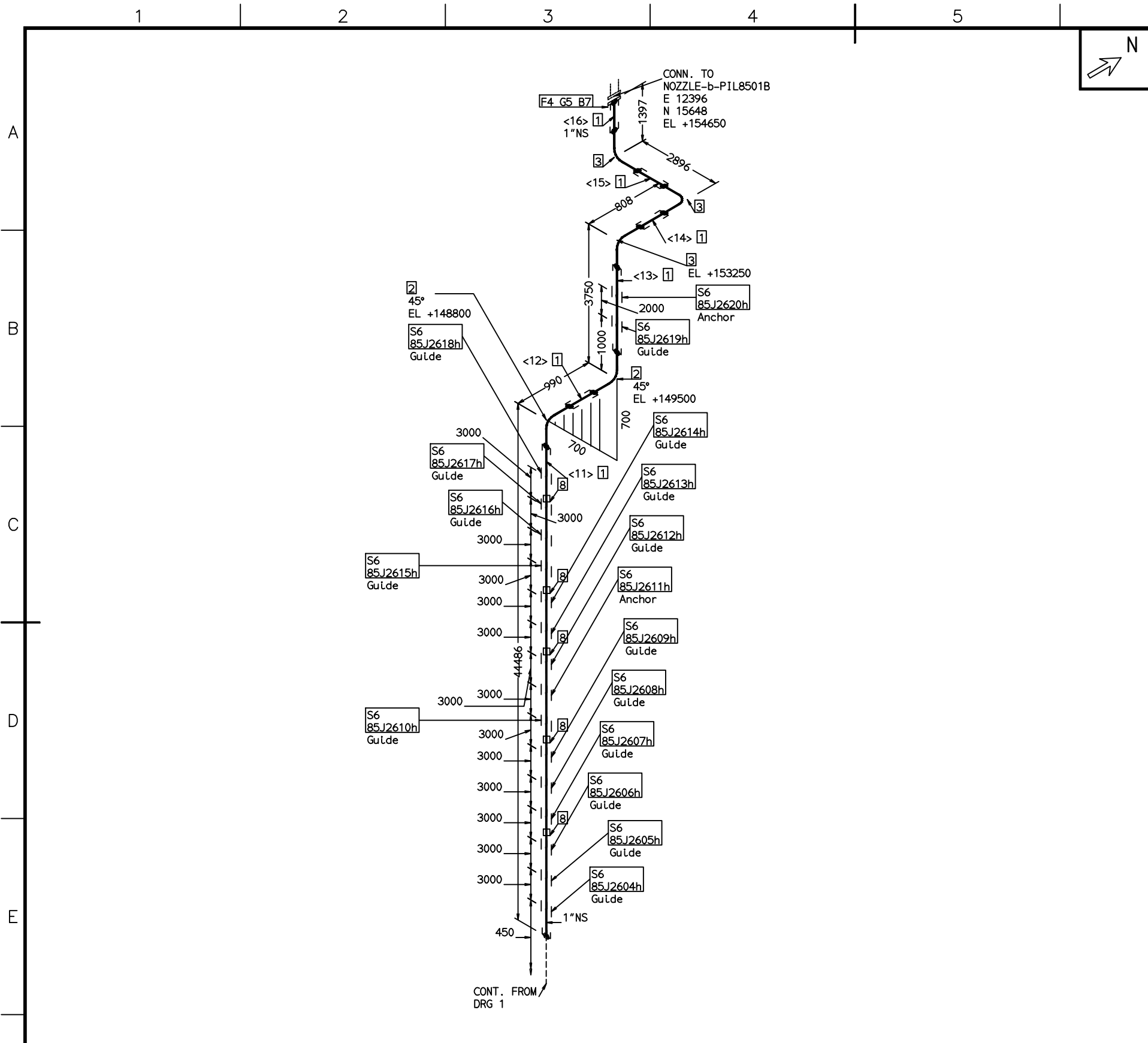
Isometric Drawing 1''-NG-85-212-B50-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 3
SIZE	A3	OWNER DWG NO.
		MKP-VD-8500-237-506-A3

A  
B  
C  
D  
E  
F

A  
B  
C  
D  
E  
F

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						

1 2 3 4 5 6 7 8



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	1	PPSP3501A_01_454.2M
<b>FITTINGS</b>			
2	ELBOW 45° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEPFS3801GL3_0 2
3	ELBOW 90° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEQFS3801GL3_0 3
<b>FLANGES</b>			
4	FLANGE;SW;CL150;RF;ASME A182 F304;ASME B16.5	1	FFS62R3801H_01 1
<b>GASKETS</b>			
5	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	1	GSD62A5SGD_01: 1
<b>SUPPORTS</b>			
6	PIPING SUPPORT;ATTA	1	ATTA01_01:25 17
<b>ERECTION MATERIALS</b>			
<b>BOLTS</b>			
7	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 4
8	FULL COUPLING ASTM A182 GRADE F 304 SW CL3000 B16.11	1	I22460143 5

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. PE/PE
PPSP3501A_01_4	<11>	44471	1		PE/PE
PPSP3501A_01_4	<12>	962	1		PE/PE
PPSP3501A_01_4	<13>	3713	1		PE/PE
PPSP3501A_01_4	<14>	764	1		PE/PE
PPSP3501A_01_4	<15>	2851	1		PE/PE
PPSP3501A_01_4	<16>	1370	1		PE/PE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

HALDOR TOPSØE A/S

CONTRACTOR: **TCC 中国天辰工程有限公司**  
CHINA TIANCHEN ENGINEERING CORPORATION

江苏中圣高科技产业有限公司  
JIANGSU SUNPOWER TECHNOLOGY CO., LTD

CONTRACTOR DRAWING NO. MKP-11-DE-9000-FE-REQ-237  
SHEET 3 TOTAL 3

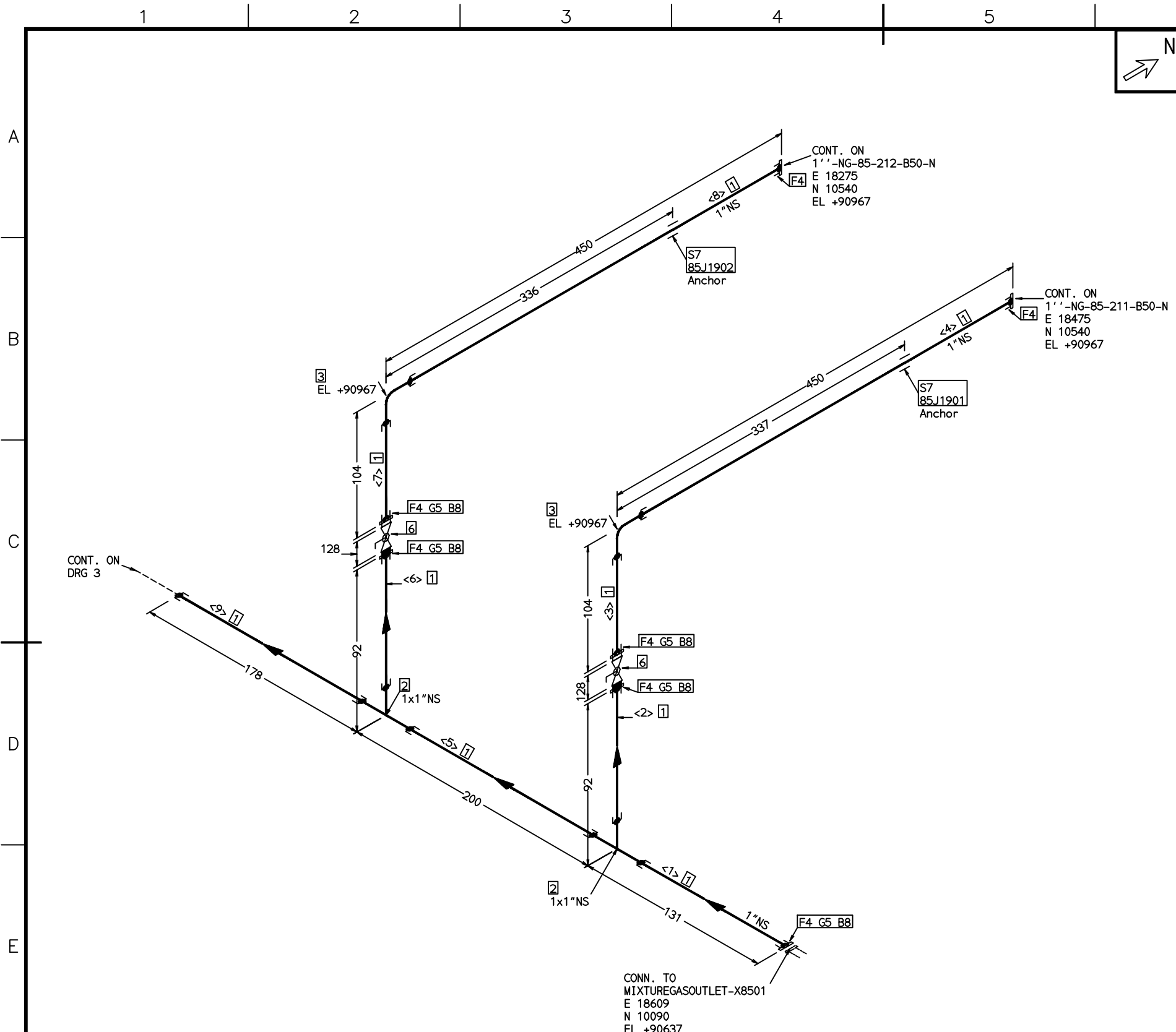
SUB-CONTRACTOR DRAWING NO. 17013D85000PE00-12  
SHEET 3 TOTAL 3

Isometric Drawing  
1''-NG-85-212-B50-N

PROJECT: ME Methanol Project  
UNIT: Flare  
PHASE: Detail Engineering

SCALE NO SHEET 3 TOT. 3 SIZE A3 OWNER DWG NO. MKP-VD-8500-237-506-A3

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								




FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;A312-TP304L;ASME B36.19M;SCH40S	1	PPSP3502A_01_4 1.6M
<b>FITTINGS</b>			
2	TEE EQUAL;SW;ASME A182-F304L;ASME B16.11;CL3000	1 x 1	JTSFS3802GL3_0 2
3	ELBOW 90°;SW;ASME A182-F304L;ASME B16.11;CL3000	1	JEQFS3802GL3_0 2
<b>FLANGES</b>			
4	FLANGE;SW;CL150;RF;ASME A182 F304L;ASME B16.5	1	FFS62R3802H_01 7
<b>GASKETS</b>			
5	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5, T=3.2mm KLINGER PSM-AS OR EQUAL.	1	GSD62A6SGD_01: 5
<b>VALVES / IN-LINE ITEMS</b>			
6	BALL VALVE;A182-F304L;BALL:SS304,PTFE SEAT;CL150;RF;FLOATING,FULL BORE,SPLIT BODY,AP1608;ANTIC STATIC AND FIRE SAFE	1	Q41F1-150P3_01 2
<b>SUPPORTS</b>			
7	PIPING SUPPORT;ATTA	1	ATTA01_01:25 2
<b>ERECTION MATERIALS</b>			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>BOLTS</b>			
8	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 20

\*\*\*\*\*  
\* CONT. ON DRG 2 \*  
\*\*\*\*\*

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.
	MKP-11-DE-9000-FE-REQ-237
	SHEET 1 TOTAL 4
 <b>江苏中圣高科技产业有限公司</b> SUNPOWER JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.
	17013D85000PE00-12
	SHEET 1 TOTAL 4

Isometric Drawing				PROJECT	ME Methanol Project
1"-NG-85-210-B40-N				UNIT	Flare
				PHASE	Detail Engineering
SCALE	NO	SHEET	TOT.	OWNER DWG NO.	MKP-VD-8500-237-506-A3
		1	4		

NOTES

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y = N \cos \alpha - E \sin \alpha + 3051408.46$ ;  $X = N \sin \alpha + E \cos \alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N, E IS ARCHITECTURE COORDINATE SYSTEM.  
 X, Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY
PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK
SHOP WELD		FIELD WELD		SOCKET WELD		SCREWED JOINT
				COMPJN JOINT		PIPE SUPPORT
				LAGGED PIPE		TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1					

1 2 3 4 5 6 7 8

A  
B  
C  
D  
E  
F

\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSP3502A_01_4	<1>	104	1		PE/PE
S:25					
PPSP3502A_01_4	<2>	65	1		PE/PE
S:25					
PPSP3502A_01_4	<3>	78	1		PE/PE
S:25					
PPSP3502A_01_4	<4>	423	1		PE/PE
S:25					
PPSP3502A_01_4	<5>	156	1		PE/PE
S:25					
PPSP3502A_01_4	<6>	65	1		PE/PE
S:25					
PPSP3502A_01_4	<7>	78	1		PE/PE
S:25					
PPSP3502A_01_4	<8>	423	1		PE/PE
S:25					
PPSP3502A_01_4	<9>	156	1		PE/PE
S:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

