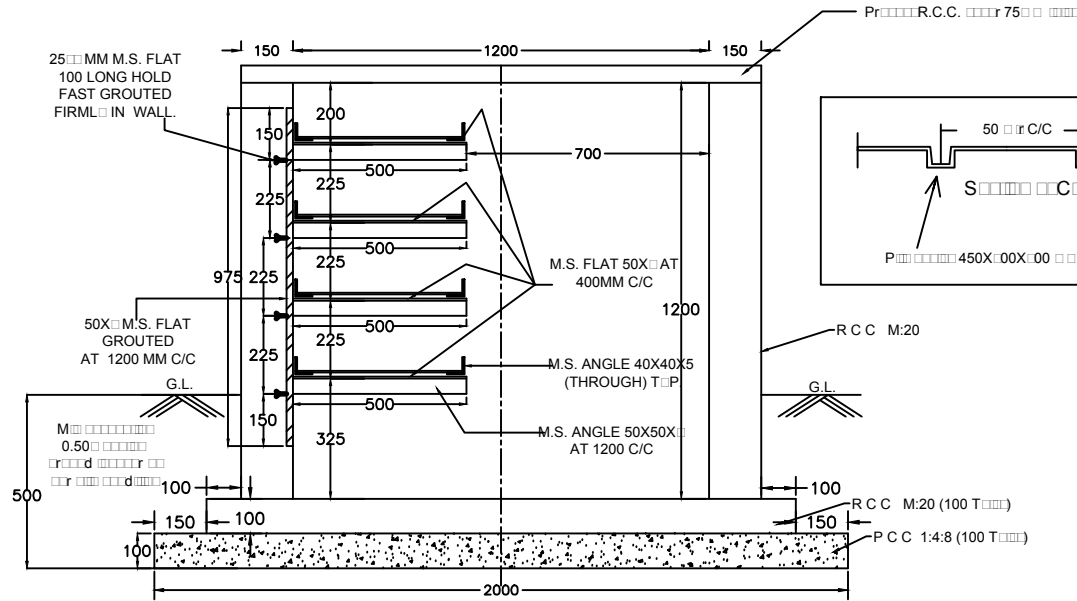


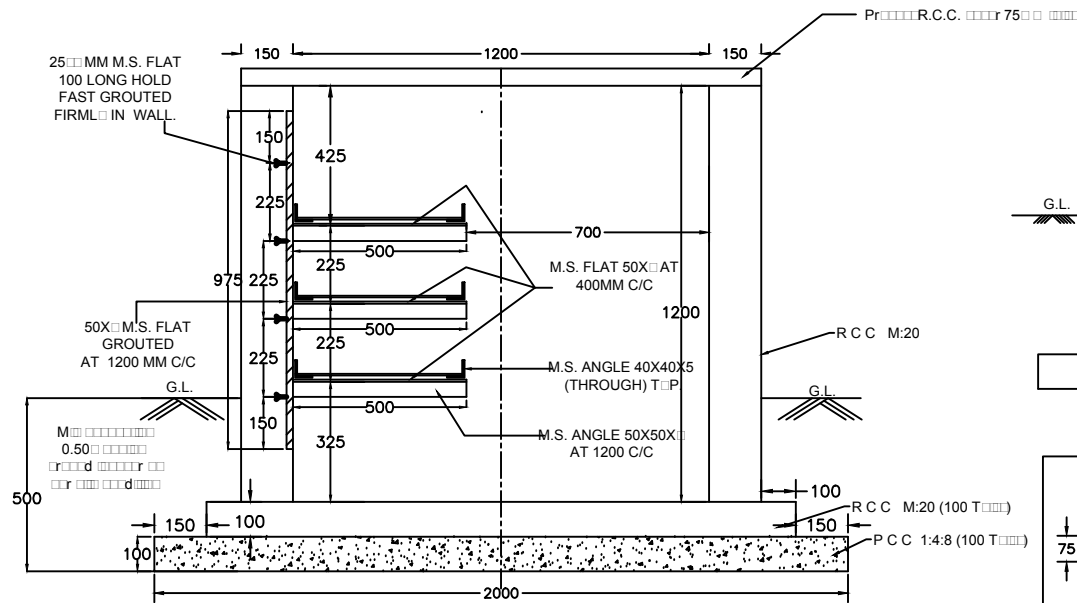
1. ITEM OF M.S. LADDER TRAY IS IN SCOPE OF ELECTRICAL CONTRACTOR.

NOTES:-

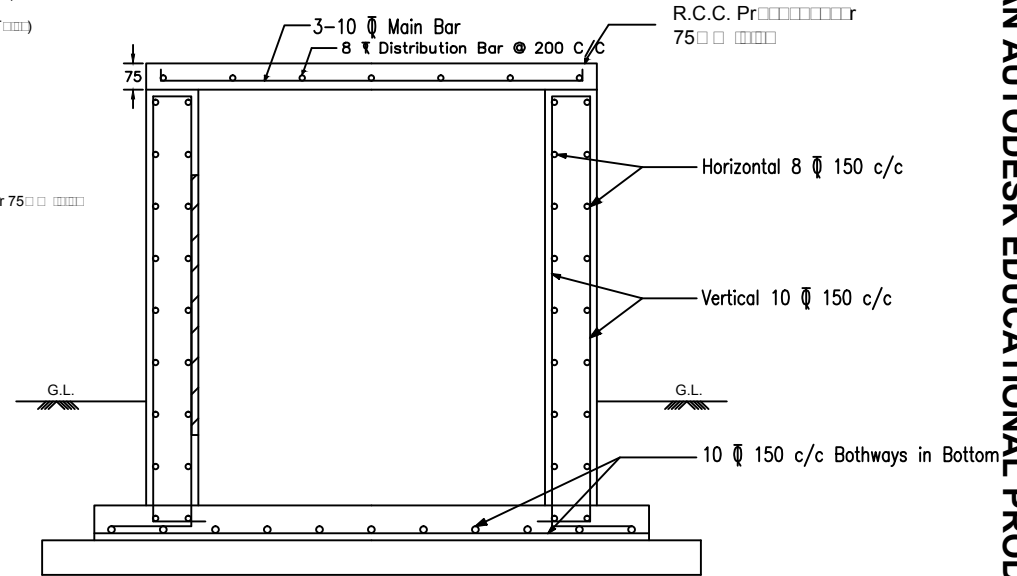
- All dimension are in MM.
- All RCC work is to be carried out as per IS 456(2000).
- CONC.MIX M-20 GRADE
- CEMENT AS PER IS-8112
- Reinforcement bar shall be TMT bars conforming to IS 1786 fe-415 for RCC work. Lap length should be 50 X dia. of bar..
- Sufficient slope (1 in 1000) shall be provided at bottom of cable trench so that rain water (if any) enters may be collected at one point & drain of easily.
- No foundation shall be rest on filledup soil. In case filled soil encountered foundation shall be taken 500mm below virgin soil.
- Clear cover to all reinforcement shall be 20mm.
- Holes shall be kept in RCC wall at required location for entry of cable of equipment as per approved electrical layout.
- Expansion joint to be provided at every 50 mtr length.



