

TECHNICAL AND ECONOMIC CONDITIONS FOR POLE DESIGN

POLE TYPE	DEVIATION ANGLE	WIND SPAN (m)	WEIGHT SPAN (m) (max/min)
1DT6P-ANGLE (16 sided)	25°-60°	165	300/0
1DT6P-TERMINAL (16 sided)	0°-30°	165	263/0

NOTE:

THE STANDARDS FOR MATERIAL, FABRICATION, WORKMANSHIP, GALVANIZING, WELDING, INSPECTION, ETC.

- MATERIAL SPECIFICATION:
 - FOR POLE MATERIAL GRADE IS S355JR.
 - FOR BASE PLATE, MATERIAL GRADE IS S355JR.
 - FOR CROSS ARM MATERIAL GRADE IS S275JR.
- CROSS ARM CONNECTING BOLT GRADE 8.8.
- GALVANIZING AS PER BSEN 1461:2009.
- BOLTS AS PER ISO 898-1:2009. NUTS AS PER ISO 4034: WASHER AS PER DIN127.
- ALL DIMENSIONS ARE IN MM.
- ALL MATERIALS ARE MILD STEEL, IF NOT STATED OTHERWISE.
- MARK NUMBER WITH "H" ALPHABET INDICATES HIGH TENSILE STEEL.
- ALL STRUCTURAL WELDING SHOULD BE CARRIED OUT ACCORDING TO BSEN 61011-1 & 2.

POWER GRID COMPANY OF BANGLADESH
APPROVED WITH COMMENT
This approval is general only and does not release the manufacturer/contractor/supplier from compliance with specification and Standards for Design, workmanship and performance as stipulated in the Contract.

COMMENT: THIS APPROVAL SUPERSEDES EARLIER APPROVAL GIVEN WIDE PGCB LETTER NO 04/PAGE/SE(TLD), DESIGN & QA/2017/44 DATED 29.01.2017

Md. Shoaib Hasan
Sub-Divisional Engineer
Design & Quality Control
PGCB Ltd.

(Engt. S.M. Zafar Hasan)
Executive Engineer (TL-1)
Design & Quality Control
PGCB

CLIENT: POWER GRID COMPANY OF BANGLADESH LIMITED (PGCB)

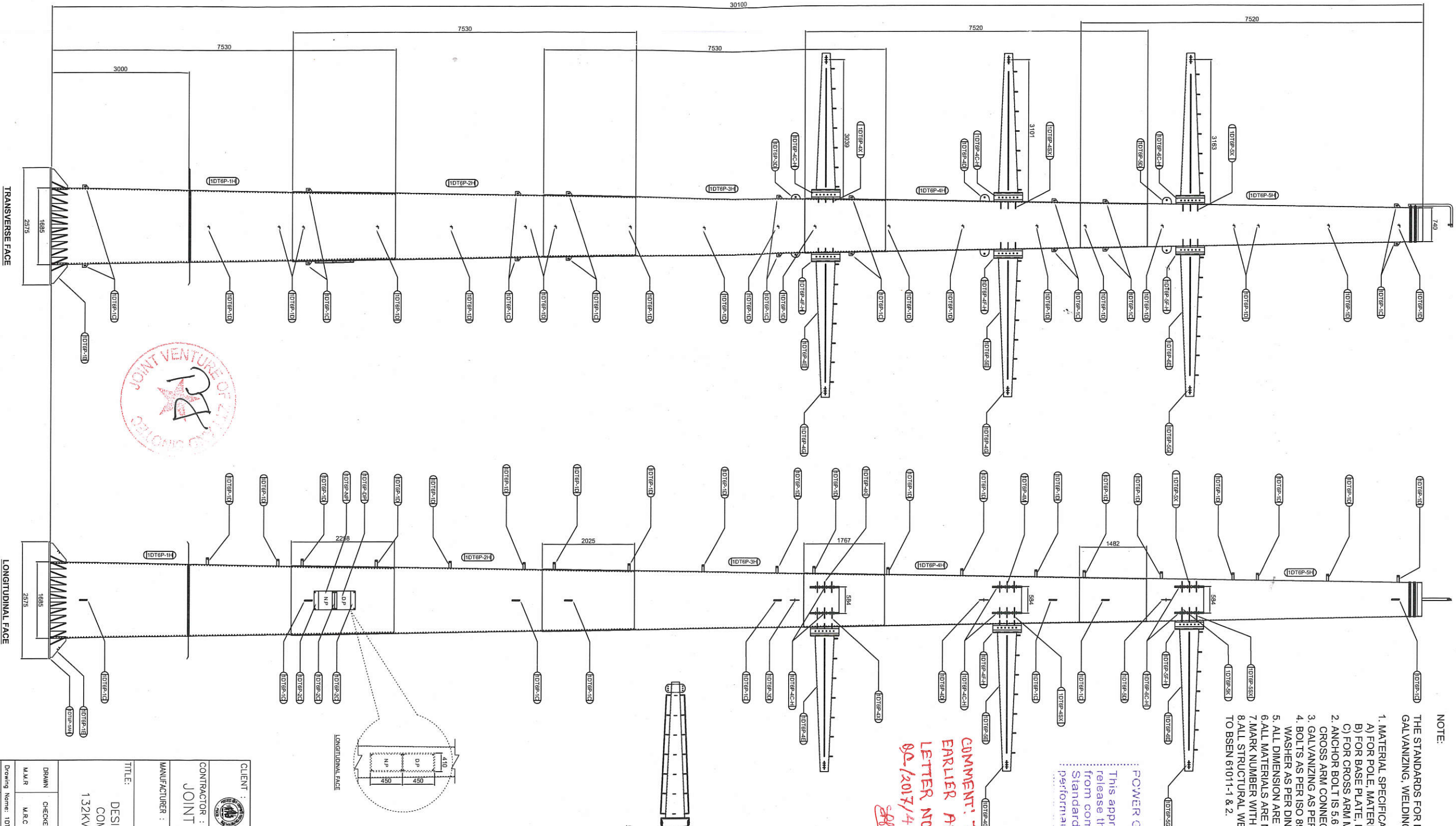
CONTRACTOR: JOINT VENTURE OF ZTT & SINOTEC

MANUFACTURER: CONFIDENCE™
Steel Limited

TITLE: DESIGN, SUPPLY, ERECTION, TESTING AND COMMISSIONING OF ISHURDI-ROOPPUR 132KV DOUBLE CIRCUIT TRANSMISSION LINE ON TURNKEY BASIS

DRAWN	CHECKED	APPROVED	POLE TYPE:	SCALE
M.M.R	M.R.C		1DT6P	N.T.S

Drawing Name: 1DT6P(TERMINAL) Erection Drawing
DATE: 06.03.17 Dwg No: CSJ/ZTT-SINOTEC/SD/1DT6P SHT. NO. 1/13 REV: A

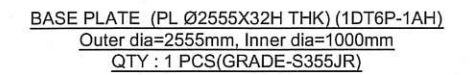




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Length of Weld leg, $L = 6\text{mm}$
Length of Weld Throat, $T = 4.24\text{mm}$
Welding strength, $F_u = 540\text{ MPa}$

BILL OF MATERIAL										
SI/ No	Mark no	Qty/Pole	Grade	Size	Pole Size			Wt/pc	Total Wt. (kg)	Remarks
					Length	Top Dia	Bottom Dia			
1	1DT6P-1H	1	S355JR	PL 20 THK	7530	1428.6	1685	6187.69	6187.69	
2	1DT6P-1AH	1	S355JR	PL2555X32 THK	2555			1639.84	1639.84	
3	1DT6P-1B	30	S275JR	PL360X16 THK	415			18.76	562.94	
4	1DT6P-1E	2	S275JR	PL360X16 THK	415			18.76	37.53	
5	1DT6P-1C	2	S275JR	PL75X20 THK	120			1.41	2.83	
6	1DT6P-1D	2	S275JR	L 50X50X6	150			0.68	1.35	
Total=									8432.17	kg
TOTAL WEIGHT (INCLUDING 3.5%GALV)=									8727.30	kg



THE STANDARDS FOR MATERIAL, FABRICATION, WORKMANSHIP,
GALVANIZING, WELDING, INSPECTION, ETC.

