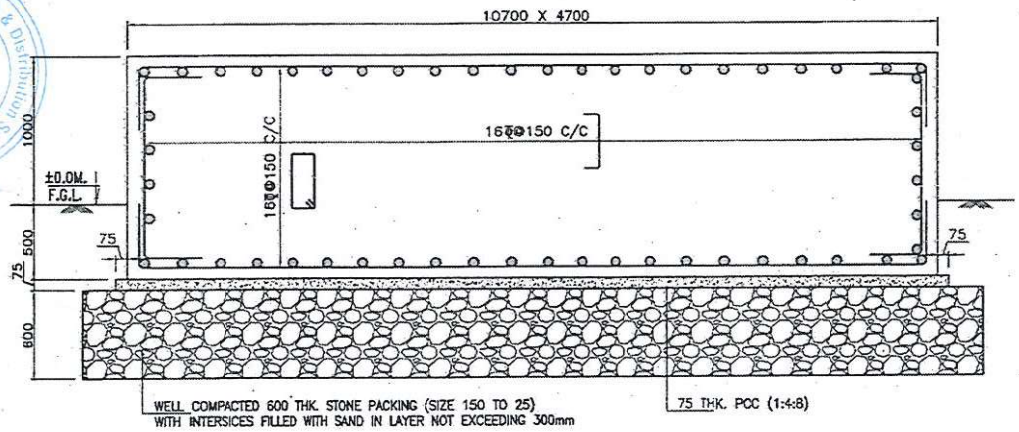
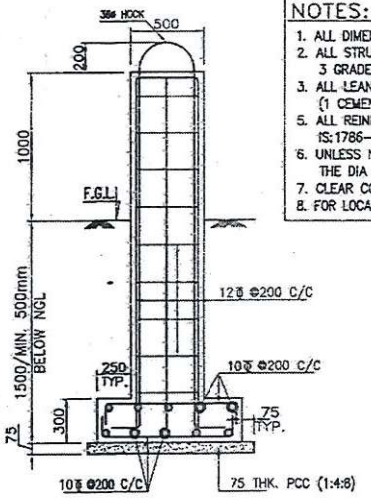
DFOGS DRAWING NO. :5427PS088-ITA-400-STD-SCI-57170-CIV-1801