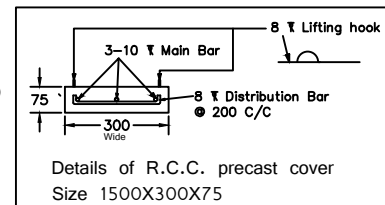
SECTION OF 4 TIER CABLE TRENCH



SECTION OF 3 TIER CABLE TRENCH



RCC DETAILED VIEW



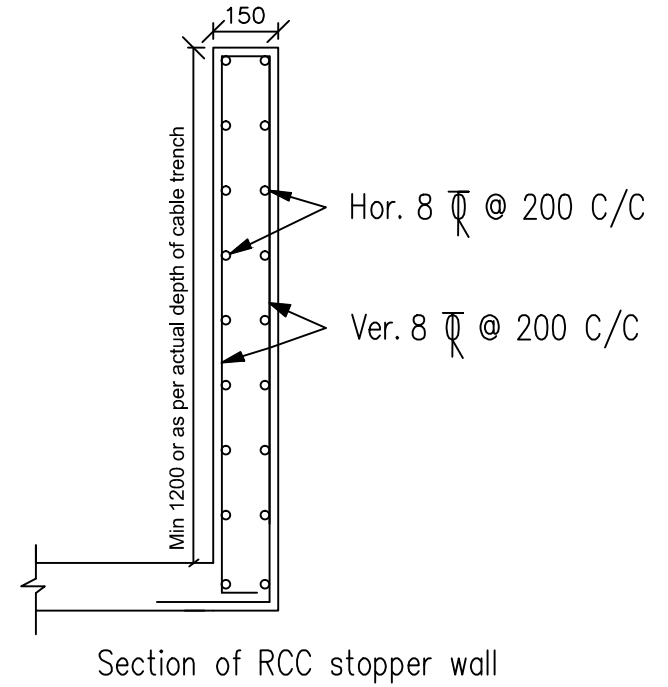
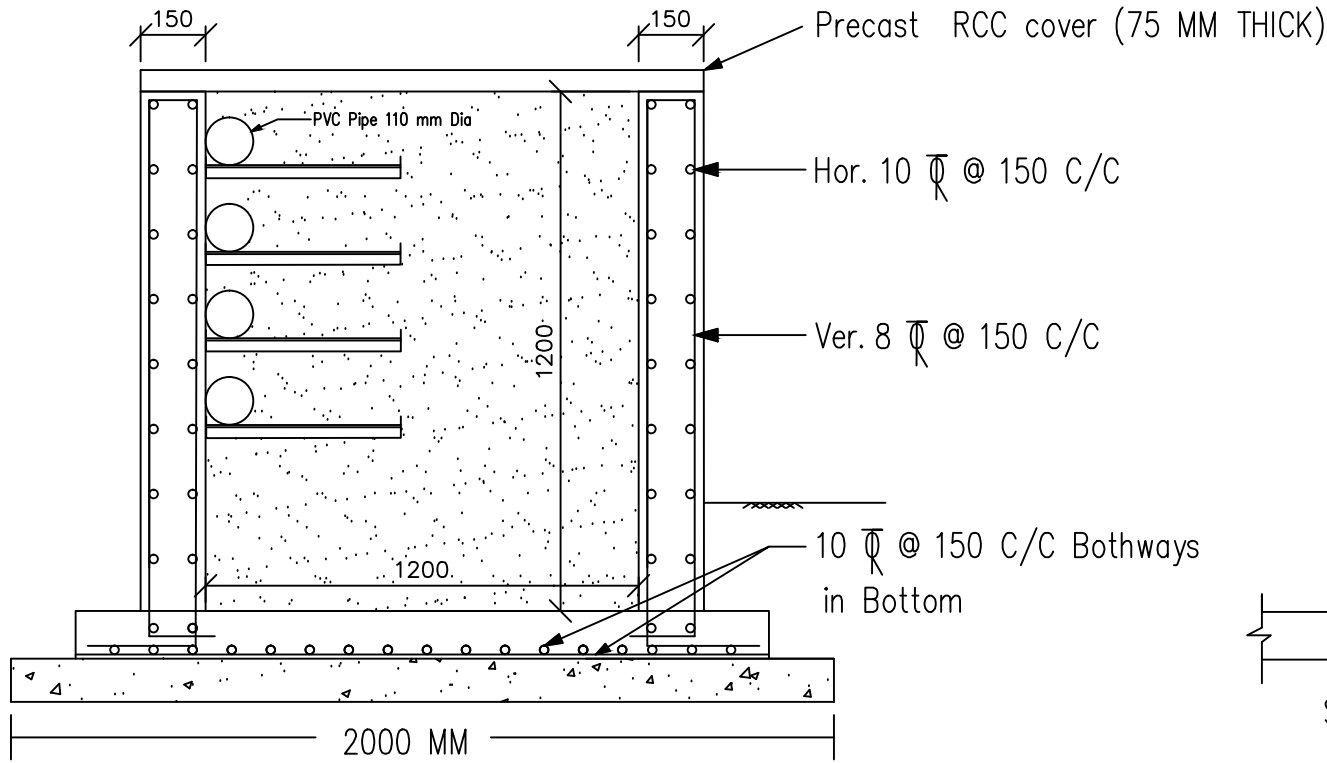
Details of R.C.C. precast cover
Size 1500X300X75

UTTAR GUJARAT VIJ CO LTD			
R.C.C OFFICE MEHSANA			
4-Tier & 3 Tier Cable Trench for Bhagapura Ind. Estate-Detroj			
Drawing traced from GETCO drawing no. 4S-162/CBLT-018 & GETCO/C/48-001/P-03 and prepared by Civil section			
DRAWN:	CHECKED:	APPD:	SI. E. A4
SCALE:	DATE:	DRG. NO:	SHEET: REV: 1 OF 1 R0
N:\E\S\...		UGVCL/R-D-PP/TRENCH/001	

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT


PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT



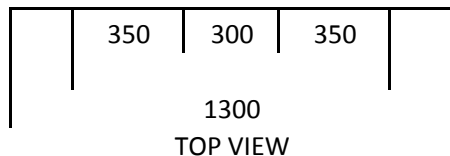
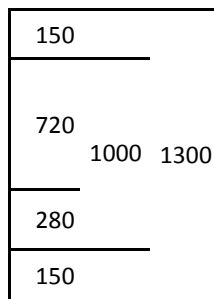
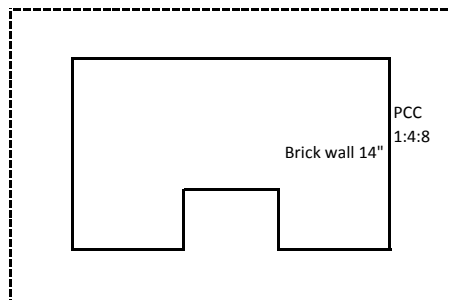
PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

DRAWING OF R.C.C. STOPPER WALL AT END OF CABLE TRENCH

UTTAR GUJARAT VIJ CO LTD R&C OFFICE, MEHSANA				
Details of R.C.C. stopper wall at end of cable trench for U/G power distribution network at Bhagapura Ind. Estate, Detroj				
Drawing traced from GETCO drawing no. 4S-162/CBLT-018 and GETCO/C/48-001/P-03 and prepared by Civil section				
DRAWN:	CHECKED:	APPD:	 SIZE: A4	
SCALE: Not to Scale	DATE:	DRG. NO: UGVCL/R&D-PP/TRENCH/002	SHEET: 1 OF 1	REV: R0

UTTAR GUJARAT VIJ COMPANY LTD.