1. MATERIAL SPECIFICATION:
 - A) FOR POLE, MATERIAL GRADE IS S355JR.
 - B) FOR BASE PLATE, MATERIAL GRADE IS S355JR.
 - C) FOR CROSS ARM MATERIAL GRADE IS S275JR.
2. ANCHOR BOLT IS 5.6 GRADE;
CROSS ARM CONNECTING BOLT GRADE 8.8.
3. GALVANIZING AS PER BSEN 1461:2009.
4. BOLTS AS PER ISO 898-1:2009; NUTS AS PER ISO 4034;
WASHER AS PER DIN127.
5. ALL DIMENSION ARE IN MM.
6. ALL MATERIALS ARE MILD STEEL IF NOT STATED OTHERWISE.
7. MARK NUMBER WITH "H" ALPHABET INDICATES HIGH TENSILE STEEL.
8. ALL STRUCTURAL WELDING SHOULD BE CARRIED OUT ACCORDING
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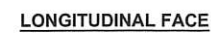
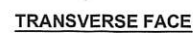
CLIENT :  POWER GRID COMPANY OF
BANGLADESH LIMITED (PGCB)

CONTRACTOR :
JOINT VENTURE OF ZTT & SINOTEC

MANUFACTURER :  **CONFIDENCE™**
Steel Limited

TITLE:	DESIGN, SUPPLY, ERECTION, TESTING AND COMMISSIONING OF ISHURDI-ROOPPUR 132KV DOUBLE CIRCUIT TRANSMISSION LINE ON TURNKEY BASIS
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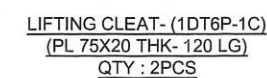
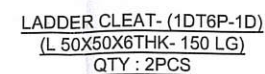
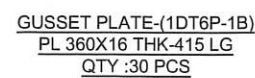
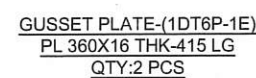
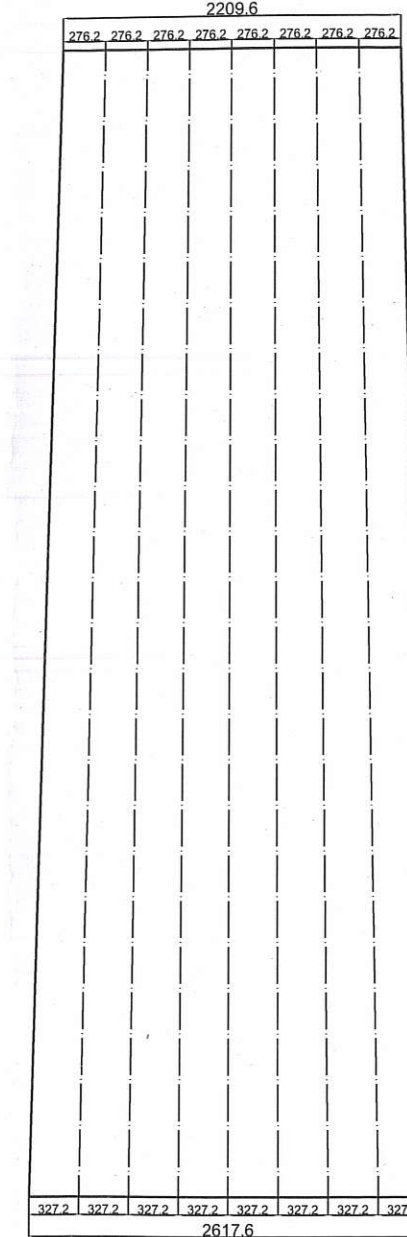
DRAWN M.S.S	CHECKED M.R.C	APPROVED	POLE TYPE: 1DT6P	SCALE N.T.S
Drawing Name: 1DT6P Erection Drawing				
DATE 16.01.17	Dwg No: CSL/ZTT-SINOTEC/SD/1DT6P		SHT. No. 2/13	REV : 



Md. Shooab Hossain
Assistant Engineer
Design & QC (PGCB)
PGCB Ltd. Dhaka.

(Engr. S.M. Zafrul Hasan)
Executive Engineer (TL-1)
Design & Quality Control
PGCB

(Abdur Rashid Khan)
Superintending Engineer(TLD)
Design & Quality Control
PGCB Ltd



POWER GRID COMPANY OF BANGLADESH
APPROVED

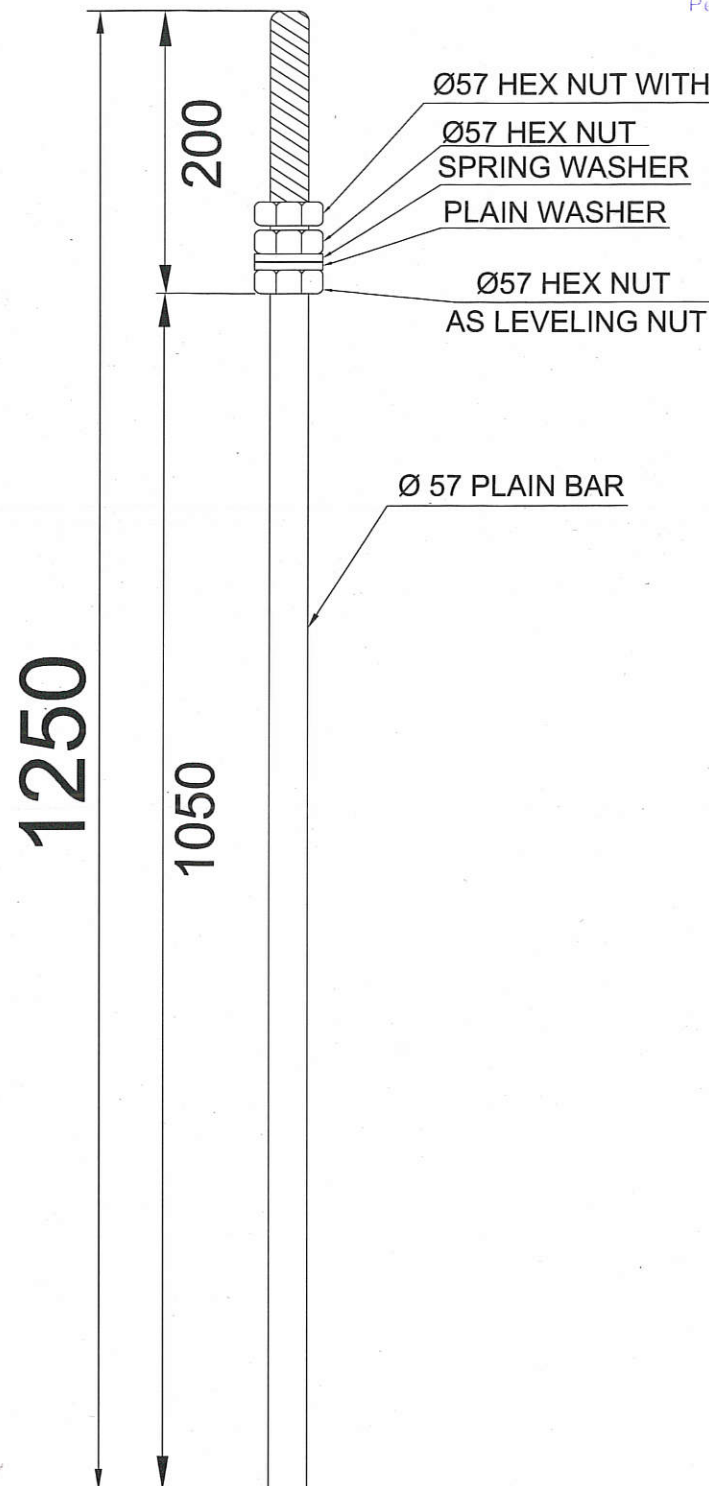
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BILL OF MATERIAL								
Sl No	Mark No	Qty/Pole	Grade	Size	Length (mm)	Wt/pcs (KG)	Total Weight (KG)	Remarks
1	1DT6P-DBP	1	S275JR	PL2555X10 THK	2555	512.45	512.45	
2	ANCHOR BOLT	64	5.6	Ø57	1250	24.86	1591.20	
	NUT	64				1.40	89.28	
	LEVELING NUT	64				1.40	89.28	
	NUT WITH BRAZING	64				1.40	89.28	
	SPW	64				0.48	30.72	
	PLW	64				0.44	28.29	
Total=							2430.50	Kg
TOTAL WEIGHT (INCLUDING 3.5% GALV)=							2515.57	Kg

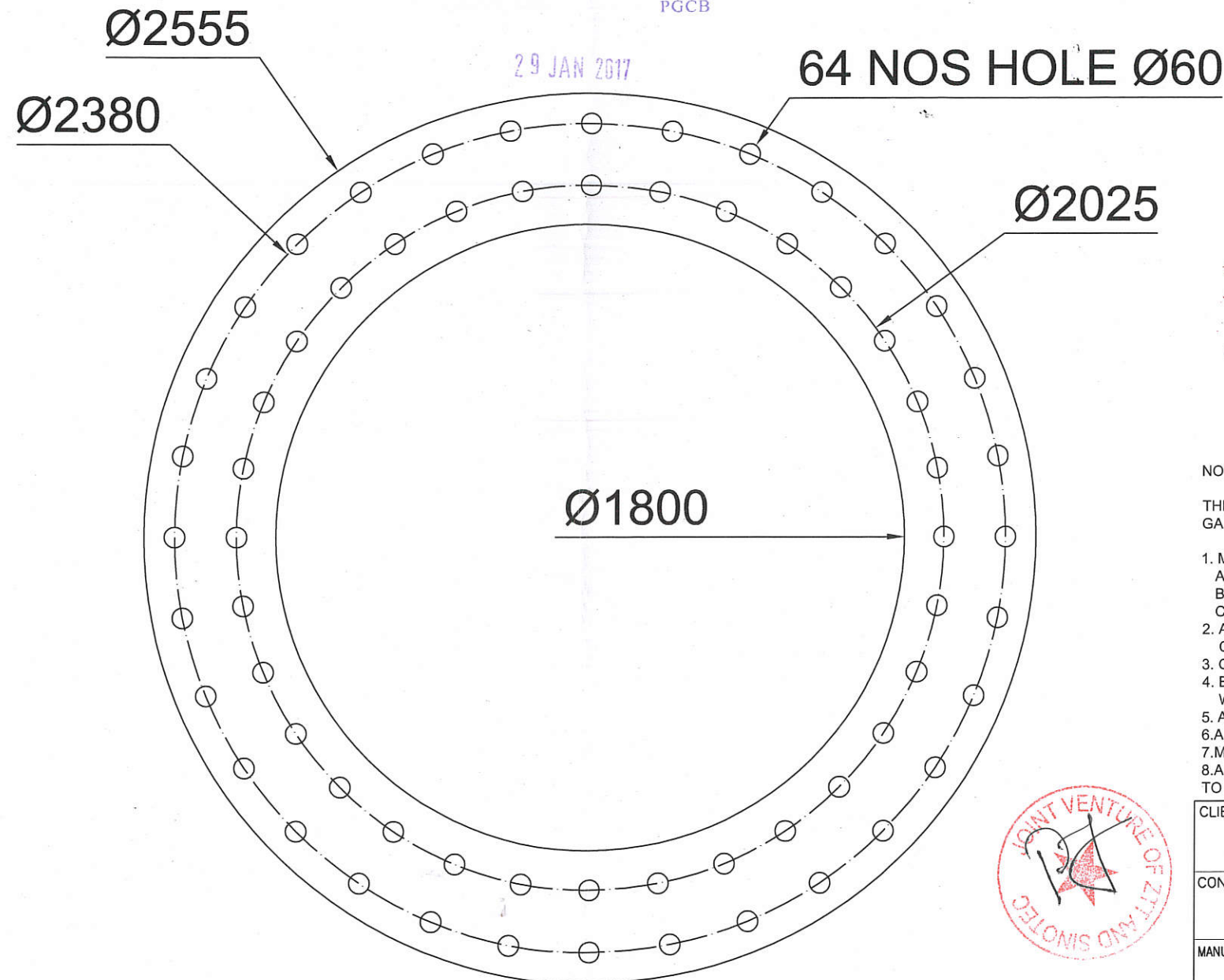
Md. Shoeb Hasan
Assistant Engineer
Design & QC (TLD-1)
PGCB Ltd. Dhaka.