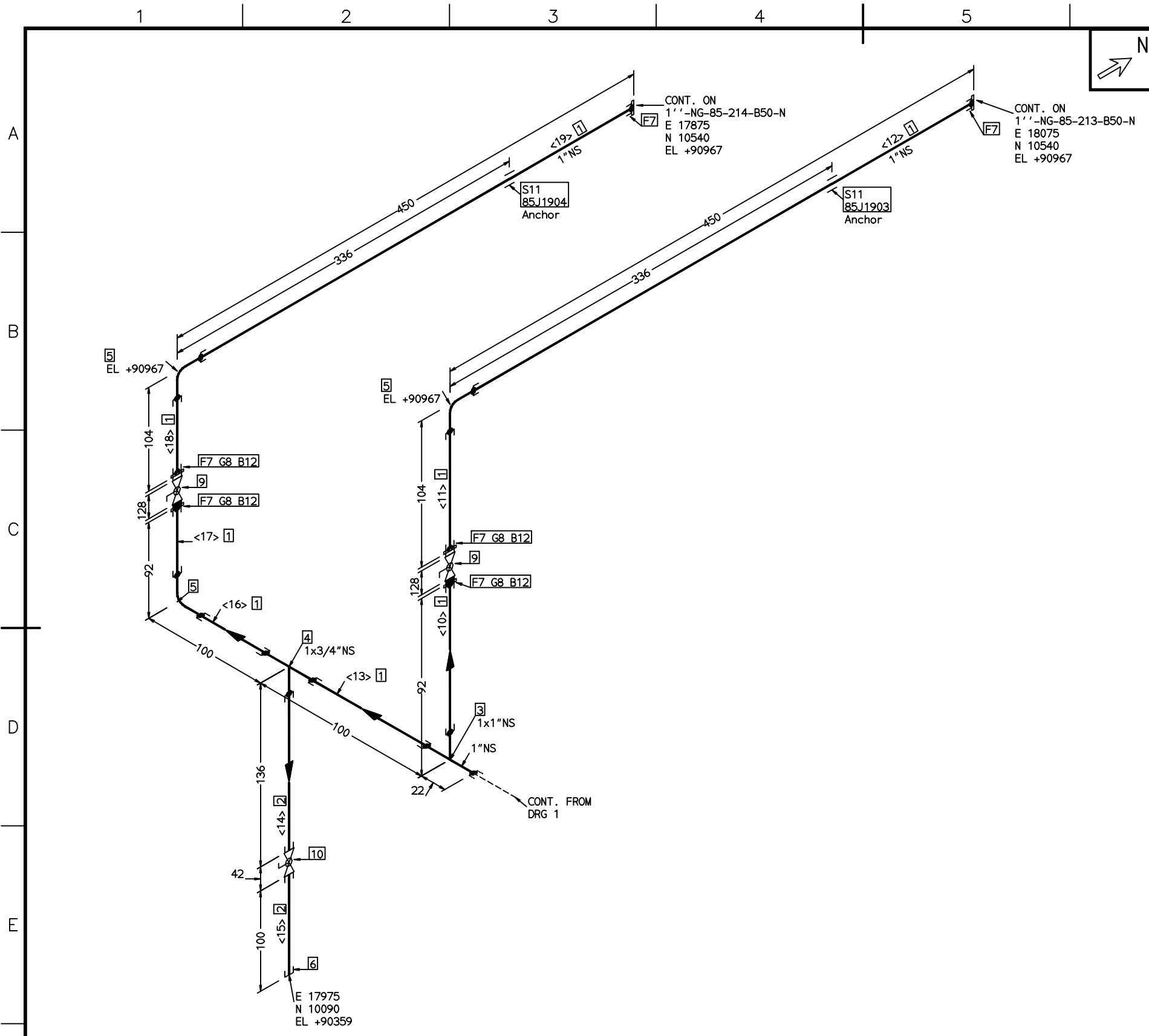
 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 2 TOTAL 4

 <b>江苏中圣高科技产业有限公司</b> <small>JIANGSU SUNPOWER TECHNOLOGY CO., LTD</small>	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 2 TOTAL 4

Isometric Drawing 1''-NG-85-210-B40-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 4
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N,E IS ARCHITECTURE COORDINATE SYSTEM. X,Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						

1 2 3 4 5 6 7 8



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;A312-TP304L;ASME B36.19M;SCH40S	1	PPSP3502A_01_4 1.3M
2	PIPE;SMLS;PE;A312-TP304L;ASME B36.19M;SCH40S	3/4	PPSP3502A_OJ_4 0.3M
<b>FITTINGS</b>			
3	TEE EQUAL;SW;ASME A182-F304L;ASME B16.11;CL3000	1 x 1	JTSFS3802GL3_0 1
4	TEE REDU;SW;ASME A182-F304L;ASME B16.11;CL3000	1 x 3/4	JTRFS3802GL3_0 1
5	ELBOW 90°;SW;ASME A182-F304L;ASME B16.11;CL3000	1	JEQFS3802GL3_0 3
6	CAP;NPT;ASME A182-F304L;ASME B16.11;CL3000	3/4	JKFFN3802GL3_0 1
<b>FLANGES</b>			
7	FLANGE;SW;CL150;RF;ASME A182 F304L;ASME B16.5	1	FFS62R3802H_01 6
<b>GASKETS</b>			
8	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5, T=3.2mm KLINGER PSM-AS OR EQUAL.	1	GSD62A6SGD_01: 4
<b>VALVES / IN-LINE ITEMS</b>			
9	BALL VALVE;A182-F304L, BALL:SS304,PTFE SEAT;CL150;RF;FLOATING, FULL BORE, SPLIT BODY,API608;ANTIC STATIC AND FIRE SAFE	1	Q41F1-150P3_01 2
10	BALL VALVE;A182-F304L, BALL:SS304,PTFE SEAT;CL600;SW;FLOATING, FULL BORE, SPLIT BODY,API608;ANTIC STATIC AND FIRE SAFE	3/4	Q41F1-600C1_OJ 1
<b>SUPPORTS</b>			
11	PIPING SUPPORT;ATTA	1	ATTA01_01:25 2
<b>ERECTION MATERIALS</b>			
<b>BOLTS</b>			
12	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 16

\*\*\*\*\*  
\* CONT. ON DRG 4 \*  
\*\*\*\*\*

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



**Middle East  
Kimiaye Pars Company**

	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 3 TOTAL 4
	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 3 TOTAL 4

Isometric Drawing 1'-NG-85-210-B40-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 3	TOT. 4
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

**NOTES**

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y = N \cos \alpha - E \sin \alpha + 3051408.46$ ;  $X = N \sin \alpha + E \cos \alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N, E IS ARCHITECTURE COORDINATE SYSTEM.  
 X, Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS. (barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
DESIGN TEMP (°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE PRESS (barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY
PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK
SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMP. JOINT	PIPE SUPPORT	LAGGED PIPE
REF. PIPING PLAN NO.:	MKP-VD-8500-237-505-A1					

1 2 3 4 5 6 7 8

\*\*\*\*\*  
\* CONT. FROM DRG 3 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSP3502A_01_4 <10>		65	1		PE/PE
S:25					
PPSP3502A_01_4 <11>		78	1		PE/PE
S:25					
PPSP3502A_01_4 <12>		423	1		PE/PE
S:25					
PPSP3502A_01_4 <13>		56	1		PE/PE
S:25					
PPSP3502A_0J_4 <14>		114	3/4		PE/TH
S:20					
PPSP3502A_0J_4 <15>		100	3/4		TH/TH
S:20					
PPSP3502A_01_4 <16>		56	1		PE/PE
S:25					
PPSP3502A_01_4 <17>		65	1		PE/PE
S:25					
PPSP3502A_01_4 <18>		78	1		PE/PE
S:25					
PPSP3502A_01_4 <19>		423	1		PE/PE
S:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 TCC 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 4 TOTAL 4

 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 4 TOTAL 4

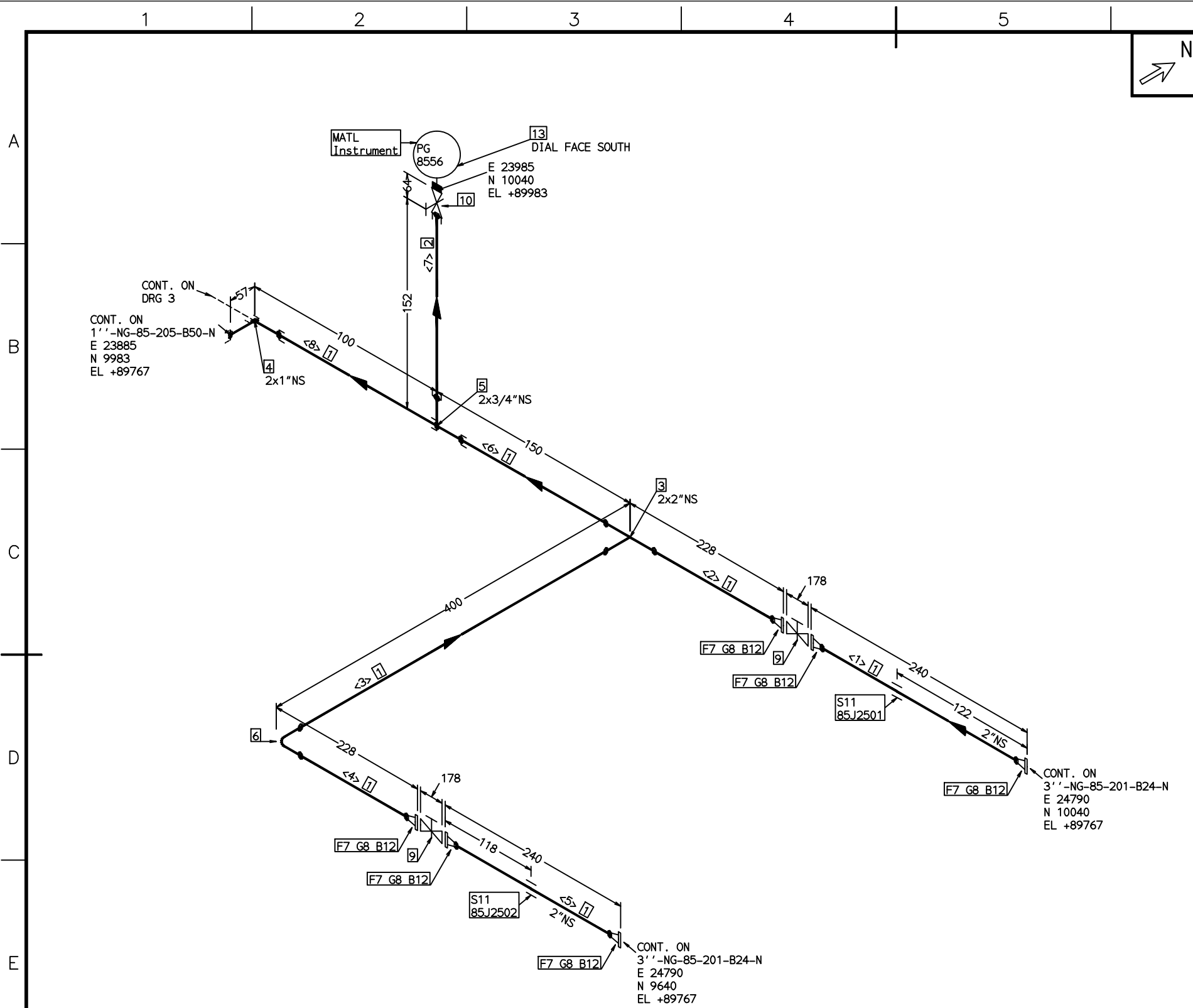
Isometric Drawing 1''-NG-85-210-B40-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 4	TOT. 4
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

A  
B  
C  
D  
E  
F

A  
B  
C  
D  
E  
F

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						


1 2 3 4 5 6 7 8



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;A312-TP304;ASME B36.19M;SCH10S	2	PPSB3501A_02_1 0.9M
2	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	3/4	PPSP3501A_OJ_4 0.1M
<b>FITTINGS</b>			
3	TEE EQUAL;SMLS;BW;ASME A403-WP304;ASME B16.9;SCH10S	2 x 2	JTSSB3601D_02_1
4	SOCKETOLET;SW;ASTM A182-F304;MSS SP-97;CL3000	2 x 1	JOOFS38010L3_0 1
5	SOCKETOLET;SW;ASTM A182-F304;MSS SP-97;CL3000	2 x 3/4	JOOFS38010L3_0 1
6	ELBOW 90°;SMLS;LR;BW;ASME A403-WP304;ASME B16.9;SCH10S	2	JELSB3601D_02_1
<b>FLANGES</b>			
7	FLANGE;WN;CL150;RF;ASME A182 F304;ASME B16.5;SCH10S	2	FFW62R3801H_02 6
<b>GASKETS</b>			
8	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	2	GSD62A5SGD_02: 6
<b>VALVES / IN-LINE ITEMS</b>			
9	GATE VALVE;BB;OS&Y;CL150;RF;A351-CF8;TrLm:30 4;API600;FLEXIBLE WEDGE	2	Z40E1-150P2_02 2
10	GATE VALVE;BB;OS&Y;CL800;SW;A182-F304;TrLm:3 04;API602;SOLID WEDGE	3/4	Z51E1-800P1_OJ 1
<b>SUPPORTS</b>			
11	PIPING SUPPORT;ATTA	2	ATTA01_02:50 2
<b>ERECTION MATERIALS</b>			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>BOLTS</b>			
12	95 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 24
<b>INSTRUMENTS</b>			
13	仪表 PG 8556	3/4	***** * CONT. ON DRG 2 * *****

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

LIBRARY	HALDOR TOPSØE A/S	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
CONTRACTOR	TCC 中国天辰工程有限公司	CONTRACTOR DRAWING NO.	MKP-11-DE-9000-FE-REQ-237	SHEET 1	TOTAL 6
CONTRACTOR	江苏中圣高科技产业有限公司	SUB-CONTRACTOR DRAWING NO.	17013D85000PE00-12	SHEET 1	TOTAL 6

PROJECT	ME Methanol Project
UNIT	Flare
PHASE	Detail Engineering
OWNER DWG NO.	MKP-VD-8500-237-506-A3

SCALE	NO	SHEET 1	TOT. 6	SIZE A3
PROJECT	ME Methanol Project			
UNIT	Flare			
PHASE	Detail Engineering			
OWNER DWG NO.	MKP-VD-8500-237-506-A3			