SECTION A-A

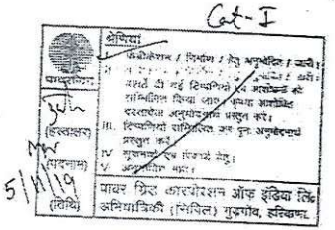


SECTION B-B

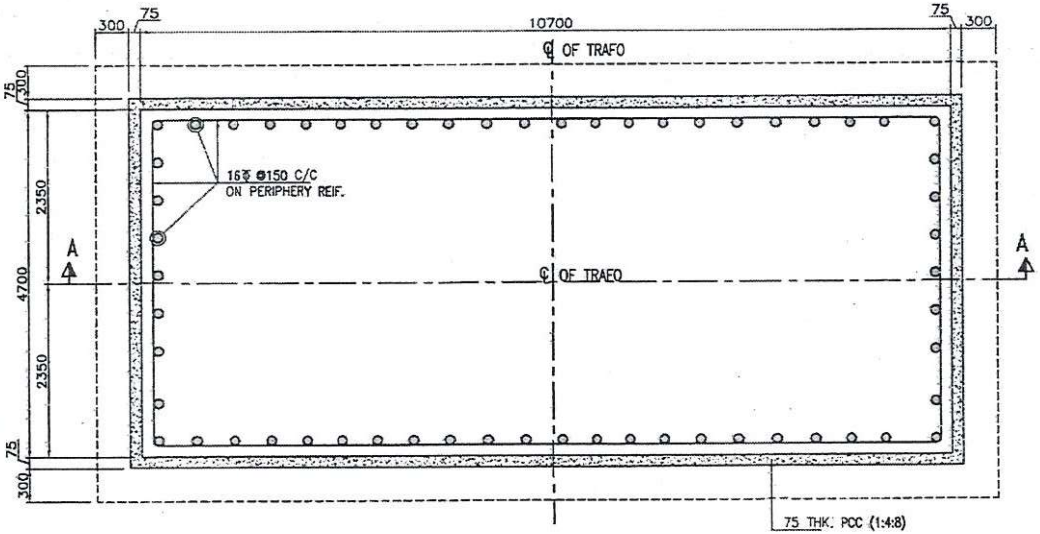
NOTES:-

1. ALL DIMENSIONS ARE IN MM. UNLESS NOTED OTHERWISE.
2. ALL STRUCTURAL CONCRETE SHALL BE 1:1.5:3 (1 CEMENT: 1.5COARCE SAND: 3 GRADED STONE AGGREGATE OF 20mm NOMINAL SIZE)
3. ALL LEAN CONCRETE SHALL BE 75MM THK. AND OF GRADE 1:4:8 (1 CEMENT 4: COURSE 8: GRADED STONE AGGREGATE 40mm NOMINAL SIZE)
5. ALL REINFORCEMENT STEEL BARS (DENOTED AS ϕ) SHALL CONFORM TO IS:1786-1985 OF GRADE Fe 415 OR TMT BARS OF EQUAL GRADE. Fe-500
6. UNLESS NOTED OTHERWISE LAP/ANCHOR LENGTH SHALL BE 50 TIMES THE DIA OF BAR.
7. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE 50 MM.
8. FOR LOCATION OF DG SET FOUNDATION REFER LAYOUT OF RESPECTIVE SUBSTATION.

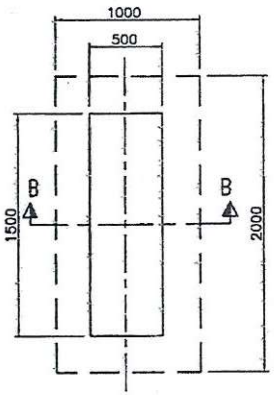
Cat-I



Sr. DGM (Opn.) (Civil) Jan 5/11/19



FOUNDATION PLAN



PLAN OF PULLING BLOCK

CONTROLLED COPY

☑ APPROVAL	☐ AS BUILT
☐ PROTO	☐ CONSTRUCTION
☐ PLANNING	☐ REFERENCE
☐ MANUFACTURING	☐ INDENT
☐ RECORD	☐ EXECUTION

GE T&D India Limited
Dt. 25/10/2019 AUTH. SIG.

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POWER GRID CORPORATION OF INDIA LTD.

REFERENCE DRAWING NO.	DESCRIPTION	GENERAL NOTES

REV.	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED	STATUS
R0	FIRST ISSUE	25.10.18				FOR APPROVAL

CLIENT: उत्तर क्षेत्र वितरण प्रणाली / NORTH REGION TRANSMISSION SYSTEM / POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)

3rd FLOOR, PLOT No.-2, SECTOR-29, GURGAON-122 001 (HARYANA).

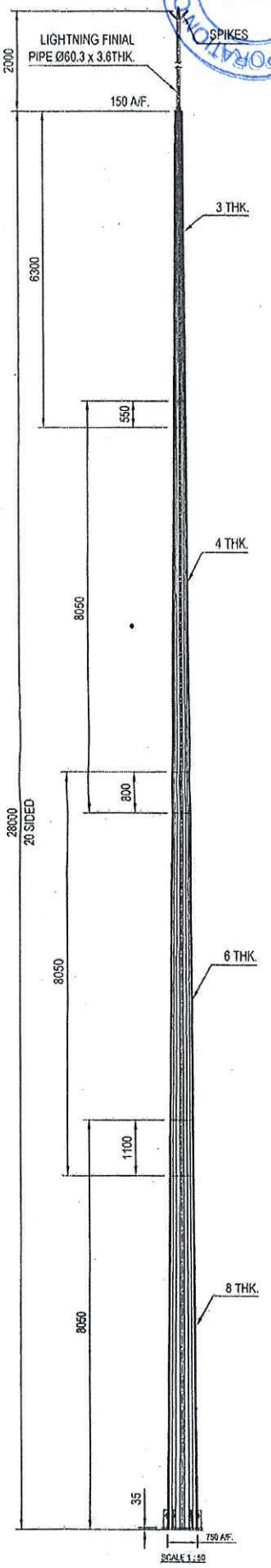
PROJECT: Substation package-II for Extension of a)Kaithal-PG, b)Kaithal-BBMB, c)Jagraon-PG, d)Bhiwani-PG under NRSS-XXXIV; Extension of Nagarur under Eastern Grid Scheme; Extension of Amritsar-PG under NRSS-XXXI Part-B; Extension of 2nd-PG under Strengthening in NR-WR Transmission Corridor scheme for HPPs in Chhattisgarh and 1*500MVA ,400/220/33 kV 3 Ph spare transformer at Kanpur(PG) under Augmentation of Transformer in Northern Region Part-A