(Engr. S.M. Zafrul Hasan)
Executive Engineer (TL-1)
Design & Quality Control
PGCB

(Abdur Rashid Khan)
Superintending Engineer(TLD)
Design & Quality Control
PGCB Ltd



DETAIL OF ANCHOR BOLT
QTY= 64 PCS, Ø=57mm
GRADE-5.6



DUMMY BASE PLATE (1DT6P-DBP)
(PL Ø2555X10H THK)
Outer dia=2555mm, Inner dia=1800mm

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NOTE:

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CLIENT :  POWER GRID COMPANY OF
BANGLADESH LIMITED (PGCB)

CONTRACTOR :
JOINT VENTURE OF ZTT & SINOTEC

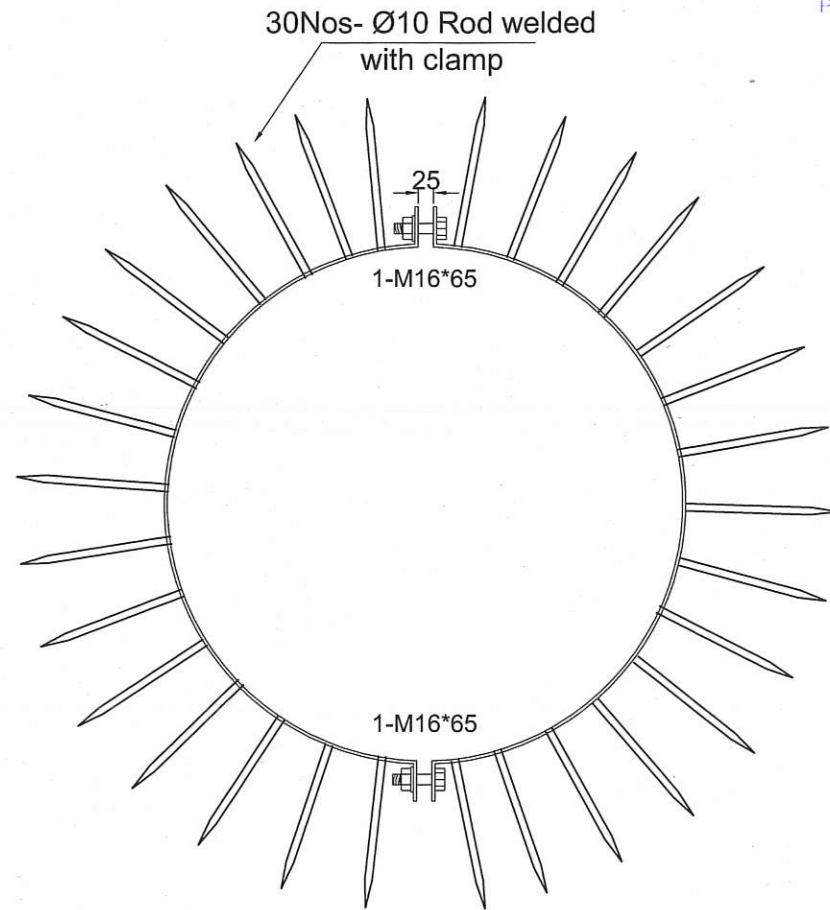
MANUFACTURER :  CONFIDENCE™
Steel Limited

TITLE:
DESIGN, SUPPLY, ERECTION, TESTING AND
COMMISSIONING OF ISHURDI-ROOPPUR
132KV DOUBLE CIRCUIT TRANSMISSION LINE
ON TURNKEY BASIS

DRAWN	CHECKED	APPROVED	POLE TYPE:	SCALE
M.S.S	M.R.C		1DT6P	N.T.S

Drawing Name: 1DT6P Erection Drawing
DATE: 16.01.17 Dwg No: CSL/ZTT-SINOTEC/SD/1DT6P SHT. NO. 3/13 REV : 1

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CROSS SECTION

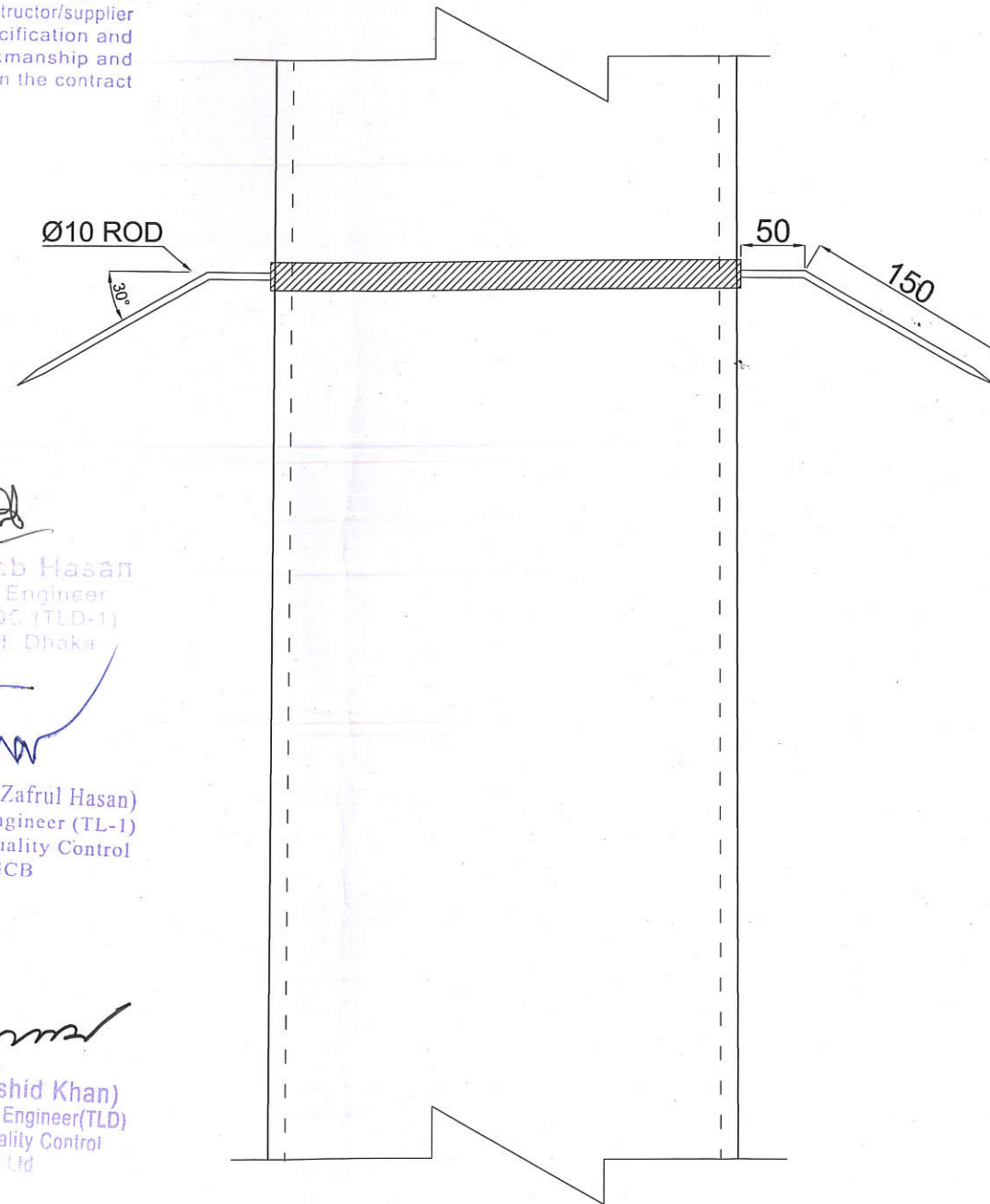
1DT6P-ACD

Md. Shorb Hasan
Assistant Engineer
Design & QC (TLD-1)
PGCB Ltd. Dhaka

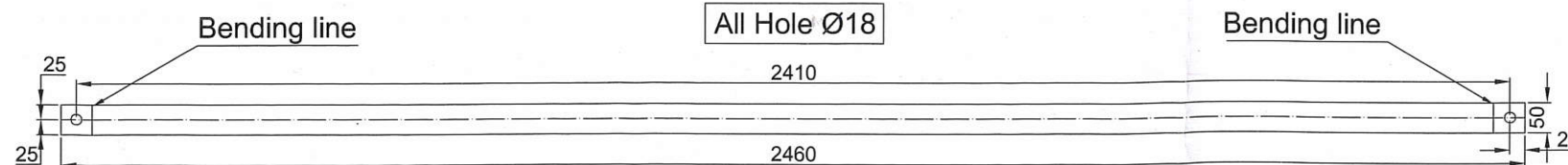
(Engr. S.M. Zafrul Hasan)
Executive Engineer (TL-1)
Design & Quality Control
PGCB