NOTES

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha - E\sin\alpha + 3051408.46$ ;  $X=N\sin\alpha + E\cos\alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N.E IS ARCHITECTURE COORDINATE SYSTEM.  
 X.Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSB3501A_02_1	<1>	113	2		BE/BE
S:50					
PPSB3501A_02_1	<2>	102	2		BE/BE
S:50					
PPSB3501A_02_1	<3>	260	2		BE/BE
S:50					
PPSB3501A_02_1	<4>	89	2		BE/BE
S:50					
PPSB3501A_02_1	<5>	114	2		BE/BE
S:50					
PPSB3501A_02_1	<6>	86	2		BE/PE
S:50					
PPSP3501A_0J_4	<7>	100	3/4		PE/PE
S:20					
PPSB3501A_02_1	<8>	100	2		PE/PE
S:50					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 2 TOTAL 6

 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 2 TOTAL 6

Isometric Drawing 2''-NG-85-301-B50-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 6
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E_s\ln\alpha +3051408.46; X=N_s\ln\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						

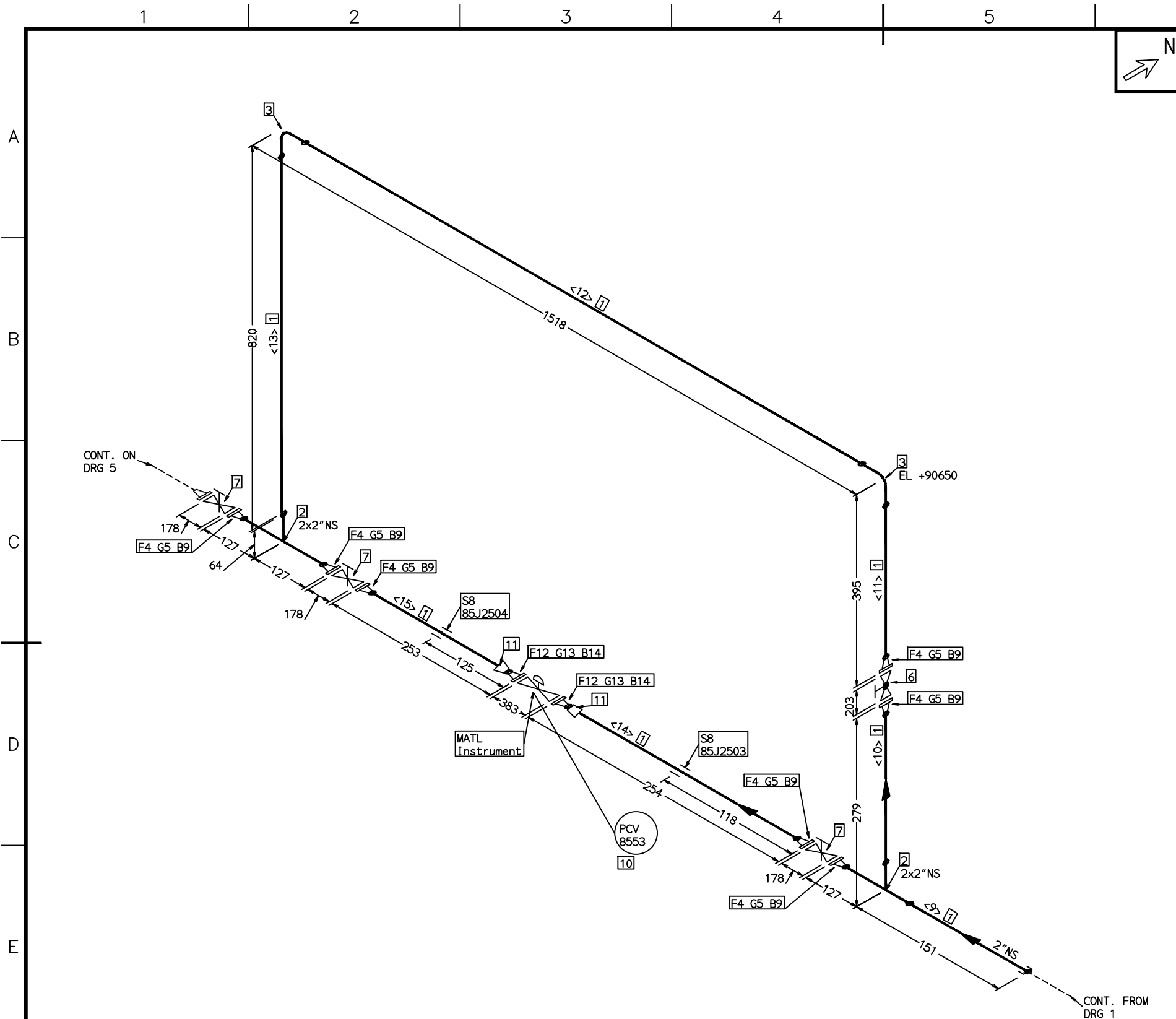
A  
B  
C  
D  
E  
F

A  
B  
C  
D  
E  
F

1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8






FABRICATION MATERIALS				
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>PIPE</b>				
1	PIPE;SMLS;BE;A312-TP304;ASME B36.19M;SCH10S	2	PPSB3501A_02_1 2.9M	
<b>FITTINGS</b>				
2	TEE EQUAL;SMLS;BW;ASME A403-WP304;ASME B16.9;SCH10S	2 x 2	JTSSB3601D_02_2	
3	ELBOW 90° ;SMLS;LR;BW;ASME A403-WP304;ASME B16.9;SCH10S	2	JELSB3601D_02_2	
<b>FLANGES</b>				
4	FLANGE;WN;CL150;RF;ASME A182 F304;ASME B16.5;SCH10S	2	FFW62R3801H_02_7	
<b>GASKETS</b>				
5	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	2	GSD62A5SGD_02: 7	
<b>VALVES / IN-LINE ITEMS</b>				
6	GLOBE VALVE;BB;OS&Y;CL150;RF;A351-CF8;TrLm:30 4;BS1873;PARABOLIC DISC	2	J41E1-150P2_02 1	
7	GATE VALVE;BB;OS&Y;CL150;RF;A351-CF8;TrLm:30 4;API600;FLEXIBLE WEDGE	2	Z40E1-150P2_02 3	
<b>SUPPORTS</b>				
8	PIPING SUPPORT;ATTA	2	ATTA01_02:50 2	
<b>ERECTION MATERIALS</b>				
<b>BOLTS</b>				
9	95 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 28	
<b>INSTRUMENTS</b>				
10	CV150RF FISHER TYPE CTRL VALVE CL150RF PCV 8553	1		1
11	SWS ECC A403 SP304 SMLS BLEXPSE MSS SP 95 S-40S	2X1	I30348309	2
12	SW FLG A182 F304 SW RF CL150	1	I34065035	2
13	NOM METELFLAT GASKET	1	I34211674	2
14	65 F-TH BLT&2HEAV HEX NUT B8	1/2	I24986441	8

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

HALDOR TOPSØE A/S  
COPENHAGEN DENMARK

DOCUMENT NAME: [ ]  
JOB NO. [ ]  
DWC. NO. [ ]  
REV. 3

CONTRACTOR:



CONTRACTOR DRAWING NO.  
MKP-11-DE-9000-FE-REQ-237  
SHEET 3 TOTAL 6



SUB-CONTRACTOR DRAWING NO.  
17013D85000PE00-12  
SHEET 3 TOTAL 6

Isometric Drawing				PROJECT	ME Methanol Project
2''-NG-85-301-B50-N				UNIT	Flare
				PHASE	Detail Engineering
SCALE NO	SHEET 3	TOT. 6	SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3

NOTES

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha - E\sin\alpha + 3051408.46$ ;  $X=N\sin\alpha + E\cos\alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N.E IS ARCHITECTURE COORDINATE SYSTEM.  
 X.Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY
PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK
SHOP WELD						
FIELD WELD						
SOCKET WELD						
SCREWED JOINT						
COMPJ JOINT						
PIPE SUPPORT						
LAGGED PIPE						
TRACED PIPE						
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1					

\*\*\*\*\*  
\* CONT. FROM DRG 3 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. PE/BE
PPSB3501A_02_1	<9>	88	2		
S:50					
PPSB3501A_02_1	<10>	151	2		BE/BE
S:50					
PPSB3501A_02_1	<11>	255	2		BE/BE
S:50					
PPSB3501A_02_1	<12>	1366	2		BE/BE
S:50					
PPSB3501A_02_1	<13>	743	2		BE/BE
S:50					
PPSB3501A_02_1	<14>	127	2		BE/BE
S:50					
PPSB3501A_02_1	<15>	127	2		BE/BE
S:50					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 4 TOTAL 6

 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 4 TOTAL 6

Isometric Drawing 2''-NG-85-301-B50-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 4	TOT. 6
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

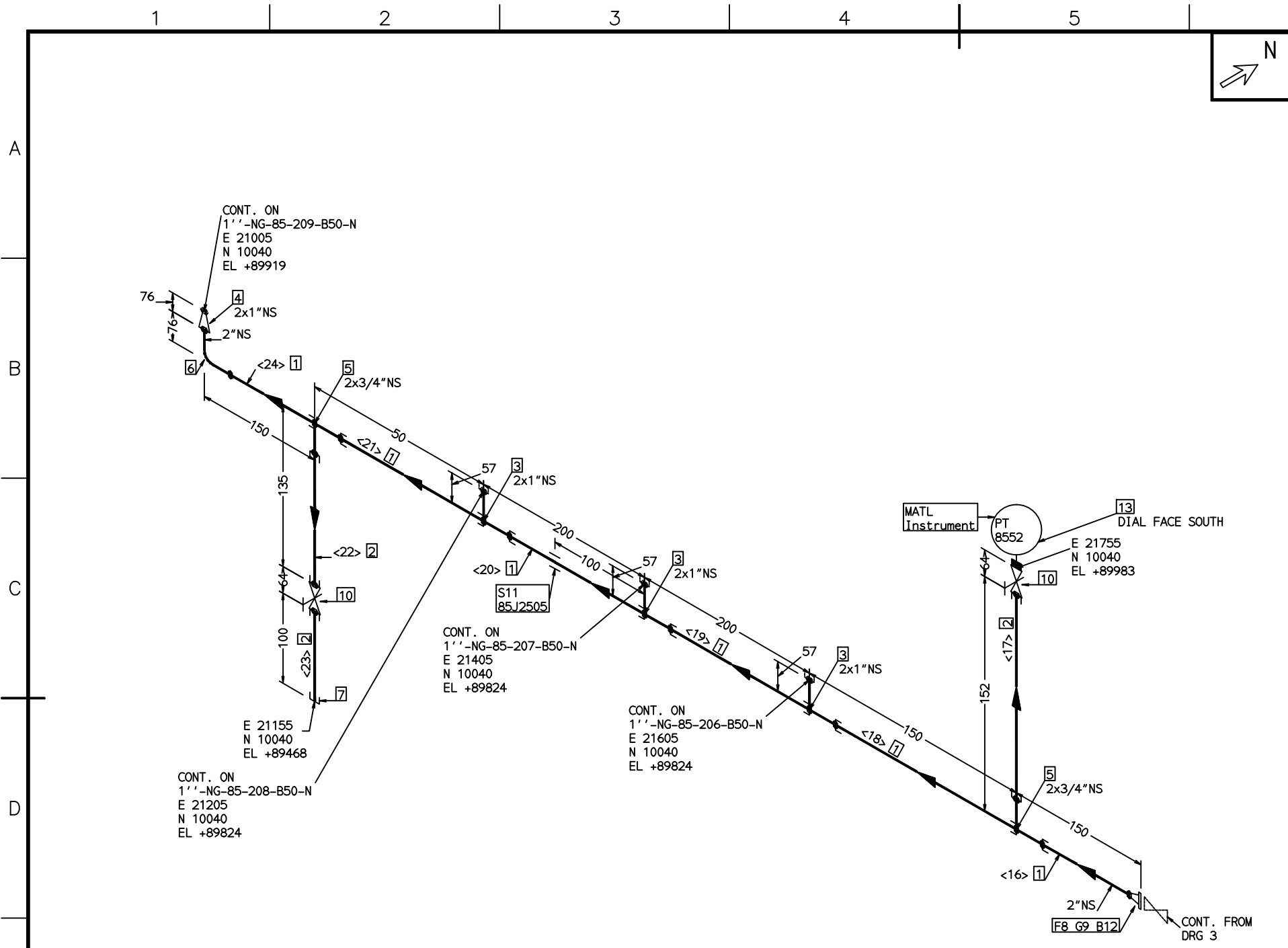
NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E_s\ln\alpha +3051408.46; X=N_s\ln\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						

A  
B  
C  
D  
E  
F

A  
B  
C  
D  
E  
F

1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8




FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;A312-TP304;ASME B36.19M;SCH10S	2	PPSB3501A_02_1 0.8M
2	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	3/4	PPSP3501A_OJ_4 0.3M
<b>FITTINGS</b>			
3	SOCKETOLET;SW;ASTM A182-F304;MSS SP-97;CL3000	2 x 1	JOOFS38010L3_0 3
4	REDUCER CON.;SMLS;BW;ASME A403-WP304;ASME B16.9;SCH10SXSCH40S	2 x 1	JRCSB3601D_020 1
5	SOCKETOLET;SW;ASTM A182-F304;MSS SP-97;CL3000	2 x 3/4	JOOFS38010L3_0 2
6	ELBOW 90°;SMLS;LR;BW;ASME A403-WP304;ASME B16.9;SCH10S	2	JELSB3601D_02_1
7	CAP;NPT;ASME A182-F304;ASME B16.11;CL3000	3/4	JKFFN3801GL3_0 1
<b>FLANGES</b>			
8	FLANGE;WN;CL150;RF;ASME A182 F304;ASME B16.5;SCH10S	2	FFW62R3801H_02 1
<b>GASKETS</b>			
9	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	2	GSD62A5SGD_02: 1
<b>VALVES / IN-LINE ITEMS</b>			
10	GATE VALVE;BB;OS&Y;CL800;SW;A182-F304;Trlm:3 04;API602;SOLID WEDGE	3/4	Z51E1-800P1_OJ 2
<b>SUPPORTS</b>			
11	PIPING SUPPORT;ATTA	2	ATTA01_02:50 1
<b>ERECTION MATERIALS</b>			
<b>BOLTS</b>			
12	95 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 4
<b>INSTRUMENTS</b>			
13	仪表 PT 8552	3/4	1