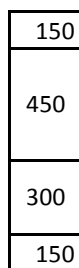
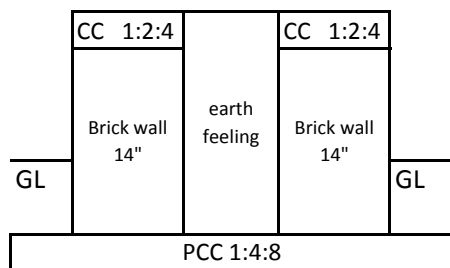
PLINTH DRAWING FOR RMU/TRANSFORMER(Size of plinth may be decided as per requirement)



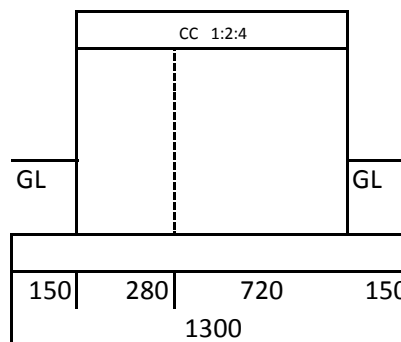
1300
TOP VIEW

Quantity Calculations:

Sr. No.	Item		Qty per each		Qty.	Total qty.	Rates	Total Amt. per each in Rs.
1	Excavation:		1.0985	cmt	1	1.10	106.0	116.44
2	PCC:	1:4:8	0.2535	cmt	1	0.25	2734	693.07
3a	Brick work	1:6	0.525	cmt	1	0.53	3331	1748.78
3b	Brick work	1:6	0.162	cmt	1	0.16	3331	539.62
						0.7	3331	2331.70
4a	Plaster	1:4	3.6	Sq mtr	1	3.6	158	568.80
4b	Plaster	1:4	1	Sq mtr	1	1	158	158.00
						4.6	158	726.80
5	Refilling		1.0985	cmt	1	1.1	53	58.22
6	CC for wall top flooring	1:2:4	0.15	cmt	1	0.15	3865	579.75
							Total	4505.98



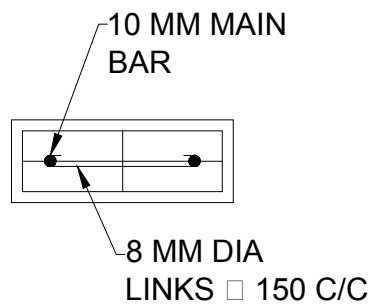
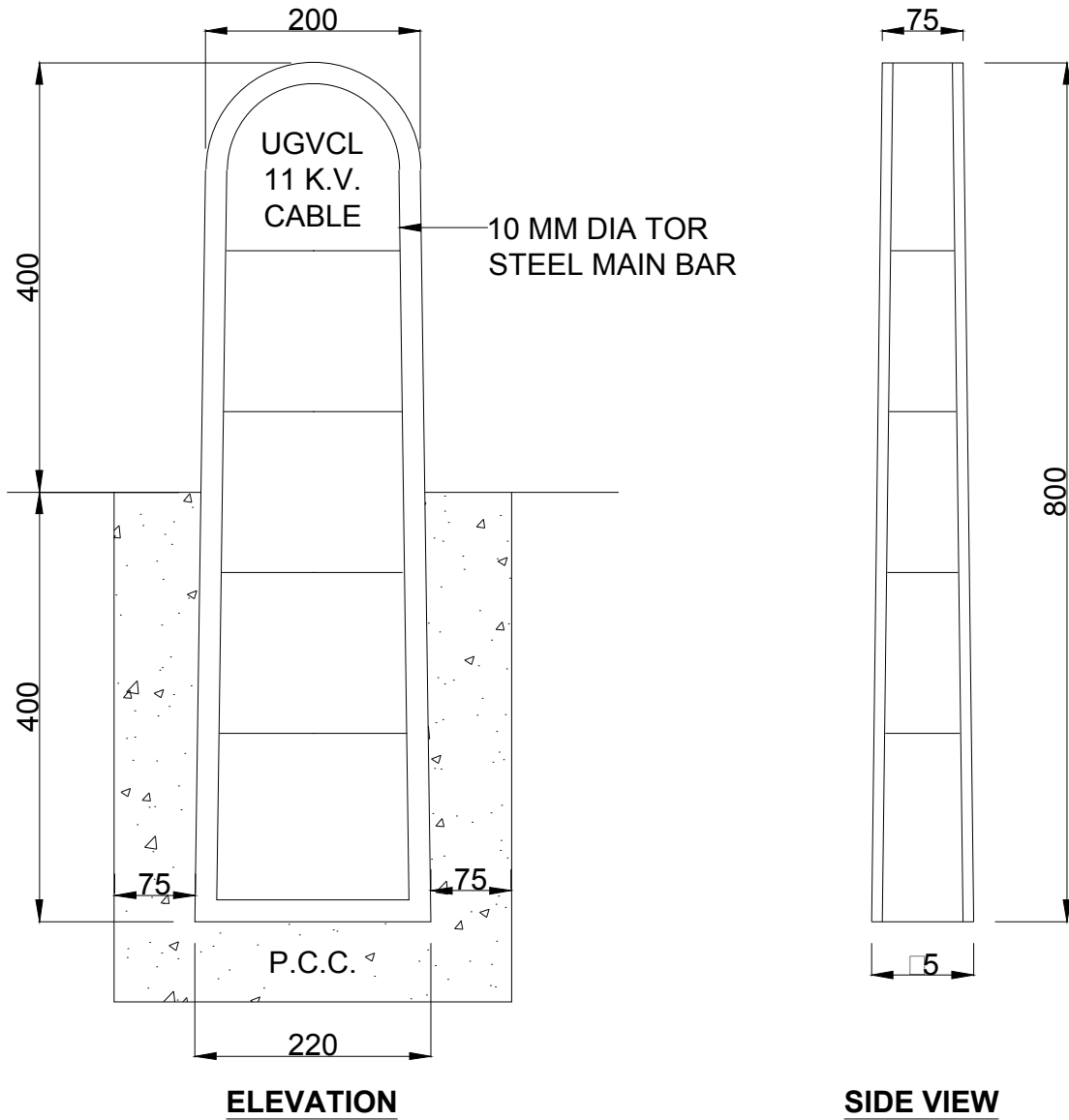
FRONT VIEW



SIDE VIEW

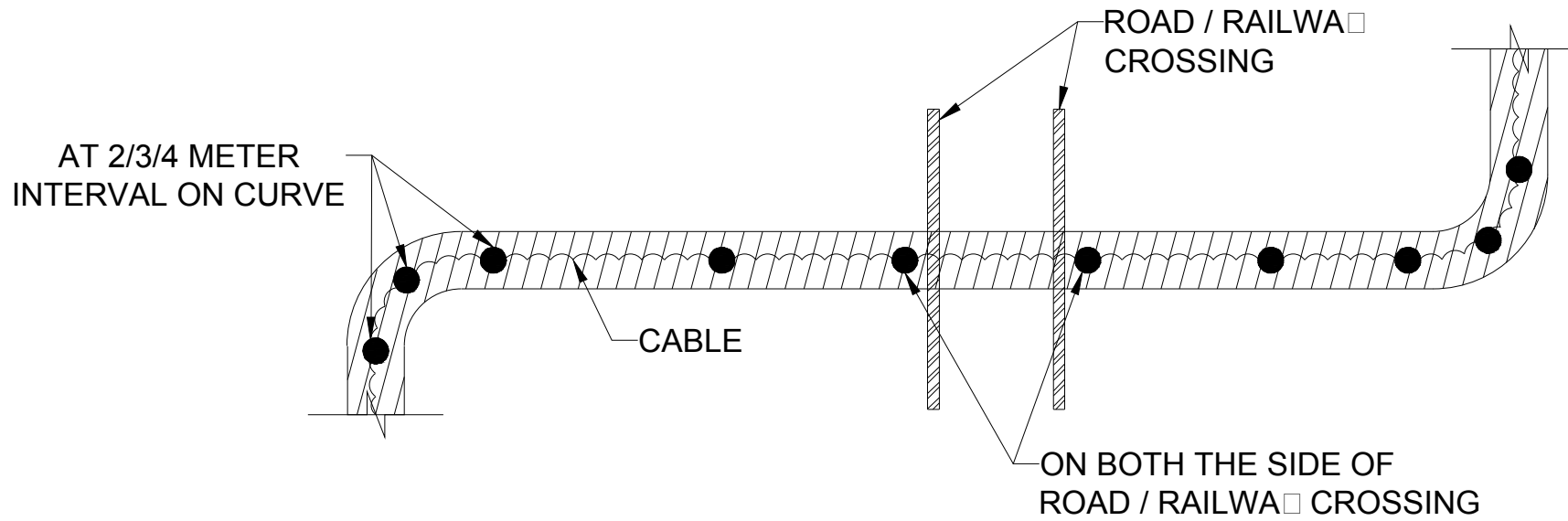
All dimentions are in mm

UTTAR GUJARAT VIJ CO. LTD	
DRAWING FOR PLINTH FOR RMU	
Drg. No.:	R&D/RMU PLINTH-001



ALL DIMENSIONS ARE IN MM




SIGN AND STAMP OF BIDDER	 Gujarat Urja Vikas Nigam Limited <small>CIN L40159GJ23045000045195 ISO 9001:2008 Certified Company</small>
	ITEM DESCRIPTION : ROUTE MARKER
DATE :	DRAWING NO: GUNVL/COMMON UG LABOUR/01