(Abdur Rashid Khan)
Superintending Engineer(TLD)
Design & Quality Control
PGCB Ltd

29 JAN 2017



ELEVATION



**FLAT BAR DETAIL (FB 50X5 THK - 2460 LG)
(1DT6P-C1)**

BILL OF MATERIAL

Sl/No	Mark no	Qty/Pole	Grade	Size	Length	Wt/pc	Total Wt. (kg)	Remarks
1	1DT6P-C1	2	S275JR	FB50X5 THK	2460	4.83	9.66	
2	SPIKE ROD	30	40	Ø10	200	0.12	3.67	
3	BOLT	2	8.8	M16	65	0.17	0.35	
Total=							13.67	kg
TOTAL WEIGHT (INCLUDING 3.5%GALV)=							14.15	kg

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CLIENT :  **POWER GRID COMPANY OF
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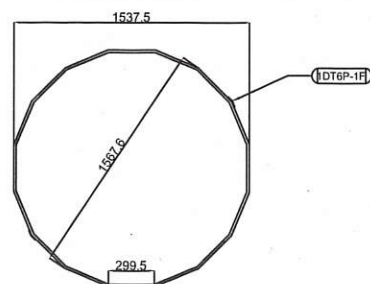
CONTRACTOR : **JOINT VENTURE OF ZTT & SINOTEC**

MANUFACTURER : 

TITLE:
**DESIGN, SUPPLY, ERECTION, TESTING AND
COMMISSIONING OF ISHURDI-ROOPPUR
132KV DOUBLE CIRCUIT TRANSMISSION LINE
ON TURNKEY BASIS**

DRAWN	CHECKED	APPROVED	POLE TYPE:	SCALE
M.S.S	M.R.C		1DT6P	N.T.S

Drawing Name: 1DT6P Erection Drawing
DATE: 16.01.17 Dwg No: CSL/ZTT-SINOTEC/SD/1DT6P SHT. NO. 4/13 REV : A



WARNING:

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POWER GRID COMPANY OF BANGLADESH
APPROVED

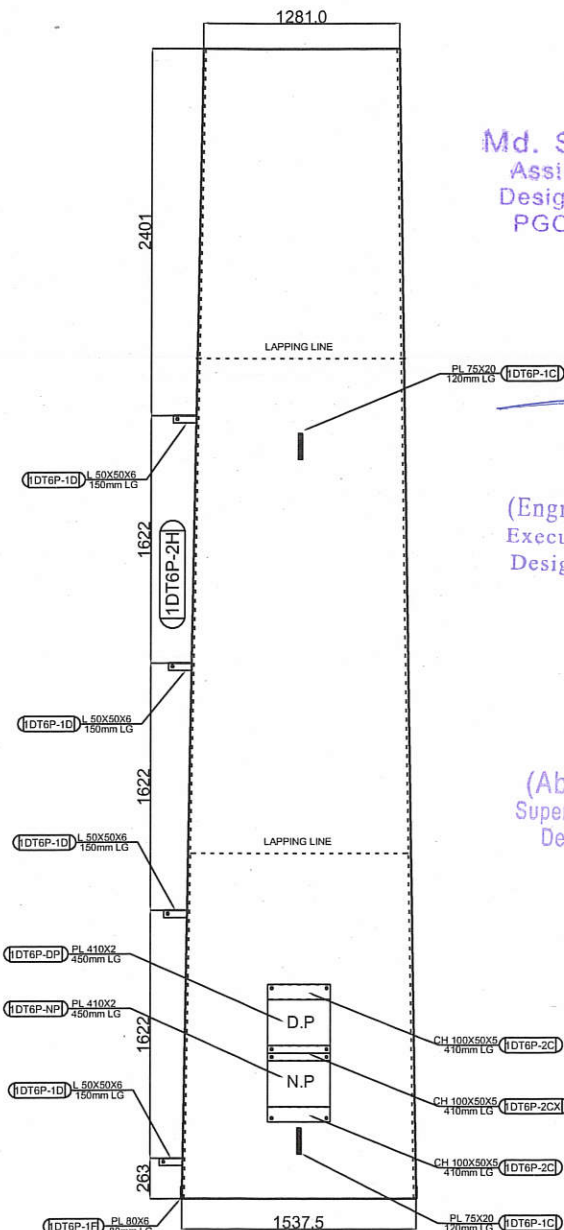
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Md. Shoeb Hasan
Assistant Engineer
Design & QC (FLD-1)
PGCB Ltd. Dhaka.

(Engr. S.M. Zafrul Hasan)
Executive Engineer (TL-1)
Design & Quality Control
PGCB

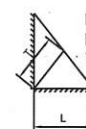
(Abdur Rashid Khan)
Superintending Engineer(TLD)
Design & Quality Control
PGCB Ltd

29 JAN 2017

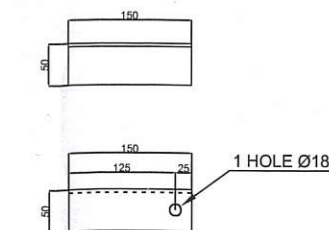


LONGITUDINAL FACE

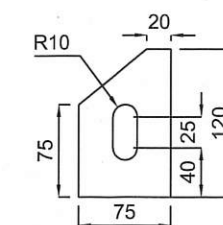
NOTE FOR WELDING:



Length of Weld leg, $L = 6\text{mm}$
Length of Weld Throat, $T = 4.24\text{mm}$
Welding strength, $F_u = 540\text{ MPa}$

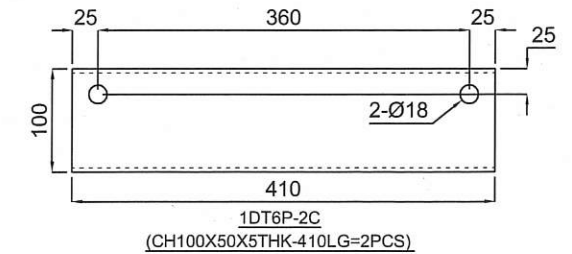


LADDER CLEAT- (1DT6P-1D)
(L 50X50X6THK- 150 LG)
QTY : 4PCS



LIFTING CLEAT- (1DT6P-1C)
(PL 75X20 THK- 120 LG)
QTY : 4PCS

BILL OF MATERIAL										
SI/ No	Mark no	Qty/Pole	GRADE	Size	Pole Size			Wt/pc	Total Wt. (kg)	Remarks
					Length	Top Dia	Bottom Dia			
1	1DT6P-2H	1	S355JR	PL 16 THK	7530	1281	1537.5	4532.12	4532.12	
2	1DT6P-1C	4	S275JR	PL75X20 THK	120			1.41	5.65	
3	1DT6P-2C	2	S275JR	CH100X50X5	410			3.04	6.08	
4	1DT6P-2CX	1	S275JR	CH100X50X5	410			3.04	3.04	
5	1DT6P-1D	4	S275JR	L 50X50X6	150			0.68	2.70	
6	1DT6P-1F	2	S275JR	PL80X6 THK	80			0.30	0.60	
7	1DT6P-DP	1	S275JR	PL410X2 THK	450			2.90	2.90	
8	1DT6P-NP	1	S275JR	PL410X2 THK	450			2.90	2.90	
9	BOLT	8	8.8	M16	45			0.14	1.13	
Total=								4557.11	kg	
TOTAL WEIGHT (INCLUDING 3.5%GALV)=								4716.61	kg	



NOTE:

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GALVANIZING, WELDING, INSPECTION, ETC.