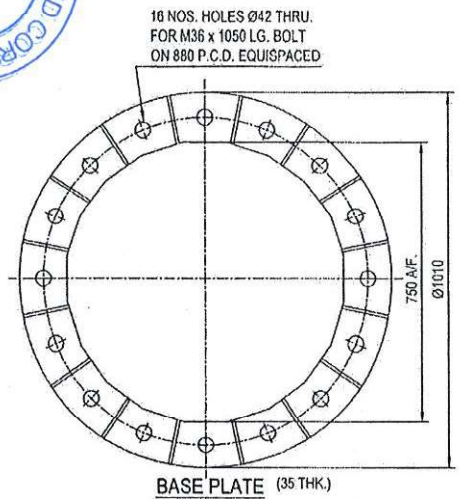
LOA No.: CC-CS/321-NR2/SS-2797/3/01/NOA-I/3328 DATED:23.8.2018

TITLE: TYP. PLATFORM DETAILS OF SPARE 315/500 MVA TRANSFORMER AT ITARSI SUBSTATION.

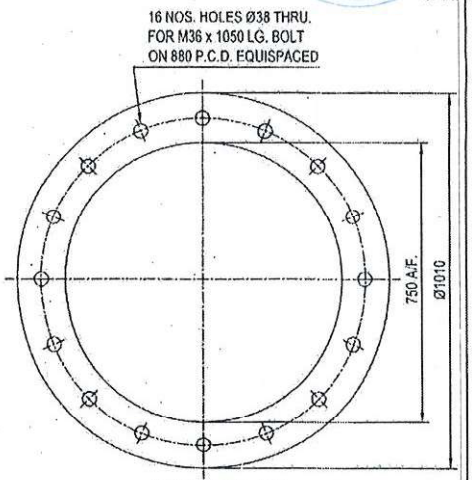
A3 | GET & D INDIA LTD. (JOINT VENTURE OF GE T&D INDIA LTD. AND POWER GRID CORPORATION OF INDIA LTD.) | DRAWING No. 5427PS088-ITA-400-STD-SCI-57170-CIV-1801 | TOTAL SHEETS 001 | SHEET No. 001 | REV. R0 | SCALE 1:100

289

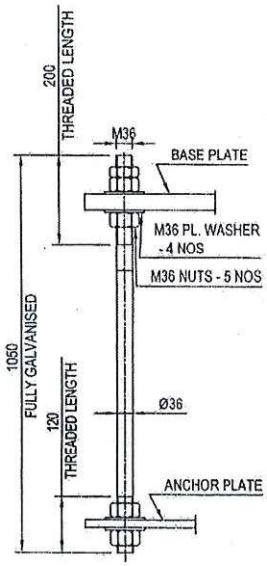




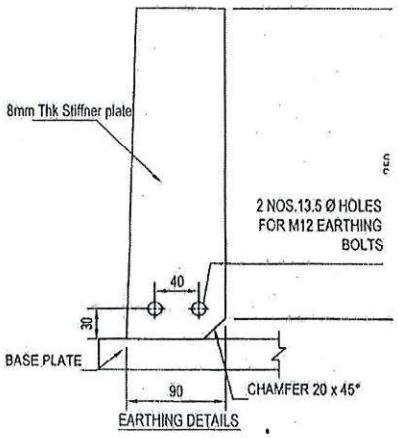
BASE PLATE (35 THK.)
SCALE 1 : 12



ANCHOR PLATE (10 THK.)
SCALE 1 : 12



FOUNDATION BOLT
M36 x 1050LG.
SCALE - 1 : 10



EARTHING DETAILS

NOTES :