TOP VIEW

ROUTE MARKERS ARE TO BE INSTALLED AT EVER 50 / 100 METERS LENGTH AS PER SPECIFICATION DRAWING AND INSTRUCTION OF ENGINEER - IN -CHARGE. HOWEVER AT CURVE AND ROAD / RAILWAY CROSSING ROUTE MARKERS ARE TO BE INSTALLED AS ABOVE AND SITE SITUATION.

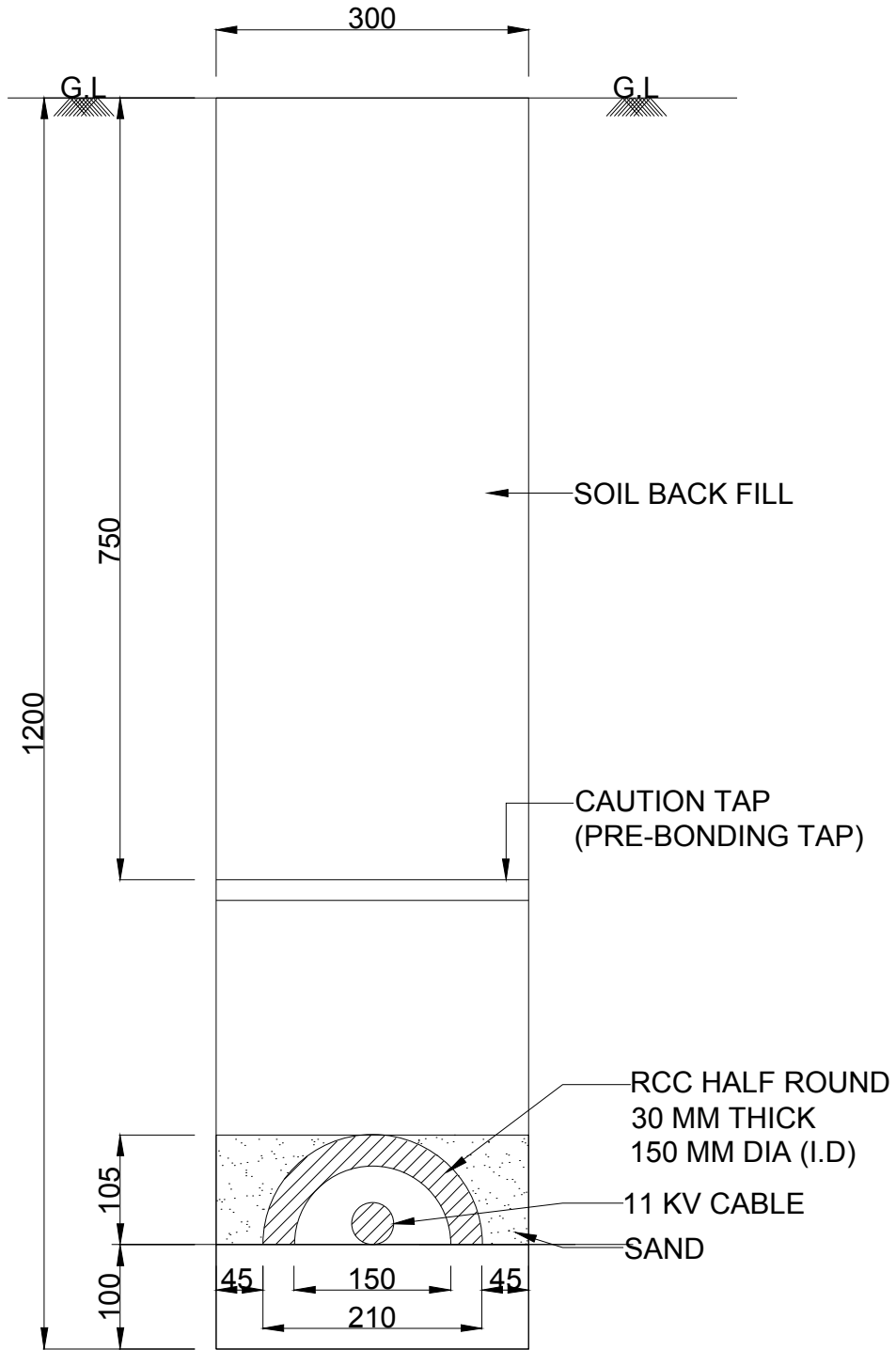
LEGEND :

-  : CABLE
-  : CABLE TRENCH
-  : ROUTE MARKER

ALL DIMENSIONS ARE IN MM

SIGN AND STAMP OF BIDDER	 Gujarat Urja Vikas Nigam Limited <small>GIN (IND)REGD.20045900041102 ISO 9001 - 2008 Certified Company</small>
	ITEM DESCRIPTION : ROUTE MARKER INSTALLATION
DATE :	DRAWING NO: GUNVL/COMMON UG LABOUR/02