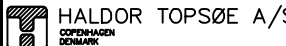


\*\*\*\*\*  
\* CONT. ON DRG 6 \*  
\*\*\*\*\*

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



**Middle East  
Kimiaye Pars Company**

 <p>HALDOR TOPSØE A/S COPENHAGEN DENMARK</p>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3
 <p><b>TCC 中国天辰工程有限公司</b> CHINA TIANCHEN ENGINEERING CORPORATION</p>	CONTRACTOR DRAWING NO.			
	MKP-11-DE-9000-FE-REQ-237			
 <p><b>江苏中圣高科技产业有限公司</b> JIANGSU SUNPOWER TECHNOLOGY CO., LTD</p>	SUB-CONTRACTOR DRAWING NO.			
	17013D85000PE00-12			
SHEET 5		TOTAL 6		

Isometric Drawing				PROJECT	ME Methanol Project
2'-NG-85-301-B50-N				UNIT	Flare
				PHASE	Detail Engineering
SCALE NO	SHEET 5	TOT. 6	SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3

**NOTES**

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y = N \cos \alpha - E \sin \alpha + 3051408.46$ ;  $X = N \sin \alpha + E \cos \alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N, E IS ARCHITECTURE COORDINATE SYSTEM.  
 X, Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY
PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK
SHOP WELD		FIELD WELD		SOCKET WELD		SCREWED JOINT
						COMPJ JOINT
						PIPE SUPPORT
						LAGGED PIPE
						TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-506-A1					

1 2 3 4 5 6 7 8

\*\*\*\*\*  
\* CONT. FROM DRG 5 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSB3501A_02_1	<16>	87	2		BE/PE
S:50					
PPSP3501A_0J_4	<17>	100	3/4		PE/PE
S:20					
PPSB3501A_02_1	<18>	150	2		PE/PE
S:50					
PPSB3501A_02_1	<19>	200	2		PE/PE
S:50					
PPSB3501A_02_1	<20>	200	2		PE/PE
S:50					
PPSB3501A_02_1	<21>	50	2		PE/PE
S:50					
PPSP3501A_0J_4	<22>	83	3/4		PE/PE
S:20					
PPSP3501A_0J_4	<23>	100	3/4		PE/TH
S:20					
PPSB3501A_02_1	<24>	74	2		PE/BE
S:50					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 6 TOTAL 6

 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 6 TOTAL 6

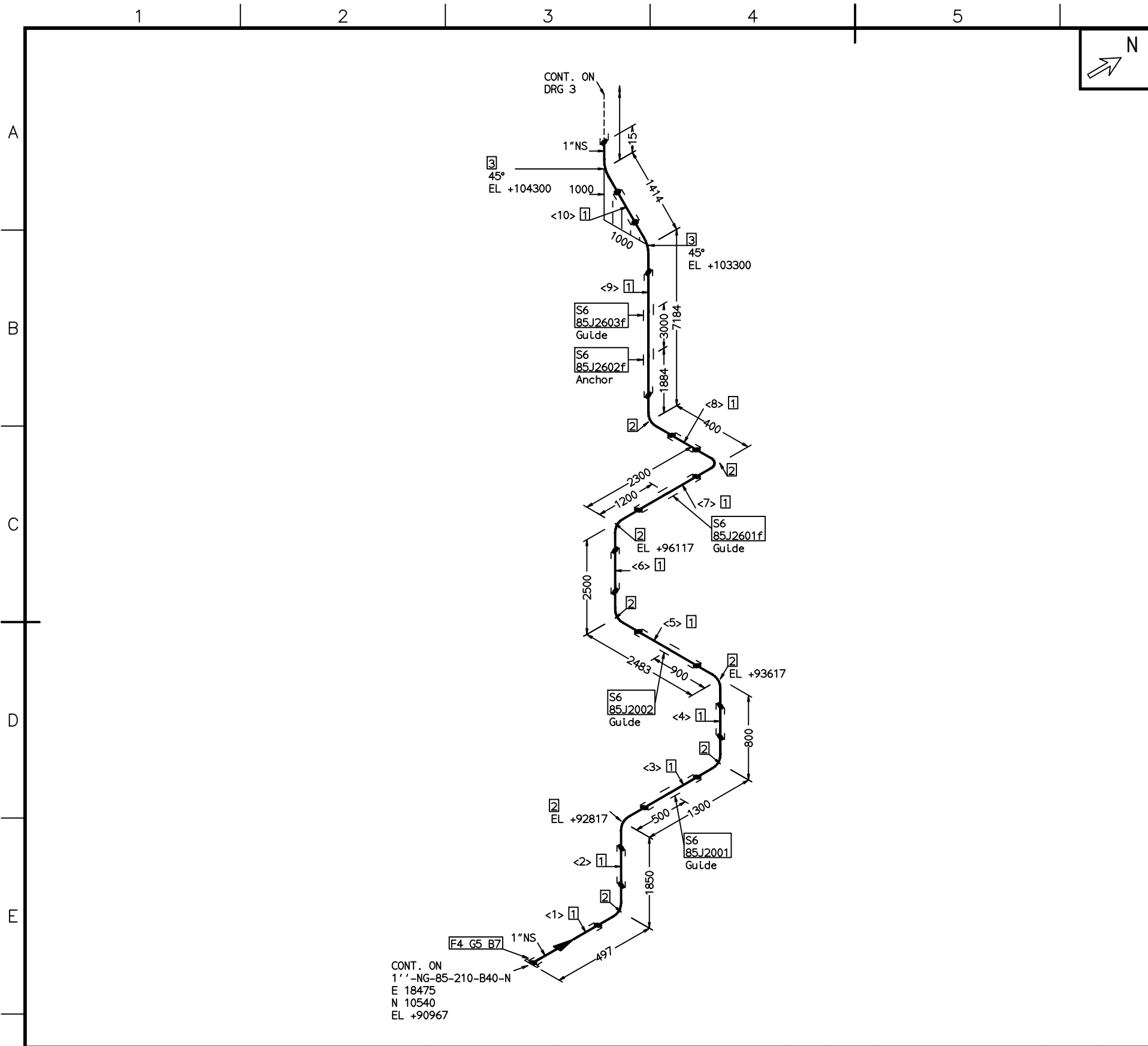
Isometric Drawing 2''-NG-85-301-B50-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 6	TOT. 6
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

A  
B  
C  
D  
E  
F

A  
B  
C  
D  
E  
F

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPJN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						


1 2 3 4 5 6 7 8



FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;PE;A312-TP304;ASME B36.19M;SCH40S	1	PPSP3501A_01_420.4M
<b>FITTINGS</b>			
2	ELBOW 90° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEQFS3801GL3_0 8
3	ELBOW 45° ;SW;ASME A182-F304;ASME B16.11;CL3000	1	JEPFS3801GL3_0 2
<b>FLANGES</b>			
4	FLANGE;SW;CL150;RF;ASME A182 F304;ASME B16.5	1	FFS62R3801H_01 1
<b>GASKETS</b>			
5	FLAT RING GASKET, MOD. PTFE, RF,CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	1	GSD62A5SGD_01: 1
<b>SUPPORTS</b>			
6	PIPING SUPPORT;ATTA	1	ATTA01_01:25 5
<b>ERECTION MATERIALS</b>			
<b>BOLTS</b>			
7	75 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B8 CL2/ASTM A194 8,ASME B18.2.1/18.2.2	1/2	LS3433A:M14 4
***** * CONT. ON DRG 2 * *****			

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



**Middle East  
Kimiaye Pars Company**

LICENSEE	HALDOR TOPSØE A/S COPENHAGEN DENMARK	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
					3

CONTRACTOR	 <b>TCC 中国天辰工程有限公司</b> CHINA TIANCHEN ENGINEERING CORPORATION	CONTRACTOR DRAWING NO.	
		MKP-11-DE-9000-FE-REQ-237	SHEET 1 TOTAL 3
SUB-CONTRACTOR	 <b>江苏中圣高科技产业有限公司</b> JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
		17013D85000PE00-12	SHEET 1 TOTAL 3

Isometric Drawing 1''-NG-85-211-B50-N				PROJECT	ME Methanol Project
				UNIT	Flare
SCALE NO SHEET 1 TOT. 3 SIZE A3				PHASE	Detail Engineering
				OWNER DWG NO.	MKP-VD-8500-237-506-A3

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B50	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

1 2 3 4 5 6 7 8

\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSP3501A_01_4	<1>	470	1		PE/PE
S:25					
PPSP3501A_01_4	<2>	1806	1		PE/PE
S:25					
PPSP3501A_01_4	<3>	1256	1		PE/PE
S:25					
PPSP3501A_01_4	<4>	756	1		PE/PE
S:25					
PPSP3501A_01_4	<5>	2439	1		PE/PE
S:25					
PPSP3501A_01_4	<6>	2456	1		PE/PE
S:25					
PPSP3501A_01_4	<7>	2256	1		PE/PE
S:25					
PPSP3501A_01_4	<8>	355	1		PE/PE
S:25					
PPSP3501A_01_4	<9>	7147	1		PE/PE
S:25					
PPSP3501A_01_4	<10>	1386	1		PE/PE
S:25					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 2 TOTAL 3

 <b>江苏中圣高科技产业有限公司</b> JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 2 TOTAL 3

Isometric Drawing 1''-NG-85-211-B50-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 3
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

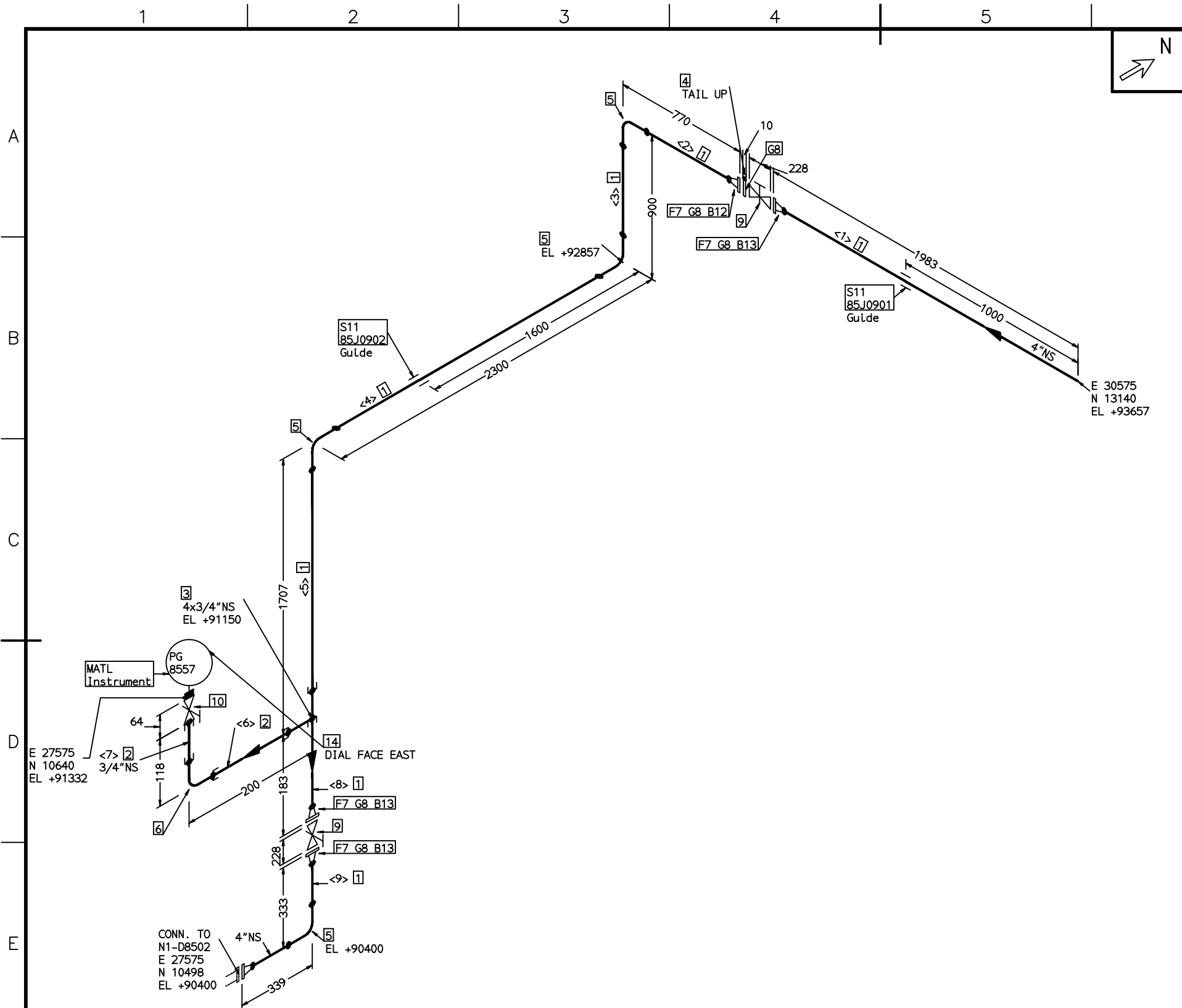
A  
B  
C  
D  
E  
F

A  
B  
C  
D  
E  
F

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
	PAINT CODE/COATING:	NA	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						