1. MATERIAL SPECIFICATION:

1. MATERIAL GRADE:
 - A) FOR POLE, MATERIAL GRADE IS S355JR.
 - B) FOR BASE PLATE, MATERIAL GRADE IS S355JR.
 - C) FOR CROSS ARM MATERIAL GRADE IS S275JR.
2. ANCHOR BOLT IS 5.6 GRADE;
CROSS ARM CONNECTING BOLT GRADE 8.8.
3. GALVANIZING AS PER BSEN 1461:2009.
4. BOLTS AS PER ISO 898-1:2009; NUTS AS PER ISO 4034;
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7. MARK NUMBER WITH "H" ALPHABET INDICATES HIGH TENSILE STEEL.
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CLIENT :  POWER GRID COMPANY OF BANGLADESH LIMITED (PGCB)

CONTRACTOR : JOINT VENTURE OF ZTT & SINOTEC

MANUFACTURER :  **CONFIDENCE™**
Steel Limited

TITLE: DESIGN, SUPPLY, ERECTION, TESTING AND COMMISSIONING OF ISHURDI-ROOPPUR 132KV DOUBLE CIRCUIT TRANSMISSION LINE ON TURNKEY BASIS

DRAWN	CHECKED	APPROVED	POLE TYPE:	SCALE
M.S.S	M.R.C		1DT6P	N.T.S

Drawing Name: 1DT6P Erection Drawing

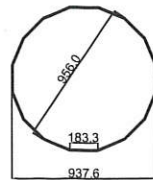
DATE	16.01.17	Dwg No: CSL/ZTT-SINOTEC/SD/1DT6P	SHT. NO. 5/13	REV : 0
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LIFTING CLEAT- (1DT6P-1C)
(PL 75X20 THK- 120 LG)
QTY : 4PCS





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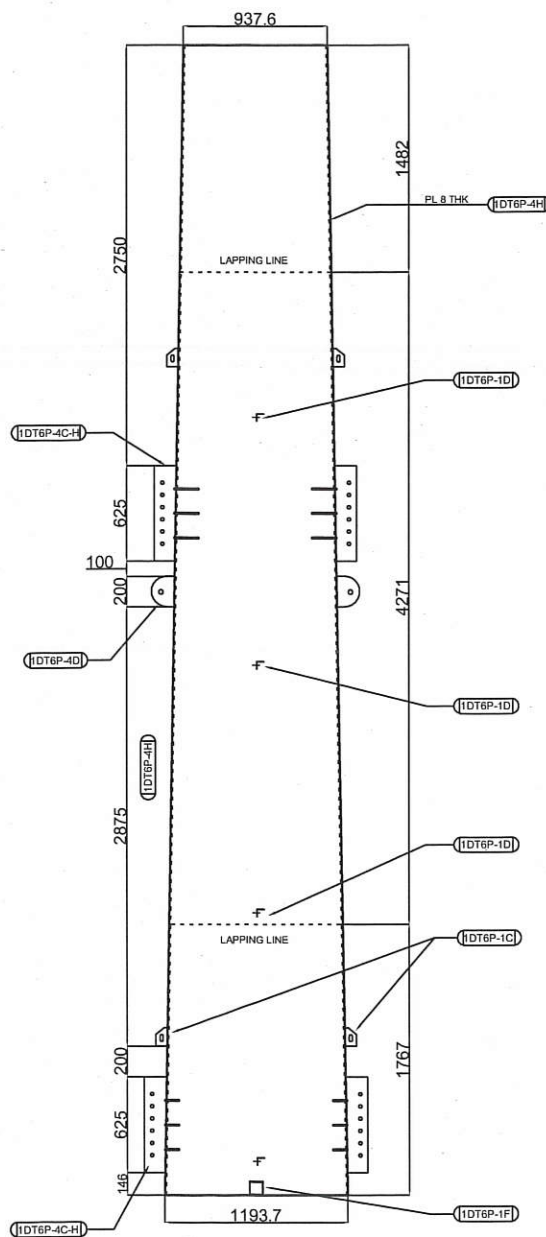
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Md. Shueb Hasan
Assistant Engineer
Design & QC (TLD-1)
PGCB Ltd. Dhaka.

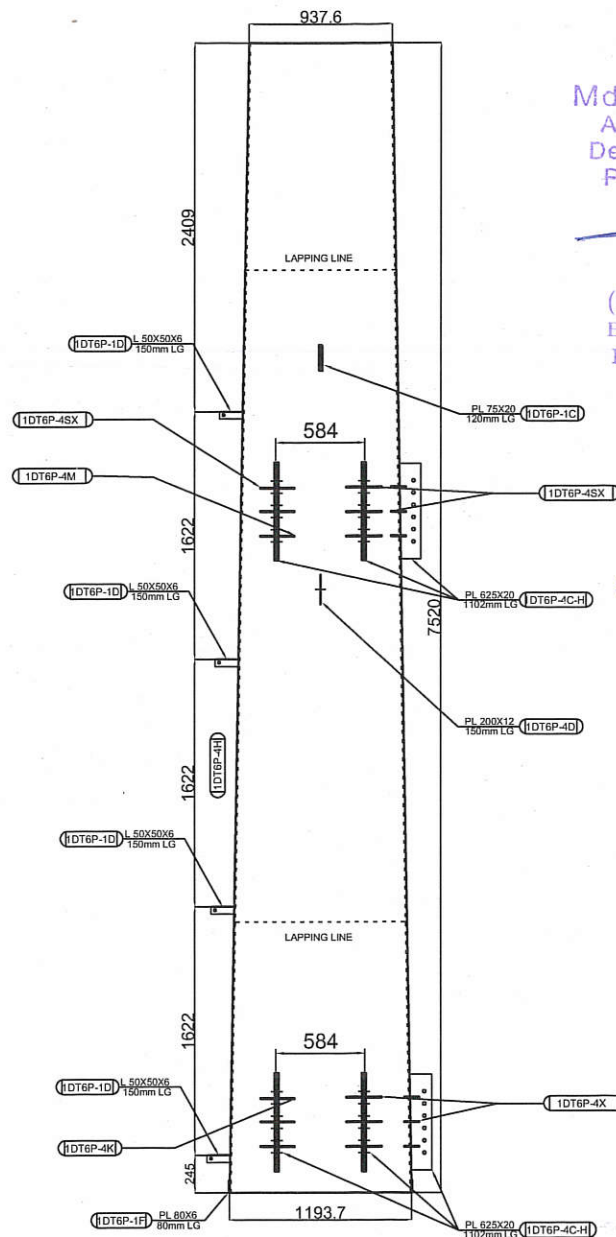
(Engr. S.M. Zafrul Hasan)
Executive Engineer (TL-1)
Design & Quality Control
PGCB

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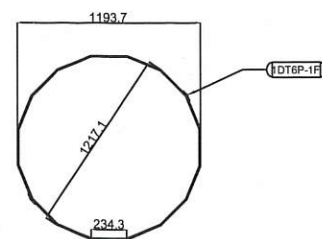
29 JAN 2017



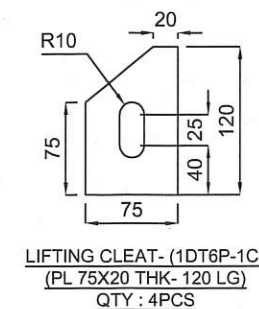
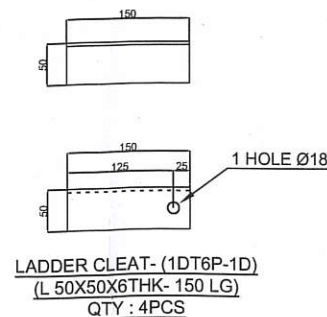
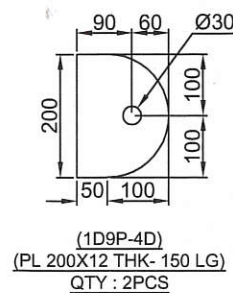
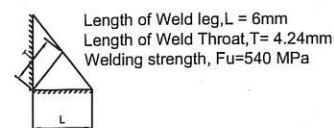
TRANSVERSE FACE



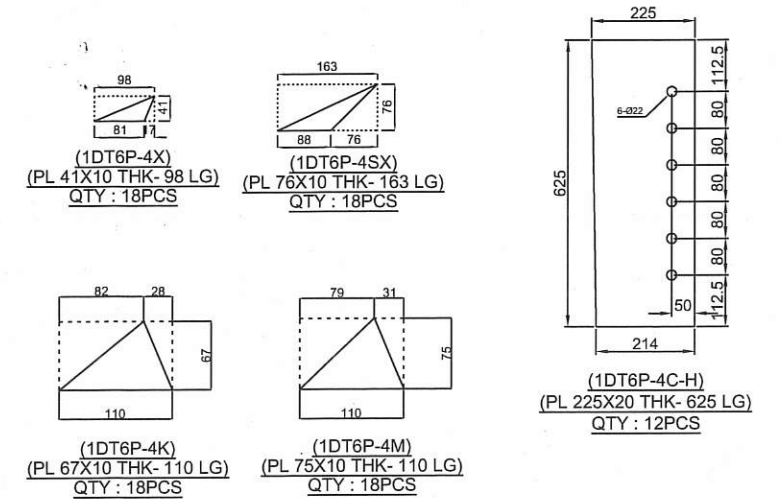
LONGITUDINAL FACE



NOTE FOR WELDING:



BILL OF MATERIAL										
SI/ No	Mark no	Qty/Pole	GRADE	Size	Pole Size			Wt/pc	Total Wt. (kg)	Remarks
					Length	Top Dia	Bottom Dia			
1	1DT6P-4H	1	S355JR	PL 8 THK	7520	937.6	1193.7	1770.02	1770.02	
2	1DT6P-1C	4	S275JR	PL75X20 THK	120			1.41	5.65	
3	1DT6P-1D	4	S275JR	L 50X50X6	150			0.68	2.70	
4	1DT6P-1F	2	S275JR	PL80X6 THK	80			0.30	0.60	
5	1DT6P-4C-H	12	S355JR	PL625X20 THK	225			22.08	264.94	
6	1DT6P-4X	18	S275JR	PL41X10 THK	98			0.32	5.68	
7	1DT6P-4SX	18	S275JR	PL76X10 THK	163			0.97	17.50	
8	1DT6P-4K	18	S275JR	PL67X10 THK	110			0.58	10.41	
9	1DT6P-4M	18	S275JR	PL75X10 THK	110			0.65	11.66	
10	1DT6P-4D	2	S275JR	PL200X12 THK	150			2.83	5.65	
Total=									2094.81	kg
TOTAL WEIGHT (INCLUDING 3.5%GALV)=									2168.13	kg



NOTE:

THE STANDARDS FOR MATERIAL, FABRICATION, WORKMANSHIP, GALVANIZING, WELDING, INSPECTION, ETC.

