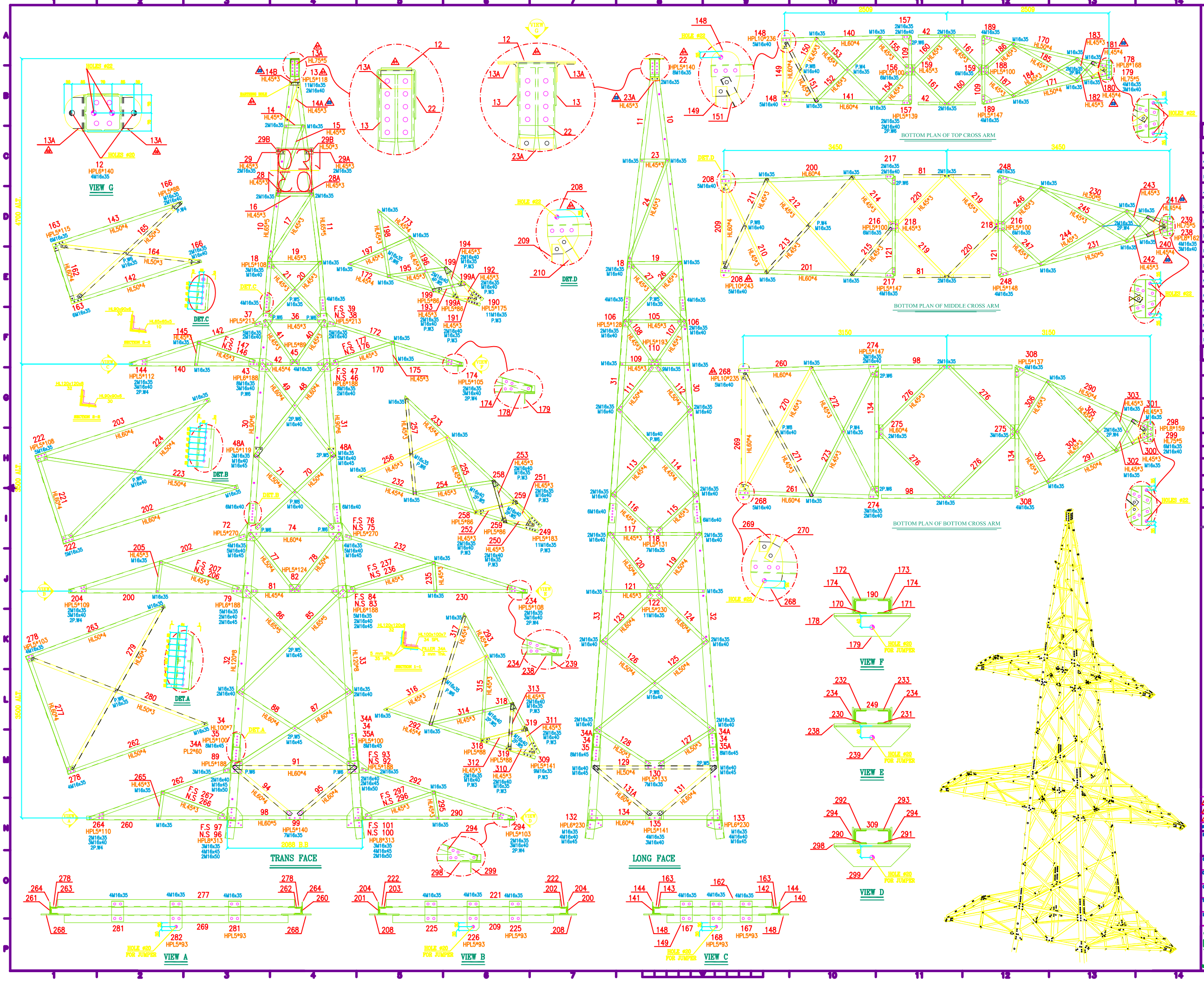


NOTES:

1- ALL DIMENSION ARE IN MILLIMETERS.
2- DO NOT SCALE THE DRAWING
3- DIAMETERS OF HOLE ARE AS FOLLOWS:
ø21.5 mm FOR M20, ø17.5 mm FOR M16
ø13.5 mm FOR M12 BOLTS.
4- EACH BOLT ASSEMBLY INCLUDES ONE BOLT ONE NUT AND ONE SPRING WASHER.
5- EACH STEP BOLT ASSEMBLY INCLUDES ONE STEP BOLT TWO NUTS AND TWO SPRING WASHER.
6- GRADE OF BOLTS IS 5.8
7- THE STEEL MEMBER INDENTIFIED BY "H" ARE ST:52 OTHER MEMBERS ARE ST:37

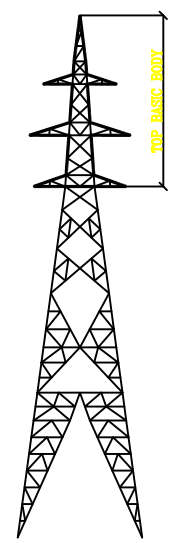
SYMBOLS AND ABBREVIATIONS

DESCRIPTION	SYMBOLE
CENTER LINE	C.L.
PLATE	PL
ANGLE	L
SPLICE	SP
HIGH TENSILE	HL
BEND LINE	B.L.
NEAR SIDE	N.S.
FAR SIDE	F.S.
Ø14 mm HOLE	●
Ø17.5 mm HOLE	○
Ø20 mm HOLE	◐
Ø22 mm HOLE	◑
HOLE FOR STEP BOLT	◎

SPECIFICATION FOR MATERIALS

NO.	ITEM	REFERENCE Specific Requirements	REFERENCE Technical Delivery Conditions
1	ANGLE	DIN 10056-2	DIN EN 10025-2 MILD STEEL:GRADE S235JR HIGH TENSILE:GRADE S355JO
2	GUSSET PLATE	DIN 10048	DIN EN 10025-2 MILD STEEL:GRADE S235JR HIGH TENSILE:GRADE S355JO
3	FILLER PLATE	DIN 10048	DIN EN 10025-2 MILD STEEL:GRADE S235JR
4	BOLT	DIN 7990	ISO 898-part1,Grade 5.8
5	NUT	DIN 4032	ISO 898-part2,Grade 5
6	SPRING WASHER	DIN 127	DIN 267-part 26
7	PLAIN WASHER	DIN EN ISO 4759-3	DIN EN 10025-2,Grade S235JR
8	GALVANIZ	ANGLES & PLATES	ASTM A123
		BOLTS & NUTS & WASHERS	ASTM A153

Note: 1-Application of an equal and approved material is allowed only after the written permission of consultant



REV.	DESCRIPTION	BY	CHKD.	APPR.	DATE
03	MODIFICATION DURING TOWER TYPE TEST	M.G	M.G	M.GH	1397/08/18
02	MODIFICATION ACCORDING TO LAST NOTED	M.G	M.G	M.GH	1397/08/13
01	MODIFICATION ACCORDING TO LETTER NO. 38/AB/2004 ISO/AT/AT	M.G	M.G	M.GH	1397/08/01

PROJECT: 63 KV D.C TRANSMISSION LINE

CLIENT: YAZD REGIONAL ELECTRIC CO.

CONSULTANT: MONENCO IRAN CO.

CONTRACTOR: YASAN CO.

TOWER TYPE: TENSION YTM60

SECTION OF TOWER: TOP BASIC BODY

DESIGN: YASAN ENG.

DRAWN: M.GHASEMI

CHECKED: A.R.ARFE

APPROVED: M.R.GHORBANI

DATE: 1397/08/07

DRAWING NO.: RM1-00-00-YTM60-E-00-01

YASAN