1 2 3 4 5 6 7 8






FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	4	PPSB1506A_04_S 7 M
2	PIPE;SMLS;PE;ASTM A106 Gr.B;ASME B36.10M;SCH80	3/4	PPSP1506A_0J_S 0.3M
<b>FITTINGS</b>			
3	SOCKETOLET;SW;ASTM A105;MSS SP-97;CL3000	4 x 3/4	JOQFS18010L3_0 1
4	FIGURE 8;CL150;RF;ASTM A515 Gr.70;ASME B16.48	4	BBG62P1801K_04 1
5	ELBOW 90° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	4	JELSB1506D_04_ 4
6	ELBOW 90° ;SW;ASTM A105;ASME B16.11;CL3000	3/4	JEQFS1801GL3_0 1
<b>FLANGES</b>			
7	FLANGE;WN;CL150;RF;A105;ASME B16.5;SCH40	4	FFW62R1801H_04 4
<b>GASKETS</b>			
8	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	4	I29559682 6
<b>VALVES / IN-LINE ITEMS</b>			
9	GATE VALVE;BB;OS&Y;CL150;RF;ASTM A216-WCB;TrLm:13Cr/STL;API600;FLEXIBLE WEDGE	4	Z40H1-150C2_04 2
10	GATE VALVE;BB;OS&Y;CL800;SW;A105;TrLm:13Cr/S TL;API602;SOLID WEDGE	3/4	Z51H1-800C1_OJ 1
<b>SUPPORTS</b>			
11	PIPING SUPPORT;ATTA	4	ATTA01_04:100 2
<b>ERECTION MATERIALS</b>			
<b>BOLTS</b>			
12	120 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 8
13	105 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 24
<b>INSTRUMENTS</b>			
14	仪表 PG 8557	3/4	1

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

LIBRARY	HALDOR TOPSØE A/S	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
CONTRACTOR	TCC 中国天辰工程有限公司	CONTRACTOR DRAWING NO.	MKP-11-DE-9000-FE-REQ-237	SHEET 1	TOTAL 2
SUB-CONTRACTOR	江苏中圣高科技产业有限公司	SUB-CONTRACTOR DRAWING NO.	17013D85000PE00-12	SHEET 1	TOTAL 2

Isometric Drawing				PROJECT	ME Methanol Project
4"-NG-85-200-B24-N				UNIT	Flare
				PHASE	Detail Engineering
SCALE	NO	SHEET	TOT.	OWNER DWG NO.	MKP-VD-8500-237-506-A3

**NOTES**

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha - E\sin\alpha + 3051408.46$ ;  $X=N\sin\alpha + E\cos\alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N.E IS ARCHITECTURE COORDINATE SYSTEM.  
 X.Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	A1	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								



1 2 3 4 5 6 7 8

\*\*\*\*\*  
\* CONT. FROM DRG 1 \*  
\*\*\*\*\*

CUT PIPE LENGTH

ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP.
PPSB1506A_04_S	<1>	1907	4		PE/BE
4:100					
PPSB1506A_04_S	<2>	541	4		BE/BE
4:100					
PPSB1506A_04_S	<3>	596	4		BE/BE
4:100					
PPSB1506A_04_S	<4>	1996	4		BE/BE
4:100					
PPSB1506A_04_S	<5>	1555	4		BE/PE
4:100					
PPSP1506A_0J_S	<6>	102	3/4		PE/PE
8:20					
PPSP1506A_0J_S	<7>	99	3/4		PE/PE
8:20					
PPSB1506A_04_S	<8>	107	4		PE/BE
4:100					
PPSB1506A_04_S	<9>	104	4		BE/BE
4:100					
PPSB1506A_04_S	<10>	111	4		BE/BE
4:100					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 2 TOTAL 2

 <b>江苏中圣高科技产业有限公司</b> <small>JIANGSU SUNPOWER TECHNOLOGY CO., LTD</small>	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 2 TOTAL 2

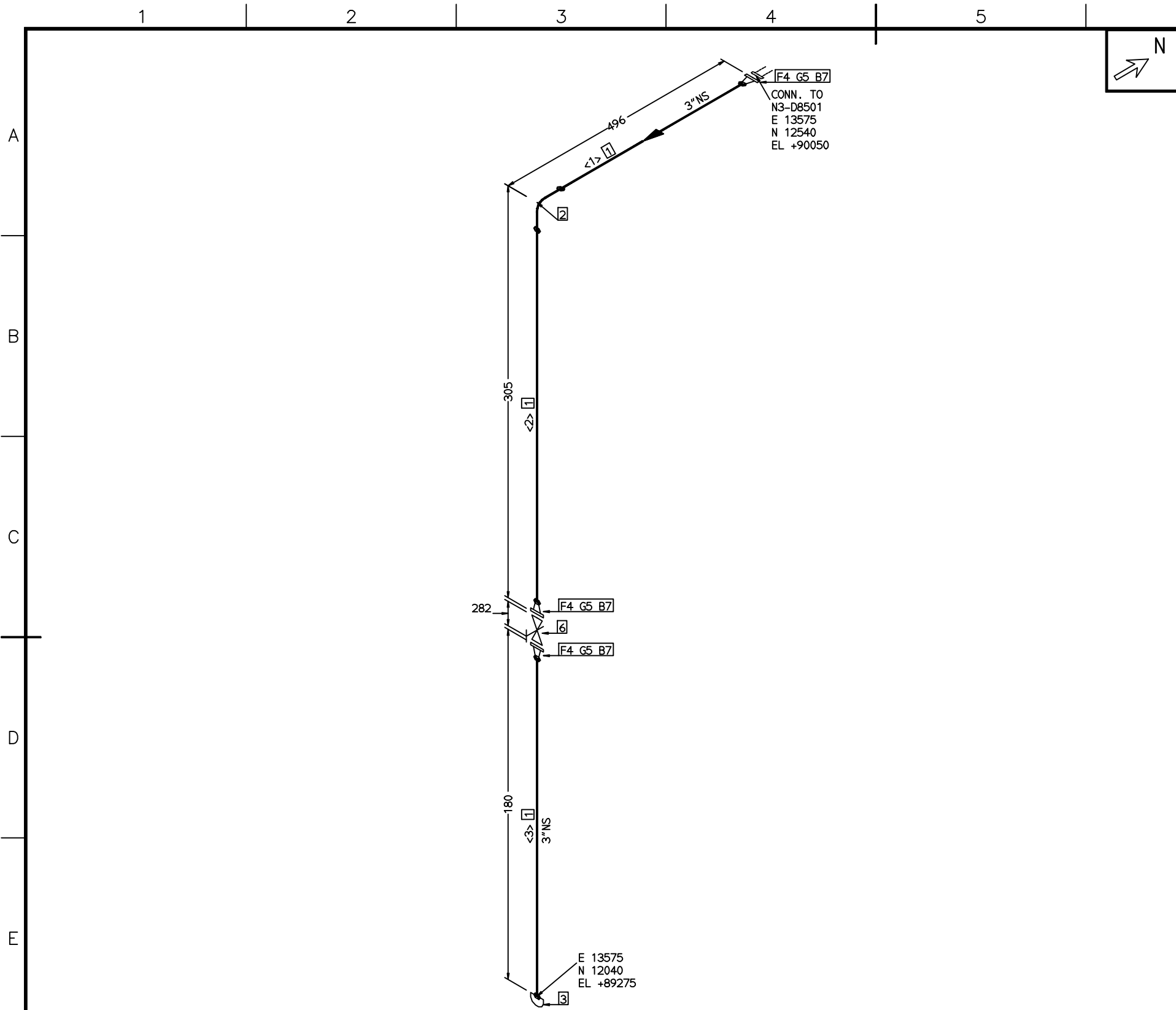
Isometric Drawing 4"-NG-85-200-B24-N	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 2	TOT. 2
SIZE	A3	OWNER DWG NO.
		MKP-VD-8500-237-506-A3

A  
B  
C  
D  
E  
F

A  
B  
C  
D  
E  
F

NOTES	DESIGN PRESS.(barg):	7.0	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE. 2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST. 3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION. 4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION. 5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT. 6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: $Y=N\cos\alpha -E\sin\alpha +3051408.46; X=N\sin\alpha +E\cos\alpha +652275.26; \alpha =7.52775036^\circ$ N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM. 7:DELETE.	DESIGN TEMP(°C):	85	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE TEST MEDIUM:	water	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
	LEAKAGE PRESS(barg)	10.5	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
	PAINT CODE/COATING:	A1	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						

1 2 3 4 5 6 7 8



NOTE: Due to (PT NO:3): joint no:(5) Must be cut & reweld & rename to:(5M) and joint no:(6) BW changed to:(6 THD) and PT NO:(8,9,10) Must be added.

**NOTES**

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSURE OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y = N \cos \alpha - E \sin \alpha + 3051408.46$ ;  $X = N \sin \alpha + E \cos \alpha + 652275.26$ ;  $\alpha = 7.52775036^\circ$   
 N, E IS ARCHITECTURE COORDINATE SYSTEM.  
 X, Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	NA	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
DESIGN TEMP(°C):	NA	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE TEST MEDIUM:	NA	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
LEAKAGE PRESS(barg)	NA	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
PAINT CODE/COATING:	A4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1	●	✗	⊥	⊥	□	—	---	----

FABRICATION MATERIALS				
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>PIPE</b>				
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	3	PPSB1506A_03_S 0.6M	
<b>FITTINGS</b>				
2	ELBOW 90° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	3	JELSB1506D_03_ 1	
3	CAP; SMLS;ASTM A234 WPB;ASME B16.9;SCH40-THD	3	JKESB1523D_03_ 1	
<b>FLANGES</b>				
4	FLANGE;WN;CL300;RF;A105;ASME B16.5;SCH40	3	FFW63R1801H_03 3	
<b>GASKETS</b>				
5	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL300, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	3	GSD63A4SGD_03: 3	
<b>VALVES / IN-LINE ITEMS</b>				
6	GATE VALVE;BB;OS&Y;CL300;RF;ASTM A216-WCB;TrLm:13Cr/STL;API600;FLEXIBLE WEDGE	3	Z40H1-300C2_03 1	
<b>ERECTION MATERIALS</b>				
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>BOLTS</b>				
7	125 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	3/4	LS3433A:M20	24

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. BE/BE
PPSB1506A_03_S	<1>	303	3		BE/BE
PPSB1506A_03_S	<2>	111	3		BE/BE
PPSB1506A_03_S	<3>	100	3		BE/BE

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

HALDOR TOPSØE A/S

DOCUMENT NAME: \_\_\_\_\_

JOB NO. \_\_\_\_\_

DOC. NO. \_\_\_\_\_

REV. 3

**TCC 中国天辰工程有限公司**  
CHINA TIANCHEN ENGINEERING CORPORATION

CONTRACTOR DRAWING NO.  
MKP-11-DE-9000-FE-REQ-237

SHEET 1 TOTAL 1

**江苏中圣高科技产业有限公司**  
JIANGSU SUNPOWER TECHNOLOGY CO., LTD

SUB-CONTRACTOR DRAWING NO.  
17013D85000PE00-12

SHEET 1 TOTAL 1

Isometric Drawing

DRAIN-of-08501

PROJECT: ME Methanol Project

UNIT: Flare

PHASE: Detail Engineering

OWNER DWG NO. MKP-VD-8500-237-506-A3

SCALE NO SHEET 1 TOT. 1 SIZE A3

A

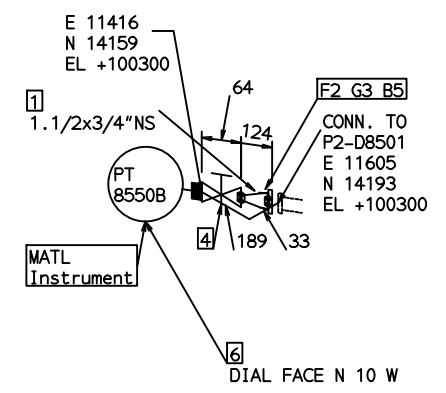
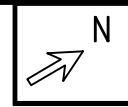
B

C

D

E

F



**FABRICATION MATERIALS**


PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>FITTINGS</b>				
1	SWG;PE;ASTM A106 Gr.B;CON;MSS SP-95;CL3000	1.1/2 x 3/4	JSCFP1801HL3_1	1
<b>FLANGES</b>				
2	FLANGE;SW;CL300;RF;A105;ASME B16.5	1.1/2	FFS63R1801H_1G	1
<b>GASKETS</b>				
3	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL300, ASME B16.21, ASME B16.5, T=3.2mm KLINGER PSM-AS OR EQUAL	1.1/2	GSD63A4SGD_1G:	1
<b>VALVES / IN-LINE ITEMS</b>				
4	GATE VALVE;BB;OS&Y;CL800;SW;A105;TrLm:13Cr/S TL;AP1602;SOLID WEDGE	3/4	Z51H1-800C1_OJ	1

**ERECTION MATERIALS**

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>BOLTS</b>				
5	110 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d), ASTM A193 B7/A194 2H, GALVANISED, ASME B18.2.1/18.2.2	3/4	LS3433A:M20	4
<b>INSTRUMENTS</b>				
6	仪表 PT 8550B	3/4		1