**CABLE TRENCH WITH ONE CABLE
(3C X 185 / 240 SQ. MM CABLE)**



ALL DIMENSIONS ARE IN MM



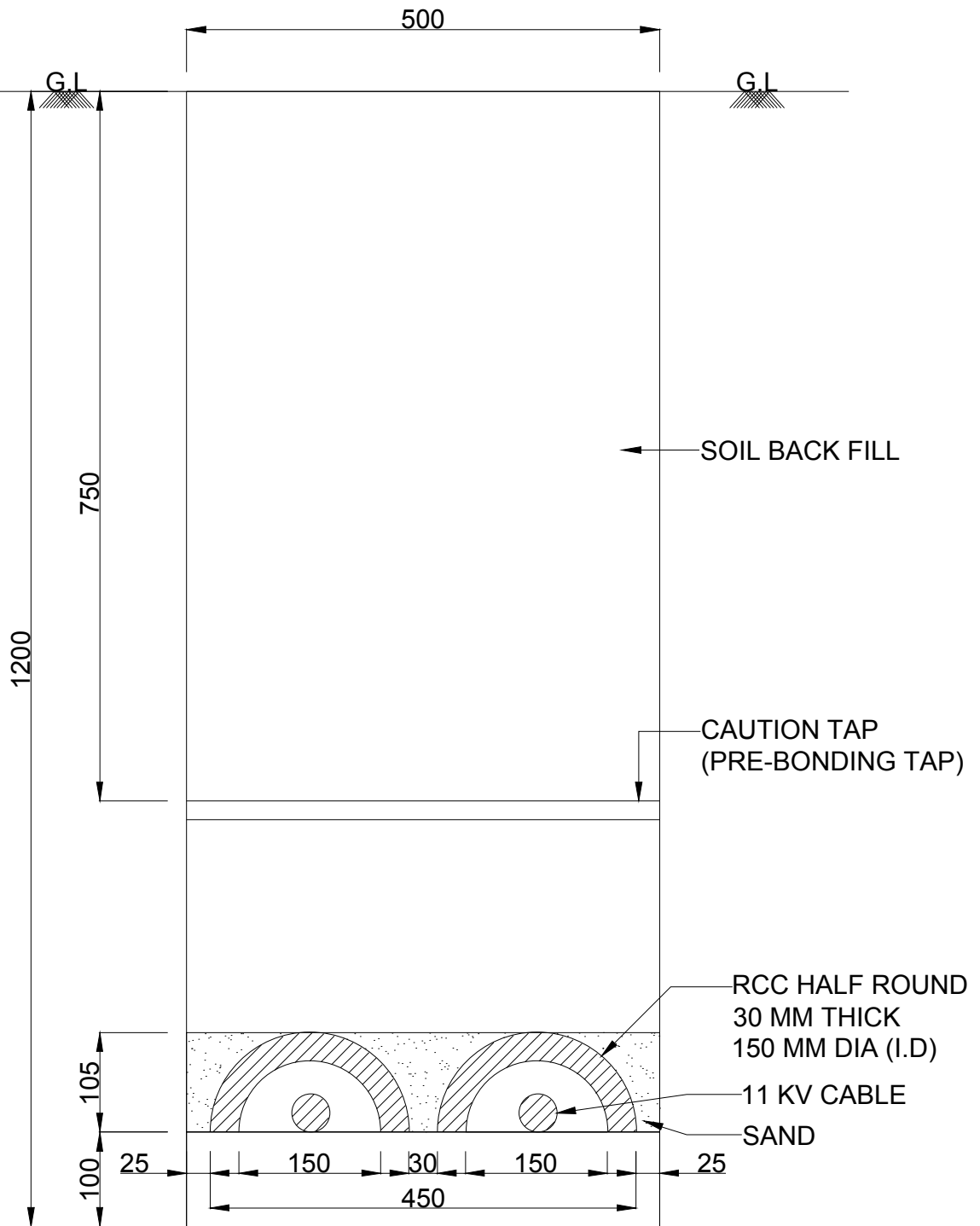
SIGN AND STAMP OF BIDDER

ITEM DESCRIPTION : CABLE TRENCH WITH ONE CABLE


DATE :

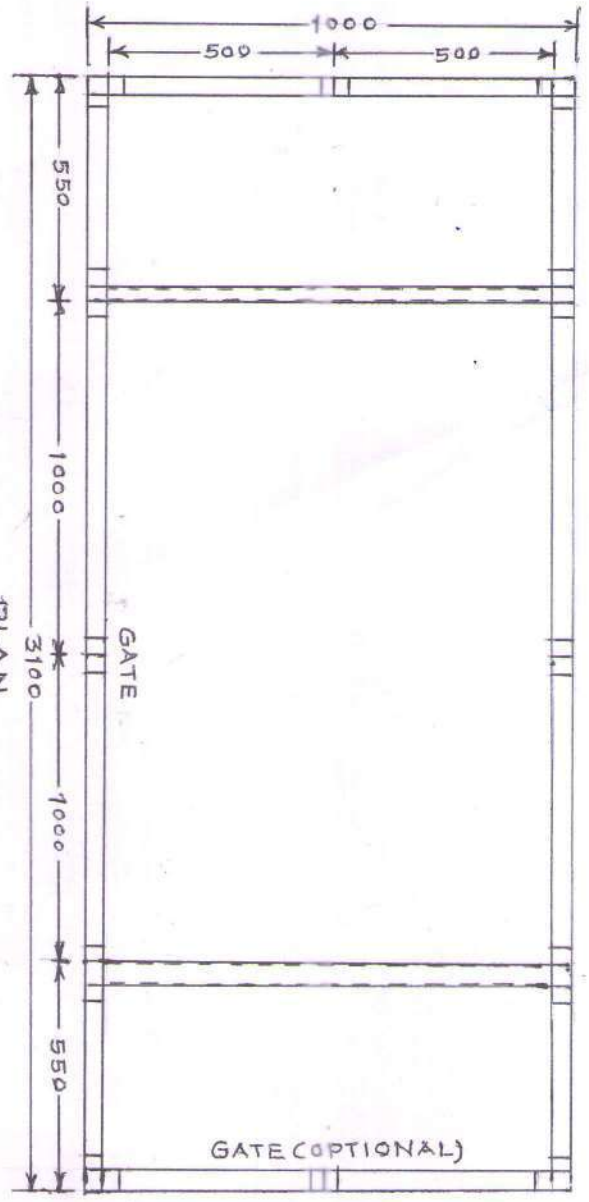
DRAWING NO: GUNVL/COMMON UG LABOUR/03

CABLE TRENCH WITH TWO CABLE
(3C X 185 / 240 SQ. MM CABLE)

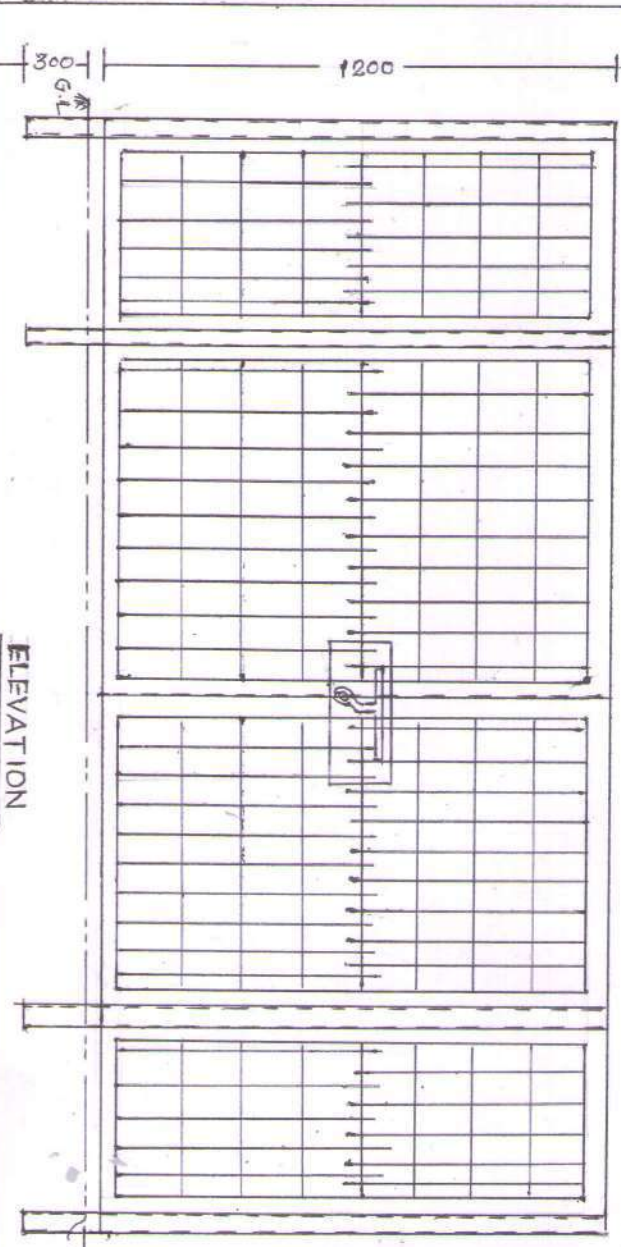


ALL DIMENSIONS ARE IN MM

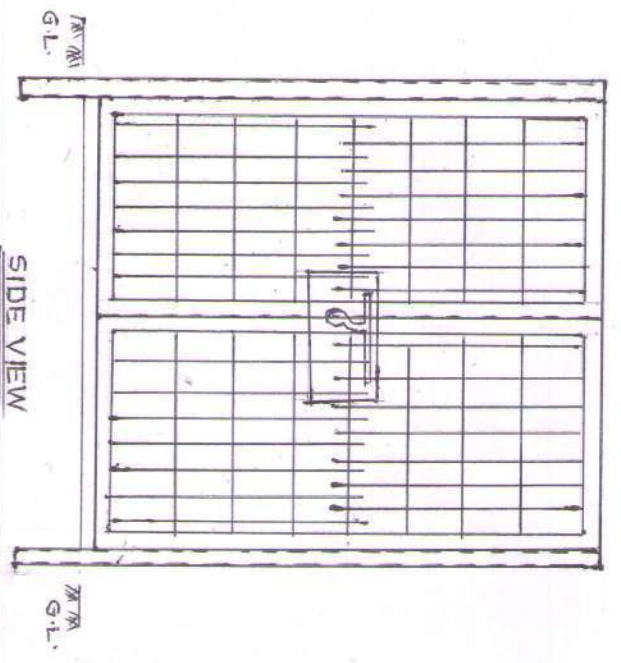
SIGN AND STAMP OF BIDDER	 Gujarat Urja Vikas Nigam Limited <small>CIN U40100GJ2004SGC045195 ISO 9001 - 2008 Certified Company</small>
	ITEM DESCRIPTION : CABLE TRENCH WITH TWO CABLE
DATE :	DRAWING NO: GUNVL/COMMON UG LABOUR/04