- MATERIAL SPECIFICATION:
 - FOR POLE, MATERIAL GRADE IS S355JR.
 - FOR BASE PLATE, MATERIAL GRADE IS S355JR.
 - FOR CROSS ARM MATERIAL GRADE IS S275JR.
- ANCHOR BOLT IS 5.6 GRADE; CROSS ARM CONNECTING BOLT GRADE 8.8.
- GALVANIZING AS PER BSEN 1461:2009.
- BOLTS AS PER ISO 898-1:2009; NUTS AS PER ISO 4034; WASHER AS PER DIN127.
- ALL DIMENSION ARE IN MM.
- ALL MATERIALS ARE MILD STEEL IF NOT STATED OTHERWISE.
- MARK NUMBER WITH "H" ALPHABET INDICATES HIGH TENSILE STEEL.
- ALL STRUCTURAL WELDING SHOULD BE CARRIED OUT ACCORDING TO BSEN 61011-1 & 2.

CLIENT :		POWER GRID COMPANY OF BANGLADESH LIMITED (PGCB)		
CONTRACTOR :		JOINT VENTURE OF ZTT & SINOTEC		
MANUFACTURER :				
TITLE: DESIGN, SUPPLY, ERECTION, TESTING AND COMMISSIONING OF ISHURDI-ROOPPUR 132KV DOUBLE CIRCUIT TRANSMISSION LINE ON TURNKEY BASIS				
DRAWN	CHECKED	APPROVED	POLE TYPE:	SCALE
M.S.S	M.R.C		1DT6P	N.T.S
Drawing Name: 1DT6P Erection Drawing				
DATE	16.01.17	Dwg No: CSL/ZTT-SINOTEC/SD/1DT6P	SHT. NO. 7/13	REV : 

Md. Shoeb Hasan
Assistant Engineer
Design & QC (TLD-1)
PGCB Ltd. Dhaka.

(Engr. S.M. Zafrul Hasan)
Executive Engineer (TL-1)
Design & Quality Control
PGCB

(Abdur Rashid Khan)
Superintending Engineer(TLD)
Design & Quality Control
PGCB Ltd

1164.8																			
146.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5										
										196.5	196.5	196.5	196.5	196.5	196.5	196.5	196.5	196.5	196.5
1572.0																			

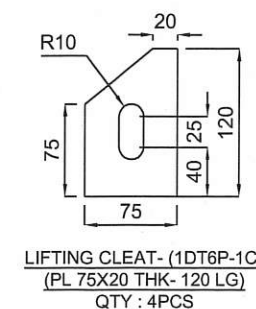
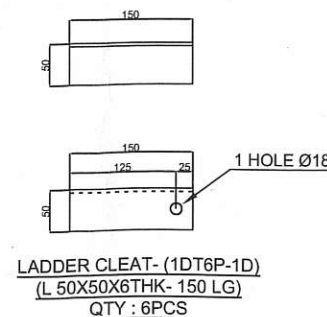
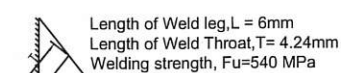
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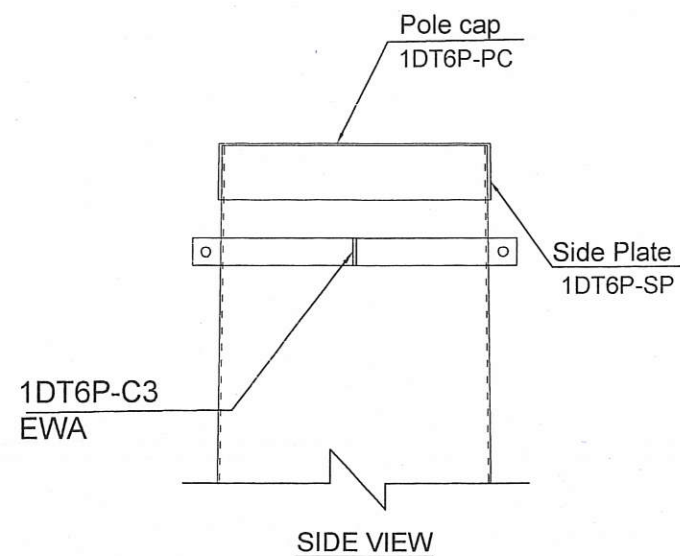
THE STANDARDS FOR MATERIAL, FABRICATION, WORKMANSHIP,
GALVANIZING, WELDING, INSPECTION, ETC.

1. MATERIAL SPECIFICATION:
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2. ANCHOR BOLT IS 5.6 GRADE;
CROSS ARM CONNECTING BOLT GRADE 8.8.
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4. BOLTS AS PER ISO 898-1:2009; NUTS AS PER ISO 4034;
WASHER AS PER DIN127.
5. ALL DIMENSION ARE IN MM.
6. ALL MATERIALS ARE MILD STEEL IF NOT STATED OTHERWISE.
7. MARK NUMBER WITH "H" ALPHABET INDICATES HIGH TENSILE STEEL.
8. ALL STRUCTURAL WELDING SHOULD BE CARRIED OUT ACCORDING
TO BSEN 61011-1 & 2.

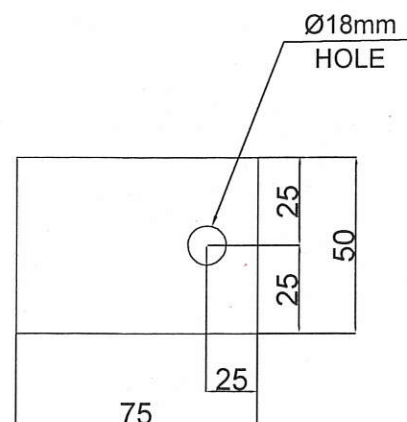
TITLE: DESIGN, SUPPLY, ERECTION, TESTING AND COMMISSIONING OF ISHURDI-ROOPPUR 132KV DOUBLE CIRCUIT TRANSMISSION LINE ON TURNKEY BASIS

DATE	16.01.17	Dwg No: CSL/ZTT-SINOTEC/SD/1DT6P	SHT. NO. 8/13	REV : 
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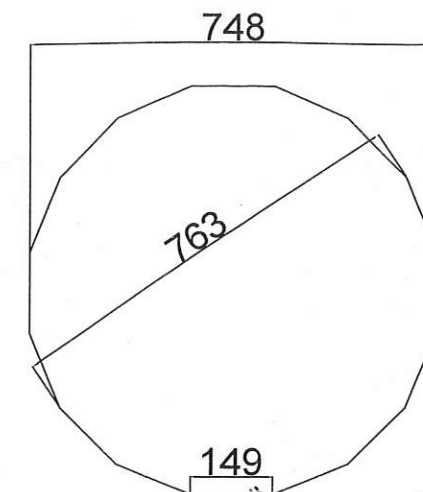
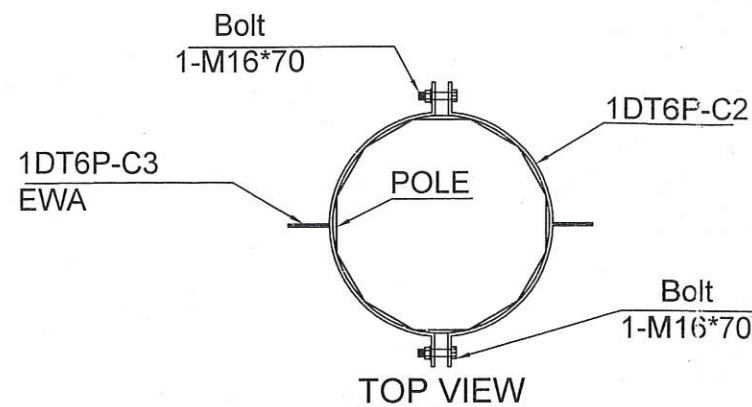




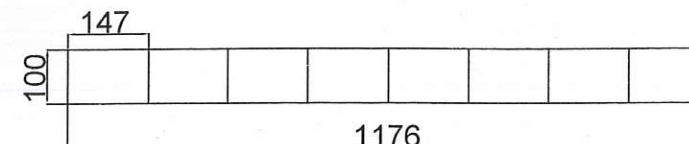
SIDE VIEW



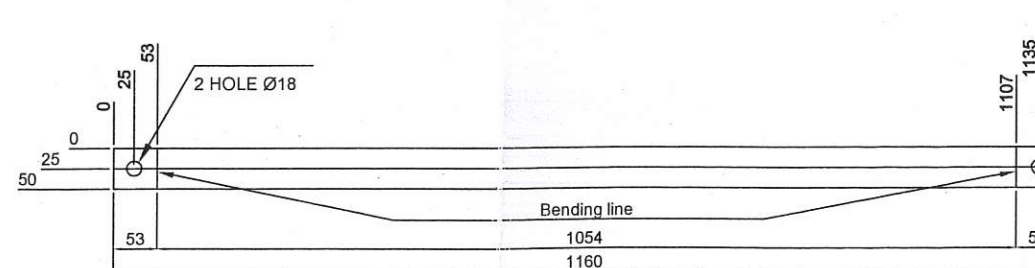
PL 50X5 THK- 75 LG
1DT6P-C3



POLE CAP: PL Ø748X4mm=1PCS
1DT6P-PC

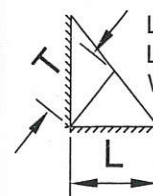


SIDE PLATE(1DT6P-SP)
PL100X4 THK-1176LG
QTY:2PCS



PL 50X5THK-1160 LG
1DT6P-C2

NOTE FOR WELDING:



Length of Weld leg, L = 6mm
Length of Weld Throat, T = 4.24mm
Welding strength, $F_u = 540$ MPa

Md. Shueb Hasan
Sub-Divisional Engineer
Design & Quality Control
PGCB Ltd.