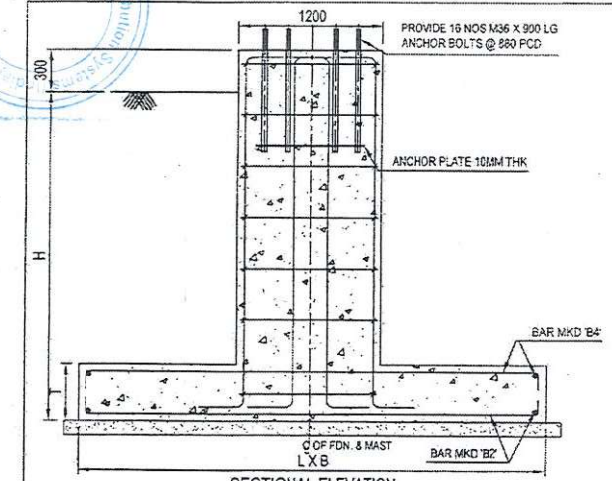
1. ALL DIMENSION ARE IN MM.
2. DESIGN STANDARD : IS 800 2007 (LSM)
3. MATERIALS AND FINISH AS PER SPECIFICATION:
   - 3.1 YIELD STRENGTH OF SHAFT MATERIAL IS MIN:355 MPA
   - 3.2 STRENGTH OF FOUNDATION BOLT MATERIAL SHALL BE AS PER 6.8 GRADE
4. FINISH : HOT DIP GALVANISED AS PER SPECIFICATION.
   - 4.1 SHEET THICKNESS B/W 2MM UPTO 5MM: ZINC COATING TO BE 460 GM/M2
   - 4.2 SHEET THICKNESS > 5MM: ZINC COATING TO BE 610 GM/M2
5. BASIC WIND SPEED : 47 M/SEC. AS PER IS : 875
6. WELDING : SUBMERGED ARC WELDING FOR SHAFT.
7. THERE SHALL BE ONE OR MORE LONGITUDINAL WELDS DEPENDING ON THE AVAILABILITY OF SHEET.
8. FOUNDATION BOLTS SHALL BE OF 6.8 GRADE.
9. IN CASE OF NON AVAILABILITY OF MATERIALS OF DESIRED SIZE / THICKNESS, MATERIAL OF HIGHER SIZE / THICKNESS MAY BE USED.

APPROVED BY ED(Engg-SS/TL/CVL & FOA) VIDE NOTE SHEET NO: CC/ENGG/CVL/2019/STD/03 DATED 16.10.19

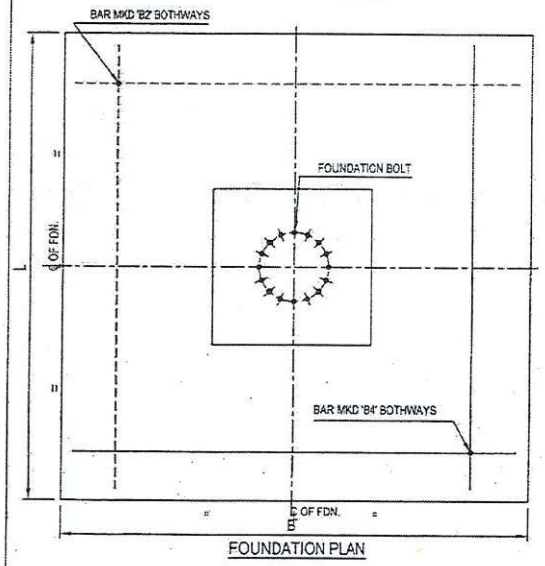
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

TITLE : POLE TYPE LIGHTNING MAST (30M HIGH & 47M/S)