PLAN



ELEVATION



SIDE VIEW

UGVCL R&DPP/FEENCINK/ERP/001

FRP FENCING SYSTEM FOR DTS	
DRN BY	A. STANI
CHE BY	UGVCL R.O. OPFI, MEHSANA
APPROV/BY	DRG. NO. E.E. DT. 12.14

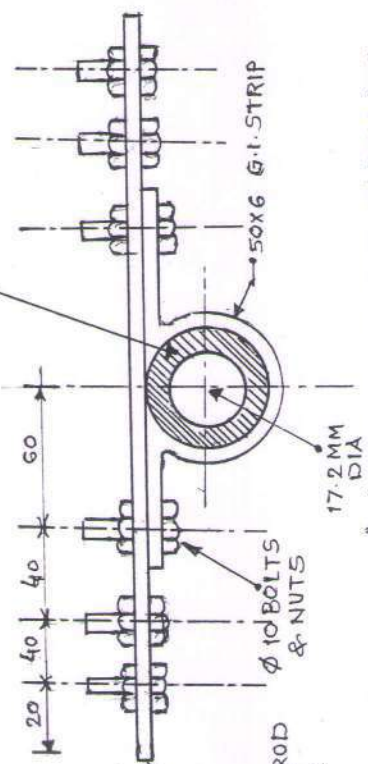
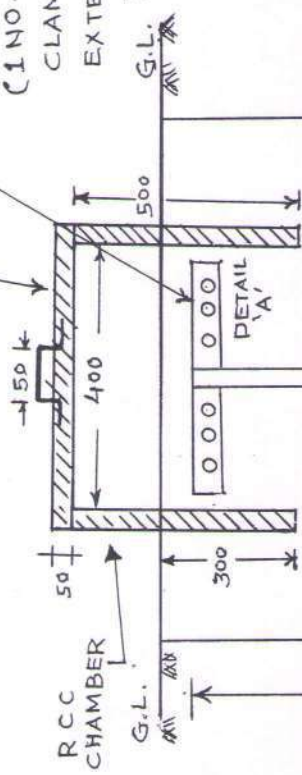
R. B. Patel
 Executive Engineer (R&D)
 UGVCL, R&C Office,
 Mehsana.

RCC CHAMBA PANEL

50 X 6 MM G.I. STRIP CLAMP WITH 3 NOS. 12 X 25 BOLTS & NUTS ON BOTH SIDE.

(1 NO. ON BOTH SIDE FOR CLAMPING & 2 NOS FOR EXTERNAL CONNECTION BY USING 50 X 6 MM. G.I. STRIP.

AFTER FIXING SURFACE SHOULD COVERED WITH BITUMIN OR GREASE



DETAIL "A" FOR CU-BONDED EARTH ROD FOR PIPE Electrode it may be different

COPPER BONDED EARTH ROD (17.2 MM X 3 MTR) OR PIPE ELECTRODE.

GROUND ENHANCING MATERIAL

100MM X 3MTR. BORE

EXISTING NORMA SOIL

Earth Pit Installation Procedure for Normal Soil for Cu-bonded Earth Rod. (Dia of pipe hole for other cases may be different.)

1. Auger a 100 mm. dia hole to depth upto 2850 mm.
2. Drop the earth rod down the hole with lower end centered and driven in 150 mm.
3. Fill the hole using ground Enhancement Material around the rod.
4. Allow it to dry to enable to compound to set before fixing clamp & connections.

UTTAR GUJRAT VIJ CO. LTD

CARBON EARTHING

DRG. NO. UGVCL/R&D-PP/EARTHING/001

CHECKED BY

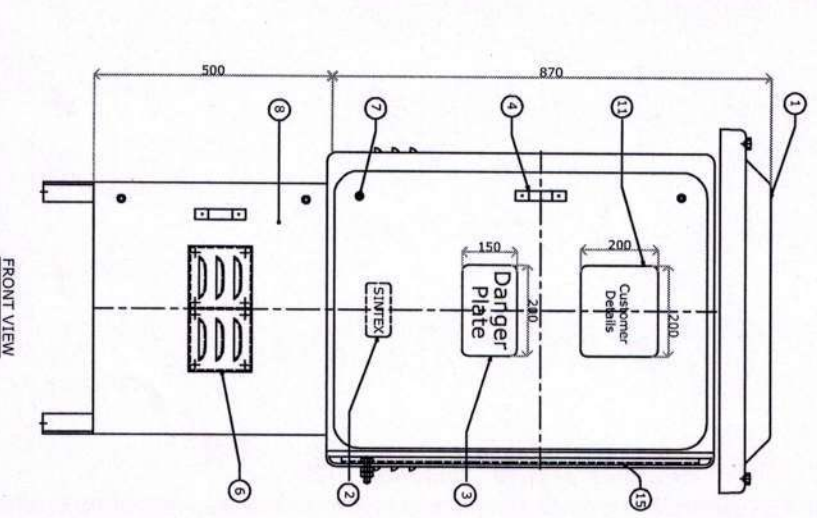
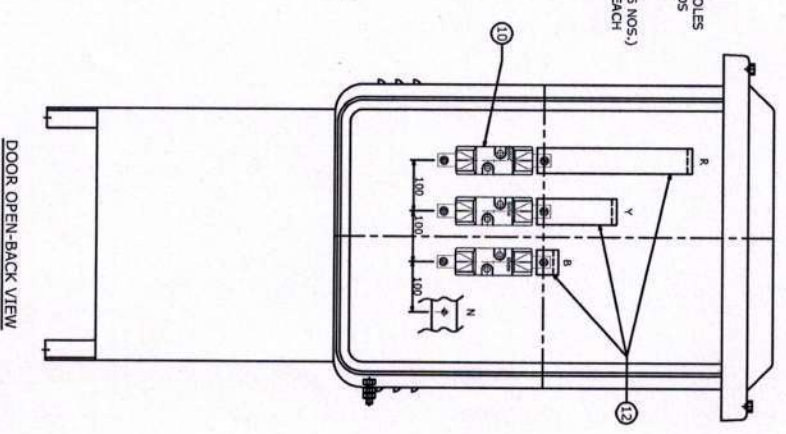
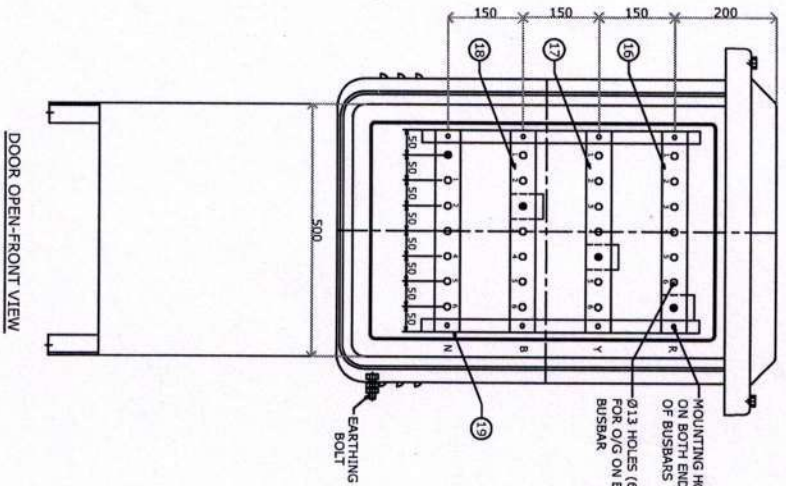
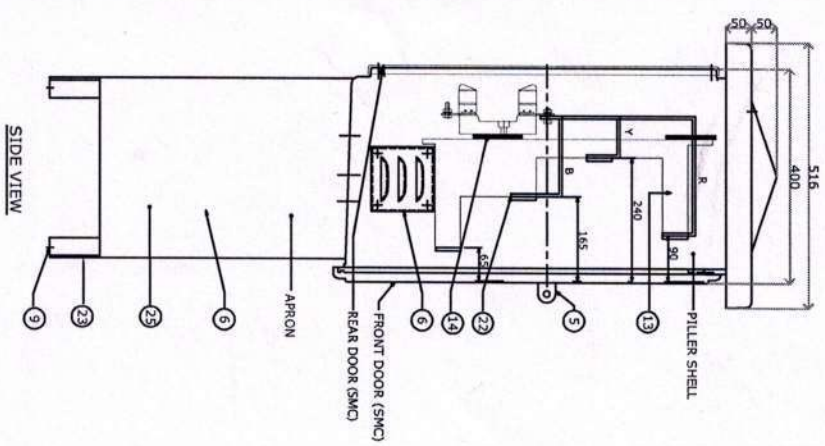
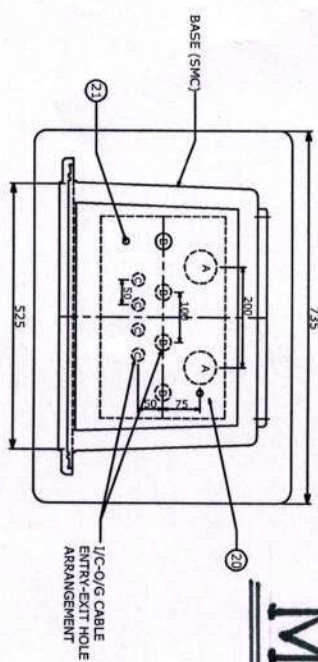
APPROVED BY