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



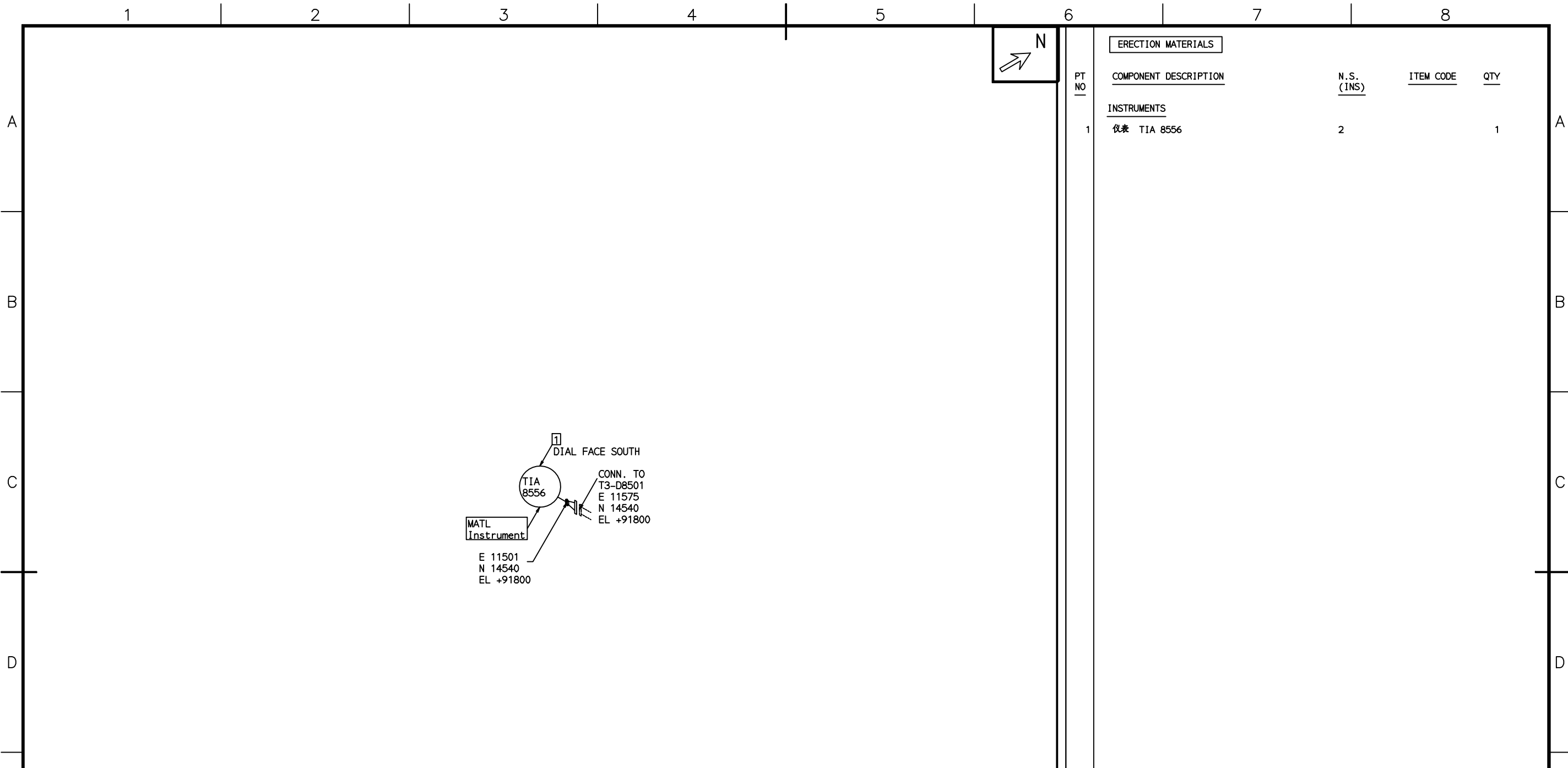
Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>OPERATIONS DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
				3

 TCC 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.
	MKP-11-DE-9000-FE-REQ-237
	SHEET 1 TOTAL 1
 江苏中圣高科技产业有限公司 SUNPOWER JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.
	17013D85000PE00-12
	SHEET 1 TOTAL 1

NOTES	DESIGN PRESS.(barg):	NA	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	NA	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	NA	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	NA	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	A4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036 ° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								


Isometric Drawing				PROJECT	ME Methanol Project
PT8550B-of-D8501				UNIT	Flare
				PHASE	Detail Engineering
SCALE NO	SHEET 1	TOT. 1	SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3



ERECTION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	QTY
<b>INSTRUMENTS</b>			
1	仪表 TIA 8556	2	1

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

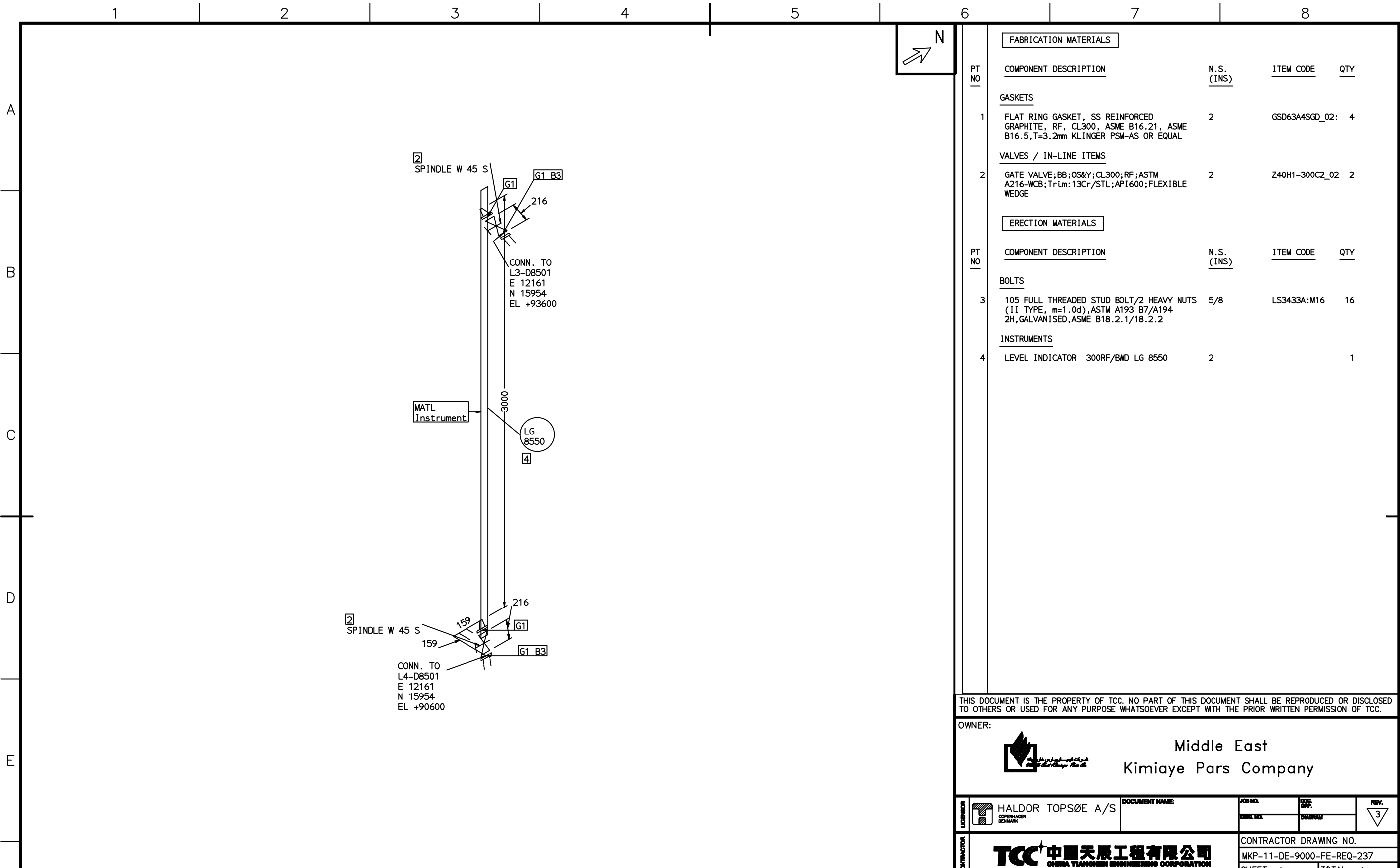
 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 1 TOTAL 1
 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 1 TOTAL 1

Isometric Drawing TIA8556-of-D8501	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 1	TOT. 1
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	NA	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	NA	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	NA	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	NA	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	A4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036 ° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								





FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>GASKETS</b>			
1	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL300, ASME B16.21, ASME B16.5, T=3.2mm KLINGER PSM-AS OR EQUAL	2	GSD63A4SGD_02: 4
<b>VALVES / IN-LINE ITEMS</b>			
2	GATE VALVE;BB;OS&Y;CL300;RF;ASTM A216-WCB;Tr Lm:13Cr/STL;API600;FLEXIBLE WEDGE	2	Z40H1-300C2_02 2
ERECTION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>BOLTS</b>			
3	105 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 16
<b>INSTRUMENTS</b>			
4	LEVEL INDICATOR 300RF/BWD LG 8550	2	1

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



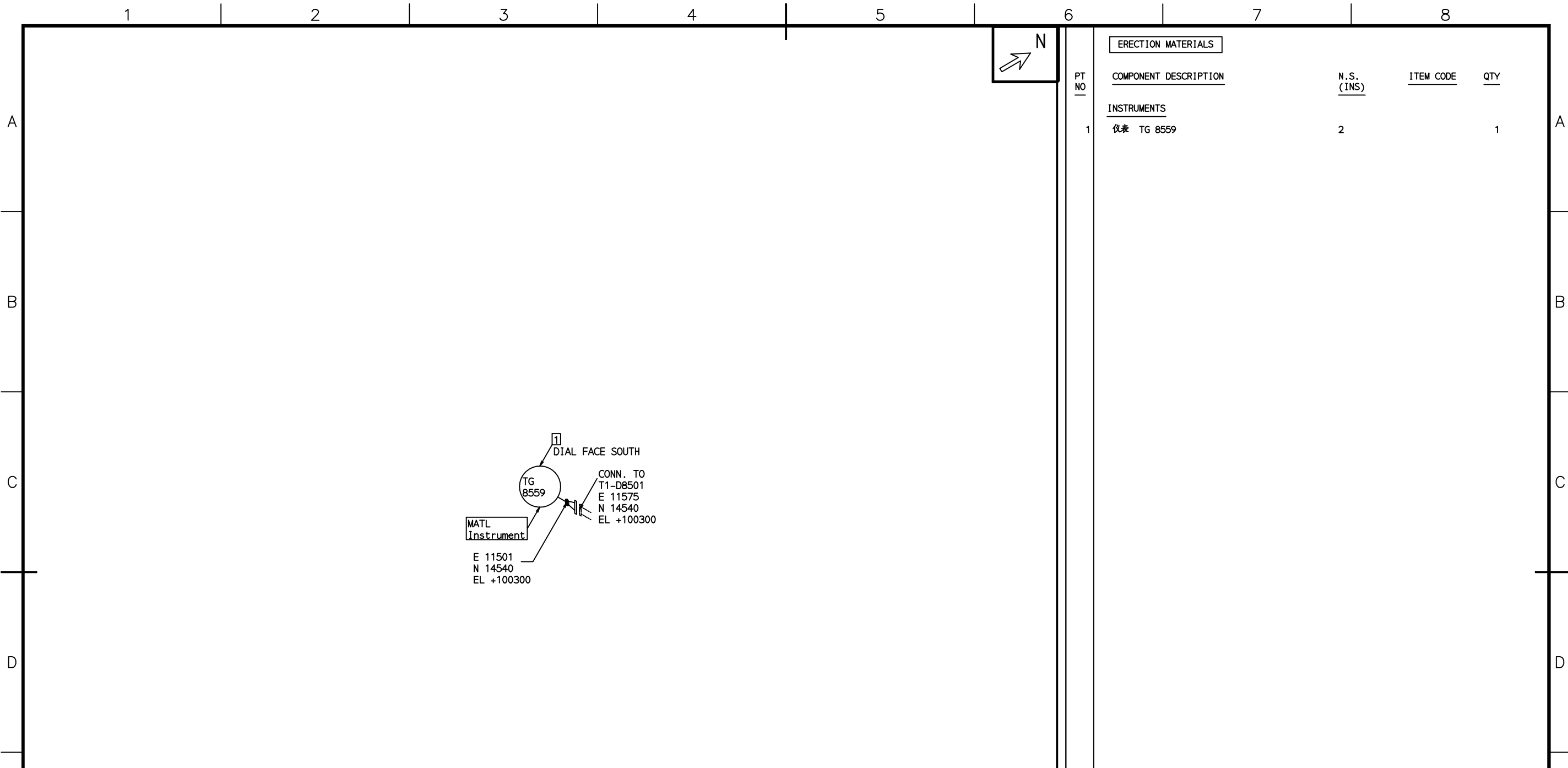
Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	
 <b>江苏中圣高科技产业有限公司</b> JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	
	SHEET 1	TOTAL 1

Isometric Drawing LG8550-of-D8501	PROJECT	ME Methanol Project	
	UNIT	Flare	
	PHASE	Detail Engineering	
SCALE NO	SHEET 1	TOT. 1	SIZE A3
	OWNER DWG NO.	MKP-VD-8500-237-506-A3	


NOTES	DESIGN PRESS.(barg):	NA	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY				
1:DELETE.	DESIGN TEMP(°C):	NA	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY				
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	NA	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY				
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	NA	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY				
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY				
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	A4	REV.	DATE	DESCRIPTION	DESIGN	CHECK				
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE	
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1									



ERECTION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	QTY
<b>INSTRUMENTS</b>			
1	仪表 TG 8559	2	1

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
				3

 <b>TCC</b> 中国天辰工程技术有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 1 TOTAL 1
 <b>江苏中圣高科技产业有限公司</b> <small>JIANGSU SUNPOWER TECHNOLOGY CO., LTD</small>	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 1 TOTAL 1

Isometric Drawing TG8559-of-D8501	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 1	TOT. 1
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	NA	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	NA	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	NA	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	NA	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	A4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036 ° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

A

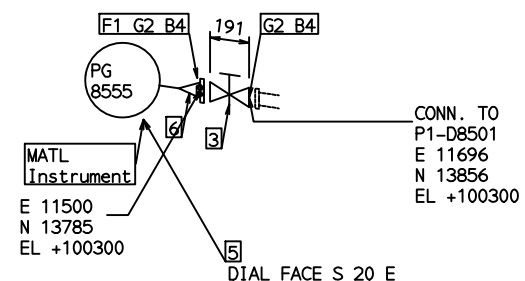
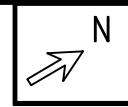
B