DRAWING NO.: C/ENGG/STAN/LM-30M-47-POLE/01 | SCALE: NTS | REV: 0

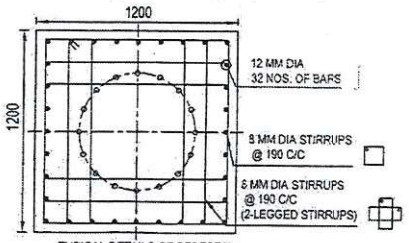


SECTIONAL ELEVATION



FOUNDATION PLAN

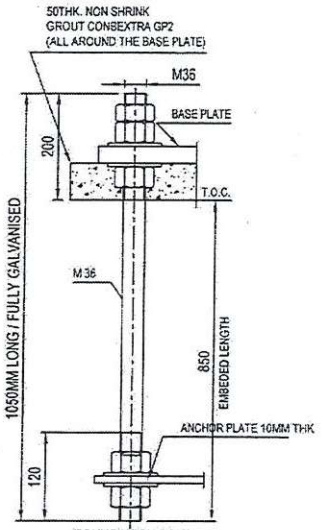
BEFORE CASTING THE FOUNDATION, VERIFY THE DIMENSIONS OF FOUNDATION BOLTS LIKE DIA, QTY & P.C.D. AND ANCHORE PLATE, WITH RESPECT TO THE DIMENSIONS MENTIONED IN STRUCTURAL DRAWING OF MAST.



TYPICAL DETAILS OF PEDESTAL

LM Mkd.	HEIGHT (m)	FOUNDATION DIMENSIONS & REINFORCEMENT					DEPTH OF FDN. FROM FGL (H)
		LENGTH "L" (m)	WIDTH "B" (m)	THICK "T" (m)	BOT R/F "B2"	TOP R/F "B4"	
LM1	30	4.5	4.5	0.55	12T @ 100 C/C	10T @ 100 C/C	2.0

FOUNDATION LOADING AT THE BASE OF MAST		
WIND SPEED	M/SEC	47
BENDING MOMENT.....	KN-M	473.0
HORIZONTAL SHEAR.....	KN	39.0
VERTICAL LOAD	KN	42.0
NET S.B.C OF SOIL	T/SQM	8.0



FOUNDATION BOLT
M36 x 1050LG (GRADE 6.8)
ANCHOR BOLT DETAIL
(M36 x 900LG BOLT WITH SN & 4W)

GENERAL NOTES

1. ALL DIMENSIONS ARE IN MM & LEVELS ARE IN METER.
2. MATERIAL OF CONSTRUCTION : CONCRETE - M-25
   REINFORCEMENT - Fe-500.
   P.C.C - 1:4:8 (75 MM THICK)
3. NOMINAL COVER SHALL BE AS FOLLOWS

DESCRIPTION	TOP	BOTTOM	SIDES
FOUNDATION	50	50	50
PEDESTAL	50	-	50

4. MINIMUM LAP LENGTH OF BARS SHALL BE 50 X DIA, UNLESS OTHERWISE STATED.
5. FOUNDATION SHOULD REST ON VIRIGIN SOIL, IF SAID S.B.C IS NOT AVAILABLE AT SPECIFIED FOUNDATION LEVEL, IT SHOULD BE TAKEN DEEPER AS PER DIRECTION OF E-I-C.
6. FOUNDATION IS DESIGNED CONSIDERING NET S.B.C- 8 T/SQM.
7. PLEASE VERIFY THE BOLT DETAILS BEFORE CASTING THE FOUNDATION.
8. NECESSARY MODIFICATION IF ANY REQUIRED AS PER THE MANUFACTURER OF LM SHALL BE SUITABLY TAKEN CARE AT SITE.

APPROVED BY ED(Engg-SS/TL/CVL & FQA) VIDE NOTE SHEET NO: CC/ENGG/CVL/2019/STD/03 DATED 18.10.19

POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

TITLE : POLE TYPE LIGHTNING MAST FOUNDATION (30M HIGH & 47M/S)

DRAWING NO:. C/ENGG/STAN/LM-30M-47-POLE/FDN/01 | SCALE NTS | REV 0