DRAWN BY

[Signature]
A.S. JANI

JR. D MAN

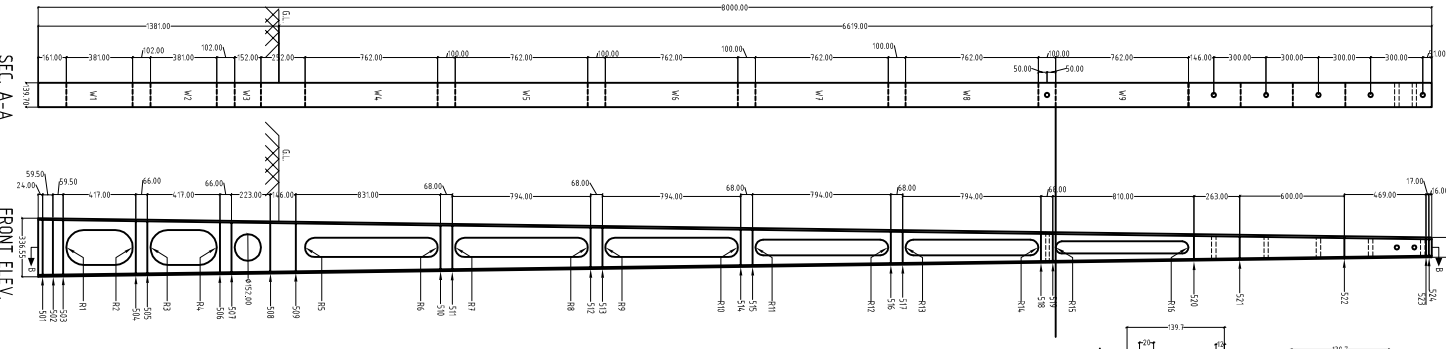
DETAILS OF I/C-O/G CABLE ENTRY-EXIT HOLE ARRANGEMENT
 A=065, 2 NOS. @200 C/C
 B= 032, 4 NOS. @100 C/C
 C=025, 4 NOS. @50 C/C



- NOTES :-**
- (1) ALL BOLTS, NUTS TO BE PROVIDED WITH PLAIN WASHER OF SUITABLE SIZE.
 - (2) PILLAR SHELL SHALL BE MOULDED OF SMC & APRON FRAME WORK SHALL BE FABRICATED USING FRP PULTRUDED SECTIONS & SMC SHEET.
 - (3) COLOUR OF PILLER BOX SHALL BE GREY & THAT OF APRON SHALL BE BLACK.
 - (4) CLEARANCES :- BETWEEN BUS BARS - 85 mm (MIN.)
 BETWEEN BUS BAR & ENCLOSURE WALL - 50 mm (MIN.)

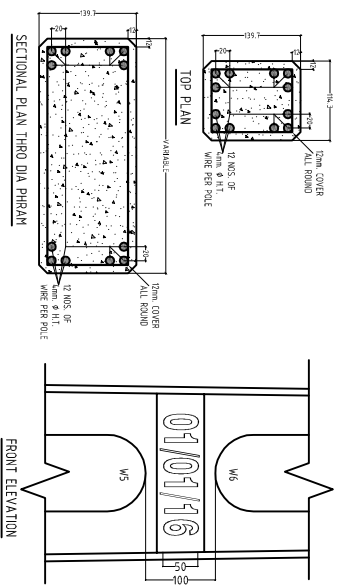
UTTAR GUJARAT VIJ COMPANY LTD
 MINI SECTION PILLER
 DRG.NO.UGVCL/R&D-PP/MSP-001
 CHECKED BY
 APPROVED BY
 DRAWN BY
 A. S. JAIN
 R. B. Patil
 SR. DESIGNER
 Mechanical Dept.

FIG 4mm & H.T. Steel STRIRUPS

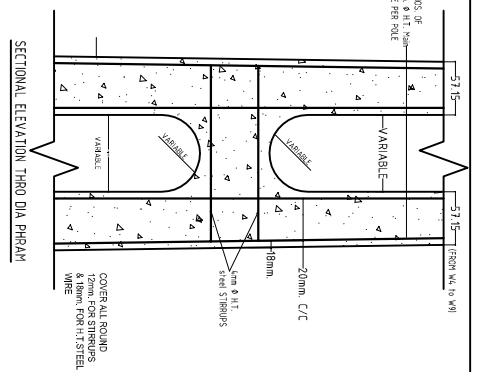


SEC. A-A

FRONT ELEV.