C

D

E

F



**FABRICATION MATERIALS**


PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>FLANGES</b>				
1	FLANGE;SW;CL300;RF;A105;ASME B16.5	1.1/2	FFS63R1801H_1G	1
<b>GASKETS</b>				
2	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL300, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	1.1/2	GSD63A4SGD_1G:	2
<b>VALVES / IN-LINE ITEMS</b>				
3	GATE VALVE;BB;OS&Y;CL300;RF;A105;Trim:13Cr/S TL;API602;SOLID WEDGE	1.1/2	Z41H1-300C1_1G	1

**ERECTION MATERIALS**

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>BOLTS</b>				
4	110 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	3/4	LS3433A:M20	8
<b>INSTRUMENTS</b>				
5	仪表 PG 8555	3/4		1
6	CONSWAGE ASTM A234 GLADE WPB PBE MSS SP 95 SMLS 1 1/2X3/4 S-80XS-80	1 1/2X3/4		1

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	
 <b>江苏中圣高科技产业有限公司</b> JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	
	SHEET 1	TOTAL 1

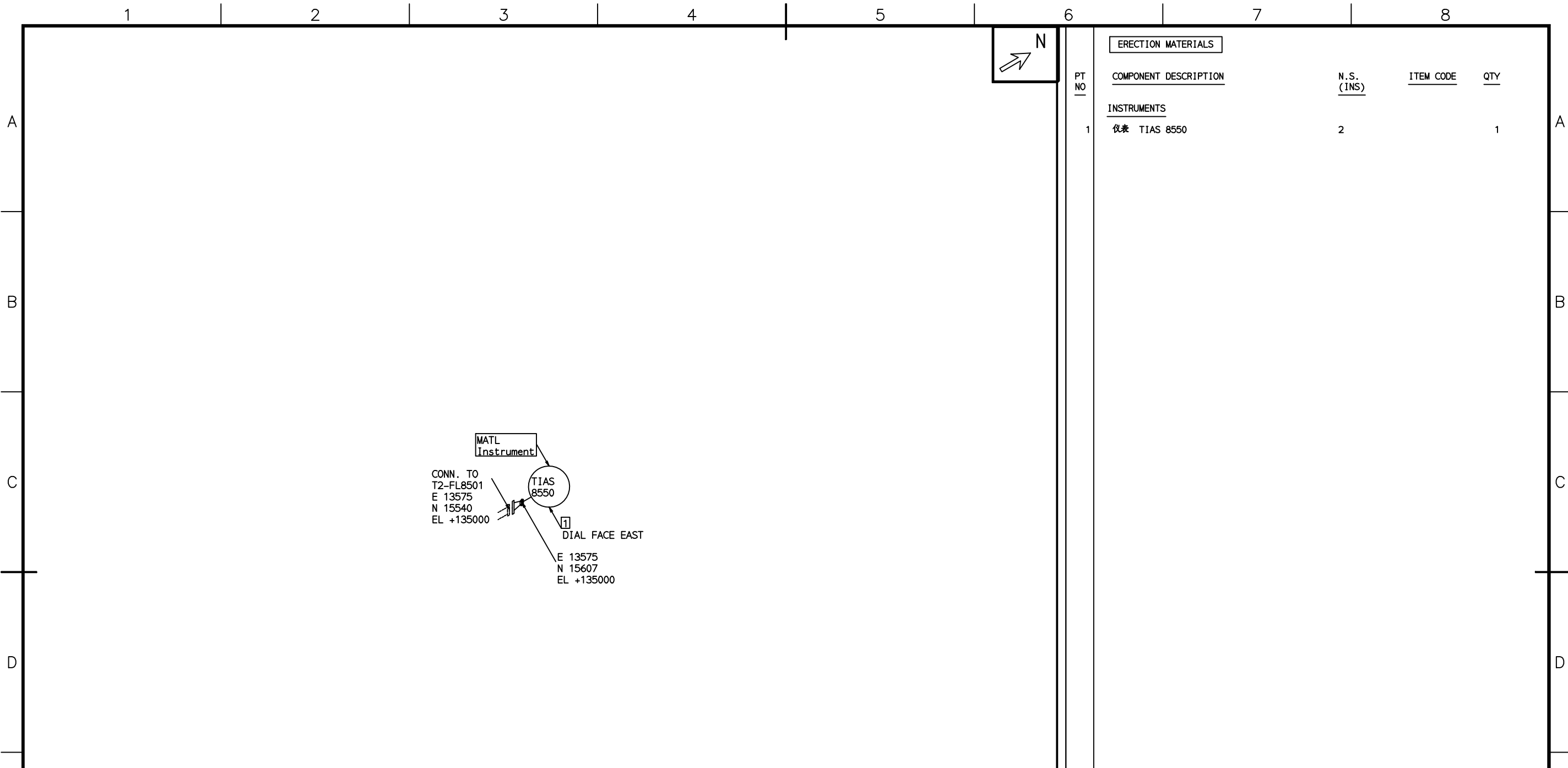
**NOTES**

- DELETE.
- THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.
- ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.
- PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2" AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.
- ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.
- THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS:  
 $Y=N\cos\alpha -E\sin\alpha +3051408.46$ ;  $X=N\sin\alpha +E\cos\alpha +652275.26$ ;  $\alpha =7.52775036^\circ$   
 N.E IS ARCHITECTURE COORDINATE SYSTEM.  
 X.Y IS SURVEYING COORDINATE SYSTEM.
- DELETE.

DESIGN PRESS.(barg):	DESIGN TEMP(°C):	LEAKAGE TEST MEDIUM:	LEAKAGE PRESS(barg)	INSULATION CLASS:	PAINT CODE/COATING:	PIPING CLASS:	REF.PIPING PLAN NO.:
NA	NA	NA	NA	NA	A4	B24	MKP-VD-8500-237-505-A1
3	2	1	0	A	REV.	SHOP WELD	
11.12.2019	29.11.2018	08.11.2018	14.12.2017	17.07.2017	DATE	FIELD WELD	
FINAL ISSUE	FINAL ISSUE	FINAL ISSUE	FINAL ISSUE	ISSUED FOR REVIEW	DESCRIPTION	SOCKET WELD	
GENGYF	GENGYF	GENGYF	GENGYF	GENGYF	DESIGN	SCREWED JOINT	
BAIY	BAIY	BAIY	BAIY	BAIY	CHECK	COMPN JOINT	
						PIPE SUPPORT	
						LAGGED PIPE	
						TRACED PIPE	

Isometric Drawing				PROJECT	ME Methanol Project
PG8555-of-D8501				UNIT	Flare
				PHASE	Detail Engineering
SCALE NO	SHEET 1	TOT. 1	SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3






ERECTION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	QTY
<b>INSTRUMENTS</b>			
1	仪表 TIAS 8550	2	1

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



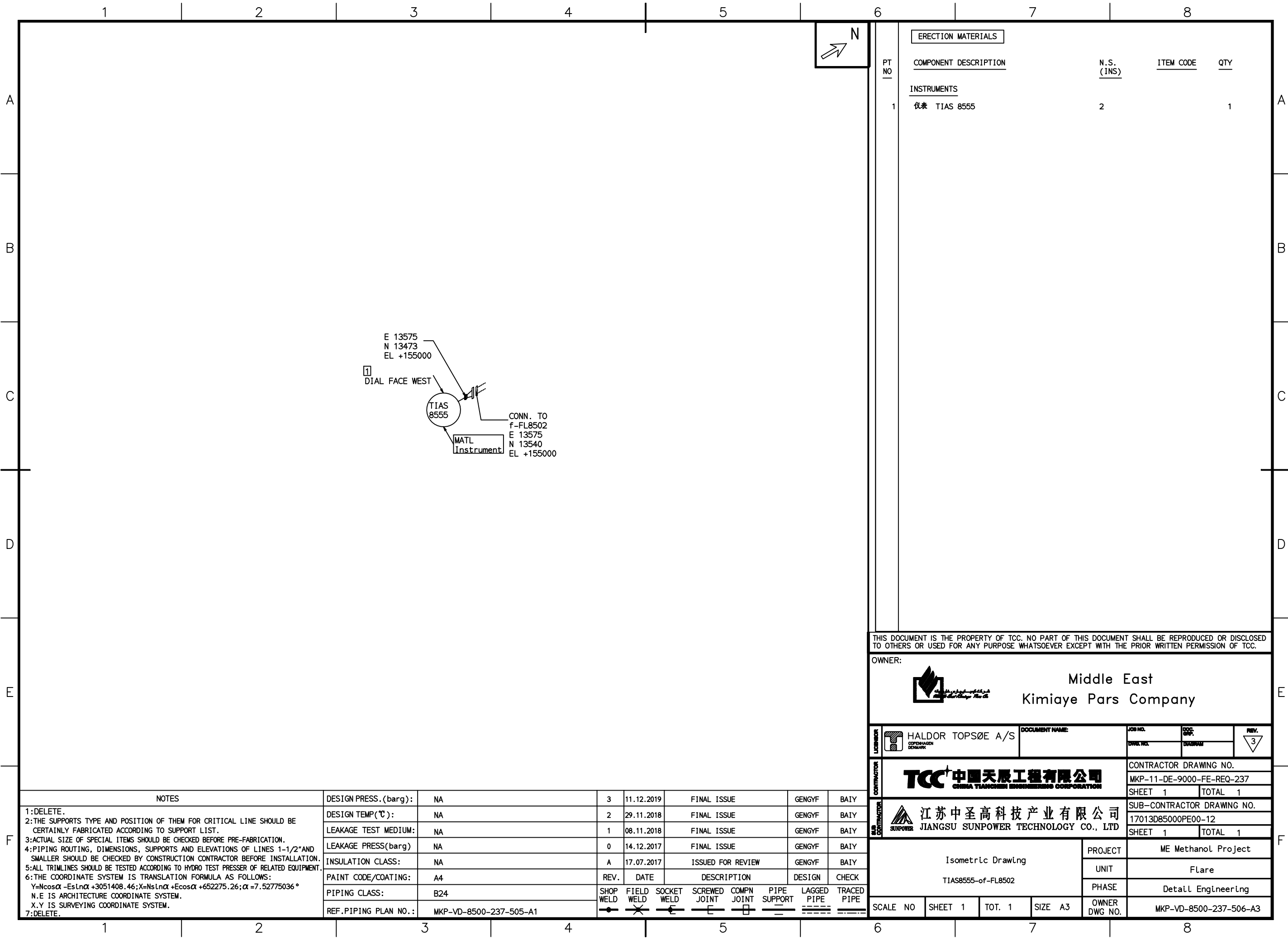
Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. NO.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 1 TOTAL 1
 <b>江苏中圣高科技产业有限公司</b> <small>JIANGSU SUNPOWER TECHNOLOGY CO., LTD</small>	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 1 TOTAL 1

Isometric Drawing TIAS8550-of-FL8501	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 1	TOT. 1
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	


NOTES	DESIGN PRESS.(barg):	NA	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY	
1:DELETE.	DESIGN TEMP(°C):	NA	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY	
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	NA	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY	
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	NA	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY	
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY	
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	A4	REV.	DATE	DESCRIPTION	DESIGN	CHECK	
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1						



ERECTION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	QTY
<b>INSTRUMENTS</b>			
1	仪表 TIAS 8555	2	1

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



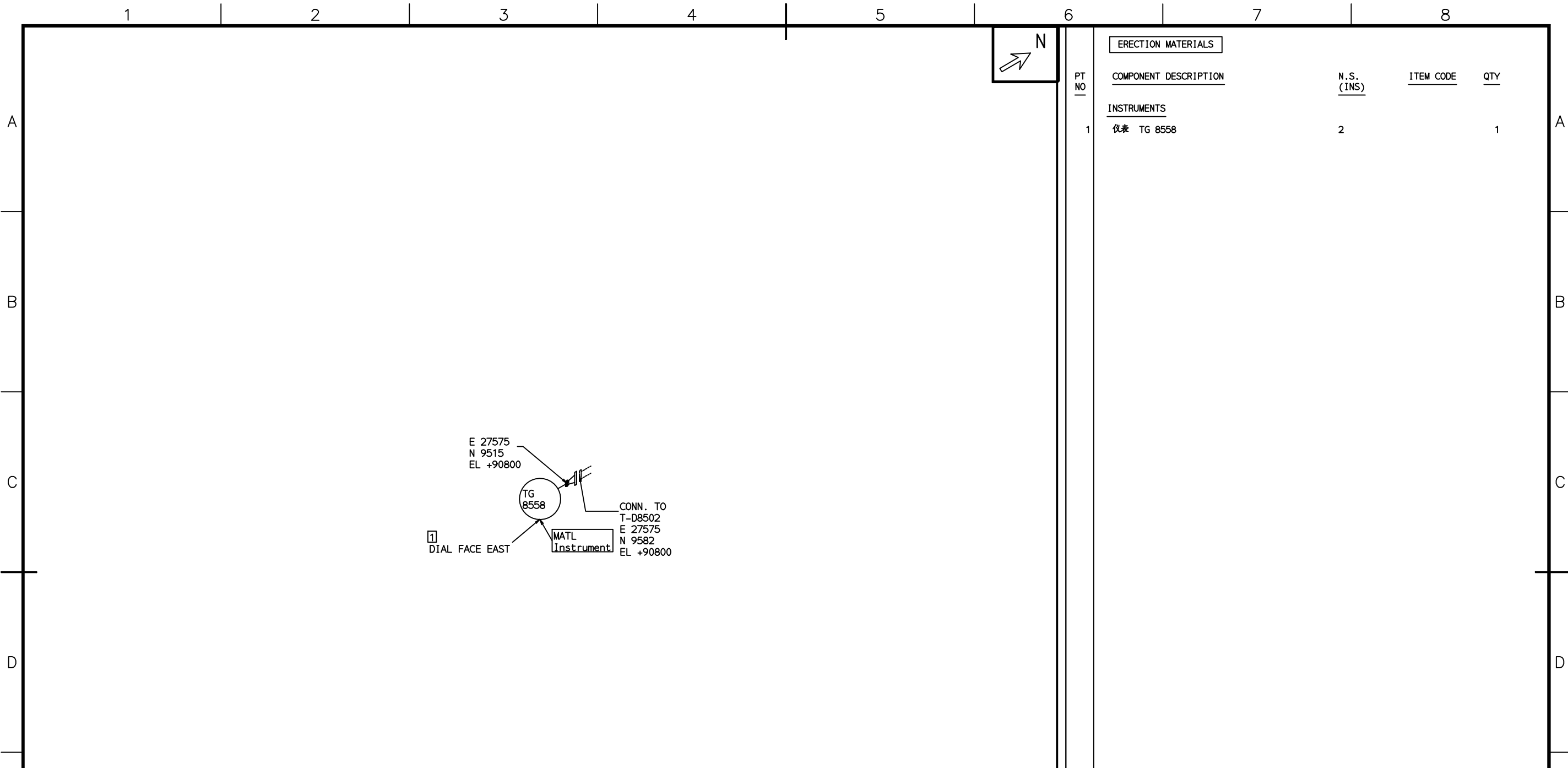
Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 1 TOTAL 1
 <b>江苏中圣高科技产业有限公司</b> JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 1 TOTAL 1