Abdur Rahim
Assistant Engineer
Transmission Line Design
PGCB, Dhaka

Engr. Md. Azizul Islam Sarkar
Executive Engineer (TLD)
Design & Quality Control
PGCB

(Engr. S. M. Zafrul Hasan)
Superintending Engineer (TLD)
Design & QC, PGCB, Dhaka.

31 JAN 2018



BILL OF MATERIAL

Sl/No	Mark no	Qty/Pole	GRADE	Size	Length	Wt/pc	Total Wt. (kg)	Remarks
1	1DT6P-PC	1	S275JR	PL748X4 THK	748	17.57	17.57	
2	1DT6P-SP	2	S275JR	PL100X4 THK	1176	3.69	7.39	
3	1DT6P-C2	2	S275JR	PL50X5 THK	1160	2.28	4.55	
4	1DT6P-C3	2	S275JR	PL50X5 THK	75	0.15	0.29	
5	BOLT	2	8.8	M16	70	0.20	0.40	
Total=							30.20	kg
TOTAL WEIGHT (INCLUDING 3.5% GALV)=							31.26	kg

POWER GRID COMPANY OF BANGLADESH LTD
APPROVED WITH COMMENT
This approval is general only and does not release the manufacturer/contractor/supplier from compliance with specification and standards for design. Workmanship and performance as stipulated in the contract.

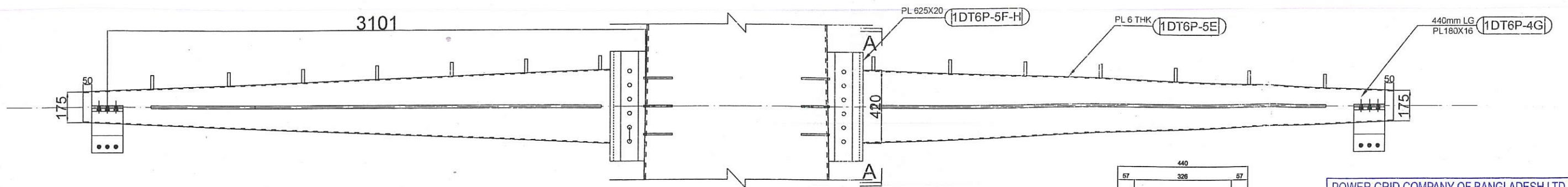
COMMENTS: THIS APPROVAL SUPERSEDES EARLIER APPROVAL
GIVEN VIDE PGCB LETTER NO. 04/PGCB/
SE(TLD).DESIGN/QC/2017/147;
DATED: 15.03.2017
Rahim

NOTE:

THE STANDARDS FOR MATERIAL, FABRICATION, WORKMANSHIP, GALVANIZING, WELDING, INSPECTION, ETC.

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- BOLTS AS PER ISO 898-1:2009; NUTS AS PER ISO 4034;
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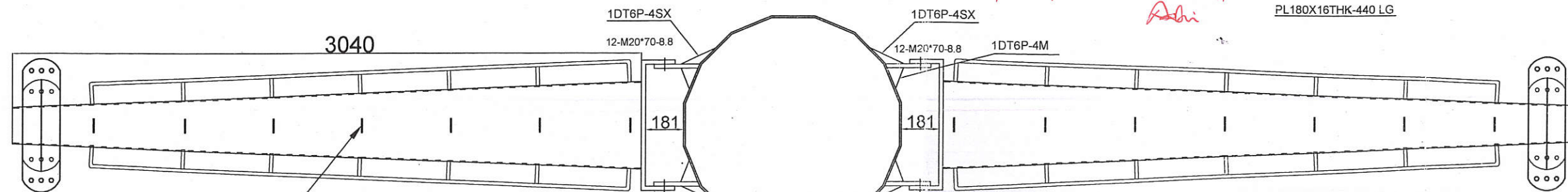
CLIENT :	 POWER GRID COMPANY OF BANGLADESH LIMITED (PGCB)			
CONTRACTOR :	JOINT VENTURE OF ZTT & SINOTEC			
MANUFACTURER :				
TITLE:	DESIGN, SUPPLY, ERECTION, TESTING AND COMMISSIONING OF ISHURDI-ROOPPUR 132KV DOUBLE CIRCUIT TRANSMISSION LINE ON TURNKEY BASIS			
DRAWN	CHECKED	APPROVED	POLE TYPE	SCALE
M.S.S	M.R.C		1DT6P	N.T.S
DRAWING NAME: 1DT6P-EARTH WIRE AND POLE CAP ARRANGEMENT				
DATE	16.01.17	Dwg No: CSL/ZTT-SINOTEC/SD/1DT6P	SHT.NO. 9/13	REV : 



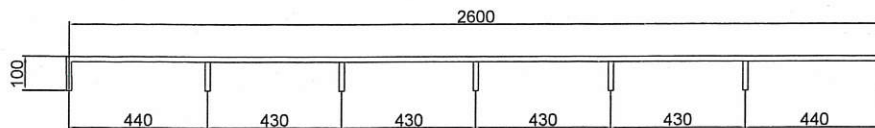
CROSS ARM-2

COMMENT: THIS APPROVAL SUPERSEDES EARLIER APPROVAL GIVEN VIDE PGCB LETTER NO. 04/PCB/SE(TLD), DESIGN & QC/2017/147, DATED: 15.03.2017

POWER GRID COMPANY OF BANGLADESH LTD
APPROVED WITH COMMENT
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(ARM-2(ROD-2))



ARM-2(ROD-1)
Ø16X3204mm=6PCS

(ARM-2(ROD-1))

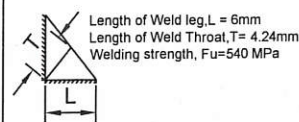
ONLY FOR 1DT6P(TERMINAL)

NOTE:

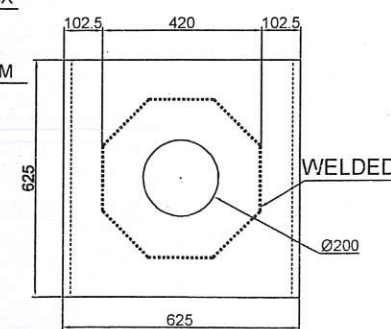
THE STANDARDS FOR MATERIAL, FABRICATION, WORKMANSHIP, GALVANIZING, WELDING, INSPECTION, ETC.

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- BOLTS AS PER ISO 898-1:2009; NUTS AS PER ISO 4034; WASHER AS PER DIN127.
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- ALL MATERIALS ARE MILD STEEL IF NOT STATED OTHERWISE.
- MARK NUMBER WITH "H" ALPHABET INDICATES HIGH TENSILE STEEL.
- ALL STRUCTURAL WELDING SHOULD BE CARRIED OUT ACCORDING TO BSEN 61011-1 & 2.

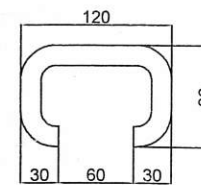
NOTE FOR WELDING:



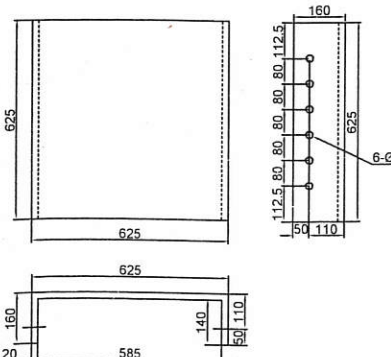
BILL OF MATERIAL									
Sl/No	Mark no	Qty/Pole	GRADE	Size	Pole Size			Wt/pc	Total Wt. (kg)
					Length	Top Dia	Bottom Dia		
1	1DT6P-5E	3	S275JR	PL 6 THK	3040	175	420	194.73	584.19
2	1DT6P-5F-H	3	S355JR	PL625X20 THK	905			88.80	266.41
3	1DT6P-4G	3	S275JR	PL180X16 THK	440			9.95	29.84
4	1DT6P-4G-A	3	S275JR	PL180X16	751			16.98	50.94
4	1DT6P-4G-B	3	S275JR	PL180X16	100			2.26	6.78
5	ARM-2(ROD-1)	6	S275JR	Ø16	3204			5.05	30.30
6	ARM-2(ROD-2)	21	S275JR	Ø16	260			0.41	8.61
7	BOLT	36	8.8	M20	70			0.35	12.47
Total=									989.54 kg
TOTAL WEIGHT (INCLUDING 3.5%GALV)=									1024.18 kg



SECTION "A-A"



ARM-2(ROD-2)
Ø16X260mm=21PCS



(1DT6P-5F-H) PL 625X20 THK- 905 LG

Engr. Md. Azizul Islam Sarkar
Executive Engineer (TLD)
Design & Quality Control
PGCB

31 JAN 2018

Md. Shueb Hasan
Sub-Divisional Engineer
Design & Quality Control
PGCB Ltd.