Isometric Drawing TIAS8555-of-FL8502	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 1	TOT. 1
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	


NOTES	DESIGN PRESS.(barg):	NA	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	NA	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	NA	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	NA	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	A4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								



ERECTION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	QTY
<b>INSTRUMENTS</b>			
1	仪表 TG 8558	2	1

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
		DWG. NO.	REVISION	3

 <b>TCC</b> 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.	
	MKP-11-DE-9000-FE-REQ-237	SHEET 1 TOTAL 1
 <b>江苏中圣高科技产业有限公司</b> <small>JIANGSU SUNPOWER TECHNOLOGY CO., LTD</small>	SUB-CONTRACTOR DRAWING NO.	
	17013D85000PE00-12	SHEET 1 TOTAL 1

Isometric Drawing TG8558-of-D8502	PROJECT	ME Methanol Project
	UNIT	Flare
	PHASE	Detail Engineering
SCALE NO	SHEET 1	TOT. 1
SIZE	A3	
OWNER DWG NO.	MKP-VD-8500-237-506-A3	

NOTES	DESIGN PRESS.(barg):	NA	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	NA	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	NA	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	NA	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	A4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

A

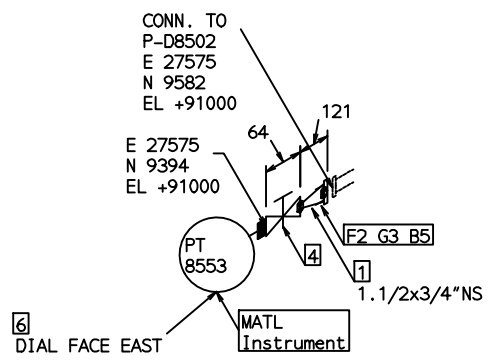
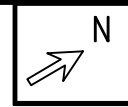
B

C

D

E

F



**FABRICATION MATERIALS**

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>FITTINGS</b>				
1	SWG;PE;ASTM A106 Gr.B;CON;MSS SP-95;CL3000	1.1/2 x 3/4	JSCFP1801HL3_1	1
<b>FLANGES</b>				
2	FLANGE;SW;CL150;RF;A105;ASME B16.5	1.1/2	FFS62R1801H_1G	1
<b>GASKETS</b>				
3	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5, T=3.2mm KLINGER PSM-AS OR EQUAL	1.1/2	GSD62A4SGD_1G:	1
<b>VALVES / IN-LINE ITEMS</b>				
4	GATE VALVE;BB;OS&Y;CL800;SW;A105;TrLm:13Cr/S TL;AP1602;SOLID WEDGE	3/4	Z51H1-800C1_OJ	1

**ERECTION MATERIALS**

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
<b>BOLTS</b>				
5	80 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d), ASTM A193 B7/A194 2H, GALVANISED, ASME B18.2.1/18.2.2	1/2	LS3433A:M14	4
<b>INSTRUMENTS</b>				
6	仪表 PT 8553	3/4		1

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

HALDOR TOPSØE A/S  
COPENHAGEN DENMARK

DOCUMENT NAME: \_\_\_\_\_

JOB NO. \_\_\_\_\_ DOC. NO. \_\_\_\_\_

REV. 3

**TCC 中国天辰工程有限公司**  
CHINA TIANCHEN ENGINEERING CORPORATION

CONTRACTOR DRAWING NO. MKP-11-DE-9000-FE-REQ-237

SHEET 1 TOTAL 1

**江苏中圣高科技产业有限公司**  
JIANGSU SUNPOWER TECHNOLOGY CO., LTD

SUB-CONTRACTOR DRAWING NO. 17013D85000PE00-12

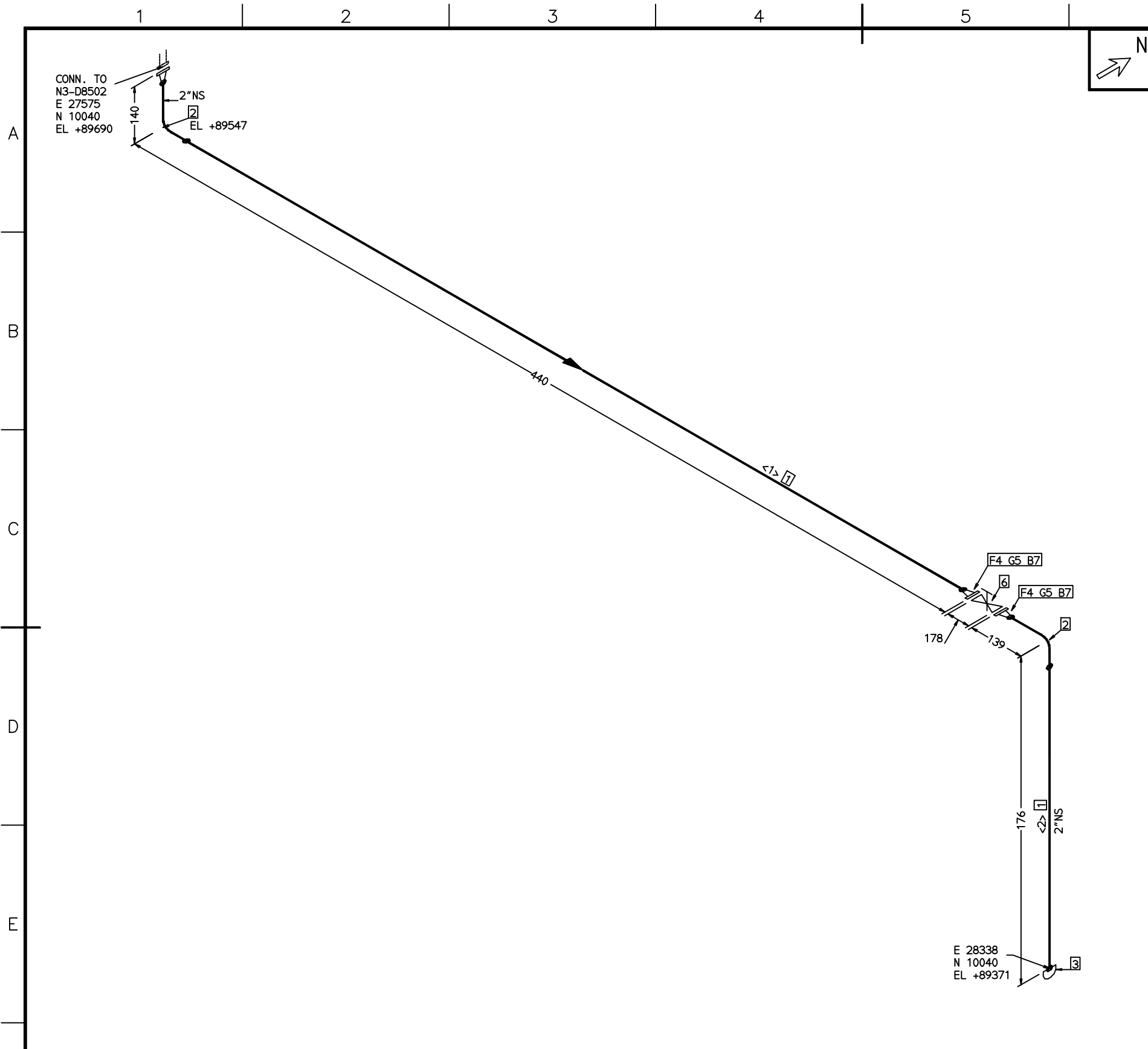
SHEET 1 TOTAL 1

NOTES	DESIGN PRESS.(barg):	NA	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY			
1:DELETE.	DESIGN TEMP(°C):	NA	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY			
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	NA	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY			
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	NA	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY			
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY			
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	A4	REV.	DATE	DESCRIPTION	DESIGN	CHECK			
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B24	SHOP WELD	FIELD WELD	SOCKET WELD	SCREWED JOINT	COMPN JOINT	PIPE SUPPORT	LAGGED PIPE	TRACED PIPE
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1								

Isometric Drawing  
PT8553-of-D8502

PROJECT: ME Methanol Project  
UNIT: Flare  
PHASE: Detail Engineering

SCALE NO SHEET 1 TOT. 1 SIZE A3 OWNER DWG NO. MKP-VD-8500-237-506-A3




FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>PIPE</b>			
1	PIPE;SMLS;BE;ASTM A106 Gr.B;ASME B36.10M;SCH40	2	PPSB1506A_02_S 0.4M
<b>FITTINGS</b>			
2	ELBOW 90° ;SMLS;LR;BW;ASTM A234 WPB;ASME B16.9;SCH40	2	JELSB1506D_02_ 2
3	CAP; SMLS;ASTM A234 WPB;ASME B16.9;SCH40-THD	2	JKESB1523D_02_ 1
<b>FLANGES</b>			
4	FLANGE;WN;CL150;RF;A105;ASME B16.5;SCH40	2	FFW62R1801H_02 3
<b>GASKETS</b>			
5	FLAT RING GASKET, SS REINFORCED GRAPHITE, RF, CL150, ASME B16.21, ASME B16.5,T=3.2mm KLINGER PSM-AS OR EQUAL	2	GSD62A4SGD_02: 3
<b>VALVES / IN-LINE ITEMS</b>			
6	GATE VALVE;BB;OS&Y;CL150;RF;ASTM A216-WCB;TrLm:13Cr/STL;API600;FLEXIBLE WEDGE	2	Z40H1-150C2_02 1
<b>ERECTION MATERIALS</b>			
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY
<b>BOLTS</b>			
7	95 FULL THREADED STUD BOLT/2 HEAVY NUTS (II TYPE, m=1.0d),ASTM A193 B7/A194 2H,GALVANISED,ASME B18.2.1/18.2.2	5/8	LS3433A:M16 12

CUT PIPE LENGTH					
ITEM CODE	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	END PREP. BE/BE
PPSB1506A_02_S	<1>	300	2		BE/BE
4:50					
PPSB1506A_02_S	<2>	100	2		BE/BE
4:50					

THIS DOCUMENT IS THE PROPERTY OF TCC. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF TCC.

OWNER:



Middle East  
Kimiaye Pars Company

 HALDOR TOPSØE A/S <small>COPENHAGEN DENMARK</small>	DOCUMENT NAME:	JOB NO.	DOC. GRP.	REV.
				3

 TCC 中国天辰工程有限公司 <small>CHINA TIANCHEN ENGINEERING CORPORATION</small>	CONTRACTOR DRAWING NO.
	MKP-11-DE-9000-FE-REQ-237
	SHEET 1 TOTAL 1
 江苏中圣高科技产业有限公司 JIANGSU SUNPOWER TECHNOLOGY CO., LTD	SUB-CONTRACTOR DRAWING NO.
	17013D85000PE00-12
	SHEET 1 TOTAL 1

Isometric Drawing				PROJECT	ME Methanol Project
DRAIN-of-D-8502				UNIT	Flare
				PHASE	Detail Engineering
SCALE NO	SHEET 1	TOT. 1	SIZE A3	OWNER DWG NO.	MKP-VD-8500-237-506-A3

NOTES	DESIGN PRESS.(barg):	NA	3	11.12.2019	FINAL ISSUE	GENGYF	BAIY
1:DELETE.	DESIGN TEMP(°C):	NA	2	29.11.2018	FINAL ISSUE	GENGYF	BAIY
2:THE SUPPORTS TYPE AND POSITION OF THEM FOR CRITICAL LINE SHOULD BE CERTAINLY FABRICATED ACCORDING TO SUPPORT LIST.	LEAKAGE TEST MEDIUM:	NA	1	08.11.2018	FINAL ISSUE	GENGYF	BAIY
3:ACTUAL SIZE OF SPECIAL ITEMS SHOULD BE CHECKED BEFORE PRE-FABRICATION.	LEAKAGE PRESS(barg)	NA	0	14.12.2017	FINAL ISSUE	GENGYF	BAIY
4:PIPING ROUTING, DIMENSIONS, SUPPORTS AND ELEVATIONS OF LINES 1-1/2"AND SMALLER SHOULD BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE INSTALLATION.	INSULATION CLASS:	NA	A	17.07.2017	ISSUED FOR REVIEW	GENGYF	BAIY
5:ALL TRIMLINES SHOULD BE TESTED ACCORDING TO HYDRO TEST PRESSER OF RELATED EQUIPMENT.	PAINT CODE/COATING:	A1					
6:THE COORDINATE SYSTEM IS TRANSLATION FORMULA AS FOLLOWS: Y=Ncosα -Eslnα +3051408.46;X=Nslnα +Ecosα +652275.26;α =7.52775036° N.E IS ARCHITECTURE COORDINATE SYSTEM. X.Y IS SURVEYING COORDINATE SYSTEM.	PIPING CLASS:	B24					
7:DELETE.	REF.PIPING PLAN NO.:	MKP-VD-8500-237-505-A1					