(Md. Abdur Rahim)
Assistant Engineer
Transmission Line Design
PGCB, Dhaka

CLIENT: POWER GRID COMPANY OF BANGLADESH LIMITED (PGCB)

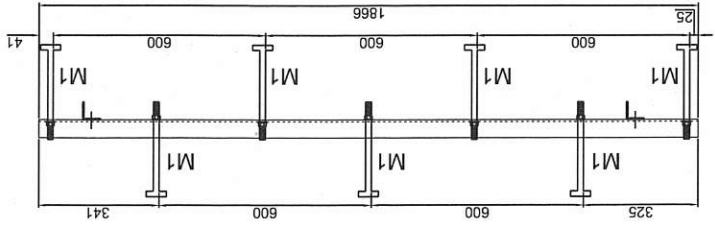
CONTRACTOR: JOINT VENTURE OF ZTT & SINOTEC

MANUFACTURER: CONFIDENCE

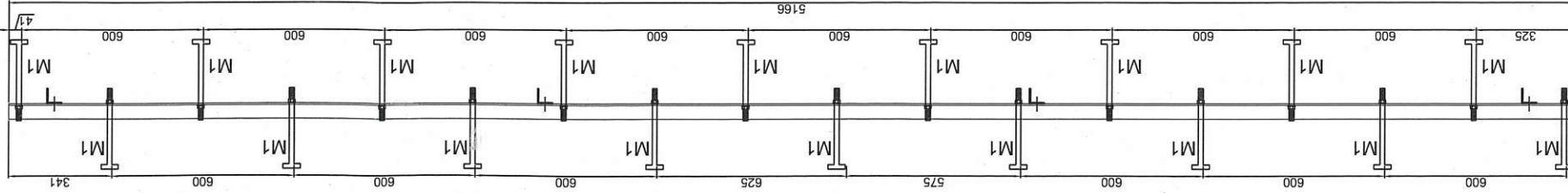
TITLE: DESIGN, SUPPLY, ERECTION, TESTING AND COMMISSIONING OF ISHURDI-ROOPPUR 132KV DOUBLE CIRCUIT TRANSMISSION LINE ON TURNKEY BASIS

DRAWN	CHECKED	APPROVED	POLE TYPE	SCALE
M.S.S	M.R.C		1DT6P	N.T.S
DRAWING NAME: DETAIL OF CROSS ARM-2				
DATE	12.12.17	Dwg No: CSL/ZTT-SINOTEC/SD/1DT6P	SHT.NO. 11/13	REV: A

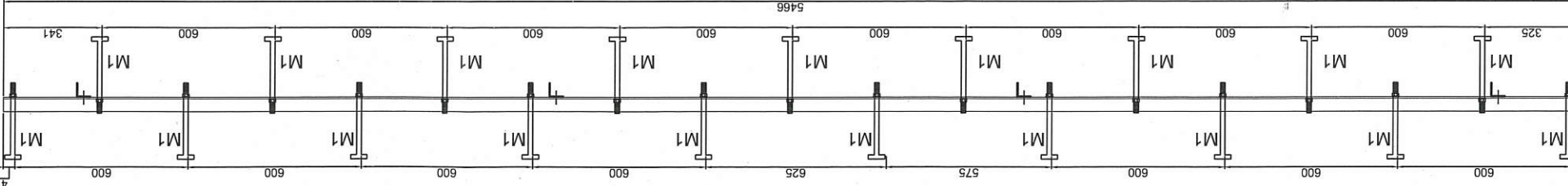
1DT6P-LD1



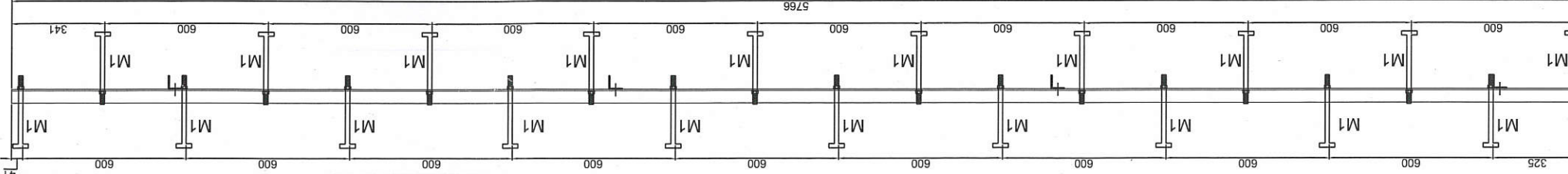
1DT6P-LD2



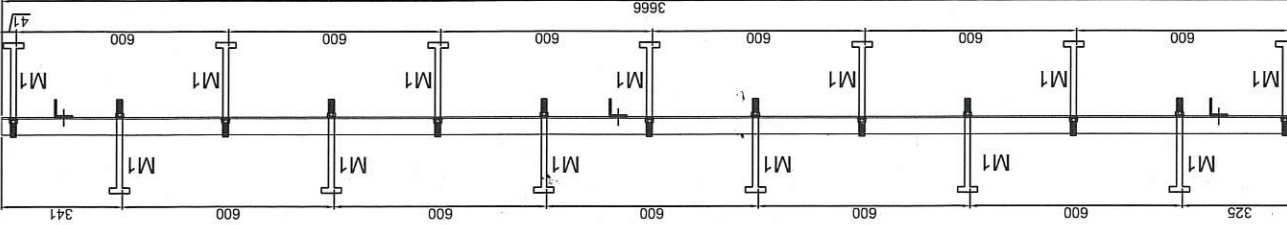
1DT6P-LD3



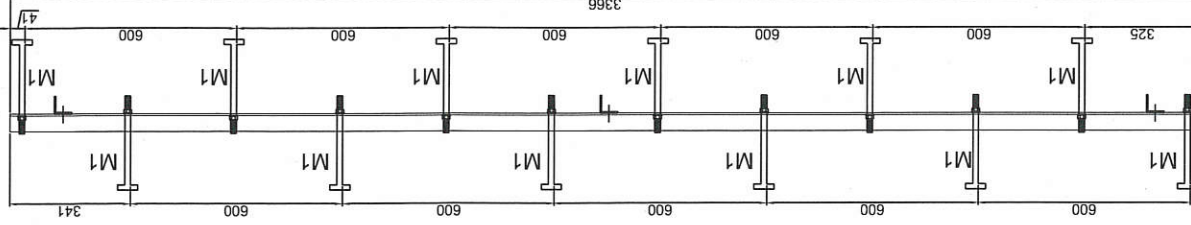
1DT6P-LD4



1DT6P-LD5



1DT6P-LD6



POWER GRID COMPANY OF BANGLADESH
APPROVED
This approval is general only and does not
Release the manufacturer/contractor/supplier
From compliance with specification and
Standards for Design workmanship and
Performance as stipulated in the contract

Md. Shorif

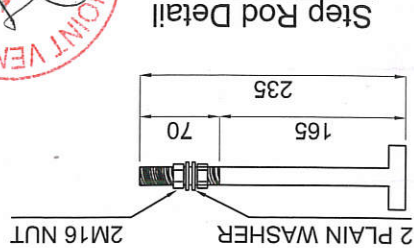
Assistant
Design & Quality Control

PGCB Ltd

(Engr. S.M. Zafrul Hasan)
Executive Engineer (TL-1)
Design & Quality Control
PGCB Ltd

(Abdur Rashid Khan)
Superintending Engineer (TL-1)
Design & Quality Control
PGCB Ltd

29 JAN 2017



BILL OF MATERIAL									
SI No	Mark No	Qty/Pole	GRADE	Size	Length (mm)	Wt/pcs (KG)	Total Weight (KG)	Remarks	
1	1DT6P-LD1	1	S275JR	L50X50X6	1866	4.50	8.40		
2	1DT6P-LD2	1	S275JR	L50X50X6	5166	4.50	23.25		
3	1DT6P-LD3	1	S275JR	L50X50X6	5466	4.50	24.60		
4	1DT6P-LD4	1	S275JR	L50X50X6	5766	4.50	25.95		
5	1DT6P-LD5	1	S275JR	L50X50X6	3666	4.50	16.50		
6	1DT6P-LD6	1	S275JR	L50X50X6	3366	4.50	15.15		
7	1DT6P-M1	90	40	φ16mm	235	0.371	33.42		
8	BOLT	20	8.8	M16	35	0.125	2.50		
9	NUT	20	8.8	M16		0.030	6.00		
10	PW	200	8.8	M16		0.011	157.95		
TOTAL WEIGHT (INCLUDING 3.5%GALV)=							163.48		
							kg		

NOTE:
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4. BOLTS AS PER ISO 898-1:2009; NUTS AS PER ISO 4034;
WASHER AS PER DIN127.
5. ALL DIMENSION ARE IN MM.
6. ALL MATERIALS ARE MILD STEEL IF NOT STATED OTHERWISE.
7. MARK NUMBER WITH "H" ALPHABET INDICATES HIGH TENSILE STEEL.
8. ALL STRUCTURAL WELDING SHOULD BE CARRIED OUT ACCORDING TO BSEN 61011-1 & 2.

WARNING:
This is a preliminary drawing. It is not to be used for construction. It is for reference only. It is not to be used for any other purpose. It is not to be used for any other purpose. It is not to be used for any other purpose.

CLIENT :	POWER GRID COMPANY OF BANGLADESH LIMITED (PGCB)				
CONTRACTOR :	JOINT VENTURE OF ZTT & SINOTEC				
MANUFACTURER :	CONFIDENCE Steel Limited				
TITLE:	DESIGN, SUPPLY, ERECTION, TESTING AND COMMISSIONING OF ISHURDI-ROOPPUR 132KV DOUBLE CIRCUIT TRANSMISSION LINE ON TURNKEY BASIS				
DRAWN	CHECKED	APPROVED	POLE TYPE	SCALE	N.T.S
M.S.S	M.R.C		1DT6P		
DATE	16.01.17	Dwg No:CSL/ZTT-SINOTEC/SD/1DT6P	SHT.NO. 13/13	REV :	