FRONT ELEVATION



SECTIONAL ELEVATION THRO DIA PHEAM

FOR 4mm & H.T. STEEL STRIRUPS

STIRRUP NO. FROM BOTTOM	STIRRUP DIST. FROM BOTTOM	WIDTH OF POLE AT POSITION	RECTANGLE DIMENSION OF STRIRRUP	OVER LAP LENGTH (6d)	TOTAL LENGTH OF STRIRRUP
501	24	335.9	305x110	36	866
502	83	334.2	305x110	36	866
503	14.3	332.6	305x110	36	866
504	560	321.0	290x110	36	836
505	626	319.2	290x110	36	836
506	104.3	307.6	275x110	36	806
507	1109	305.7	275x110	36	806
508	1332	299.5	265x110	36	786
509	14.78	295.5	265x110	36	786
510	2309	272.4	240x110	36	736
511	2377	270.5	240x110	36	736
512	3171	248.5	215x110	36	686
513	3239	246.6	215x110	36	686
514	4033	224.5	190x110	36	636
515	4101	222.6	190x110	36	636
516	4895	200.6	165x110	36	586
517	4963	198.7	165x110	36	586
518	5757	176.6	145x110	36	546
519	5825	174.7	145x110	36	546
520	6635	152.2	120x110	36	496
521	6898	144.9	115x110	36	486
522	7498	128.3	95x110	36	446
523	7967	115.2	85x110	36	426
524	7984	114.8	85x110	36	426
TOTAL LENGTH (MM)					16114

NOTE :-


- 1) THE DIMENSIONS SHOWN ARE IN MM
- 2) ALL STRIRUPS SHALL BE WELDED AT LAPS
- 3) TOTAL NOS. OF STRIRUPS FOR 4mm & H.T. STEEL WIRE SHALL BE 24 NOS. (501 TO 524)
- 4) THE THICKNESS OF WIRE SHOWN AS 570mm SHALL BE FROM WINDOWS W.4. TO W.4 EXCEPT BOTTOM MOST THREE WINDOWS
- 5) APPROXIMATE WEIGHT OF POLE 418kg
- 6) BOTTOM & TOP OF P & S C POLE SHALL BE PAINTED WITH ANTI CORROSIVE BLACK EPOXY BASE BITUMINOUS PAINT.
- 7) STRIRUPS IN POLE SHALL NORMALLY BE 4mm H.T. WIRE IN CASE MANUFACTURER DESIRES HE MAY USE M.S. BARS OF 5mm /6 mm AS SHOWN IN TABLE ABOVE.
- 8) TOTAL WEIGHT OF 4mm H.T. STEEL IS 9825 kg PER POLE CONSIDERED INCLUSIVE OF ALL WASTAGES, END PIECES & ROLLING MARGIN PLUS PIECES OF GAP BETWEEN TWO POLES WHILE FINISHING MATERIALS ACCORDING TO ACTUAL WEIGHT OF EACH COIL IS TO BE CONSIDER AS PER THE TEST REPORT SUBMITTED BY THE SUPPLIER.

WINDOW FORMS

MARK	RADIUS OF CURVATURE	IN MM
R 1	80	
R 2	78	
R 3	78	
R 4	77	
R 5	88.5	
R 6	80	
R 7	76	
R 8	68	
R 9	65	
R 10	53.5	
R 11	53	
R 12	44	
R 13	41.5	
R 14	32	
R 15	29.6	
R 16	24.4	

WEIGHT OF WIRES PER POLE

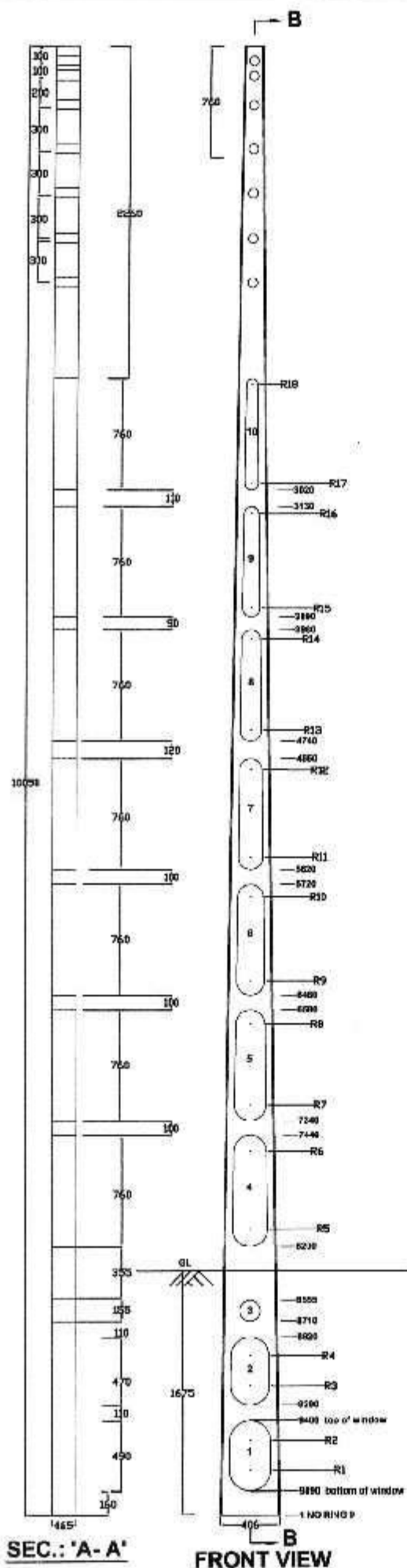
TENSION WIRE	LENGTH (Mtr.)	UNIT WT (kg/mtr)	TOTAL WT. (kg)
4mm DIA. MAIN HT STEEL WIRE	96.01	0.099	9.504
4mm DIA. ... H.T. WIRE	16114	0.099	160


PRESTRESSED CONCRETE POLE-8M/200 KG
 SHOWING DETAILED DIMENSION
 FOR READY MADE POLE SUPPLY

DT: 28-12-15

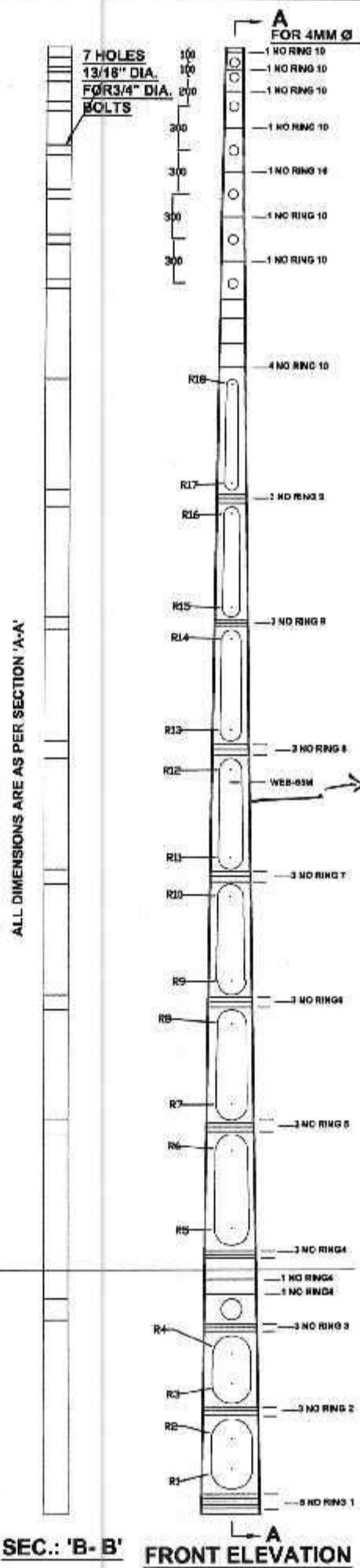
UGVCL/PSC Pole/8 MTR/C-583

R/02



SEC.: 'A-A'

FRONT VIEW



SEC.: 'B-B'

FRONT ELEVATION

ALL DIMENSIONS ARE AS PER SECTION 'A-A'



UTTAR GUJARAT VIJ COMPANY LTD.

Prestressed Concrete Pole 10 Mtr/270Kg.s showing detailed dimensions for readymade PSC Pole.

Regenerated from GEB Drg. no. PKM/PSC/POLE/01/

DRAWN:	CHECKED:	APPD:	SIZE	REV
			A4	R0
SCALE:	DATE:	DRG. NO:	SHEET:	
			1 OF 2	
N. T. S.	18/06/2011	UGVCL/CVIL/10MTR PSC Pole/1		

Drawn by

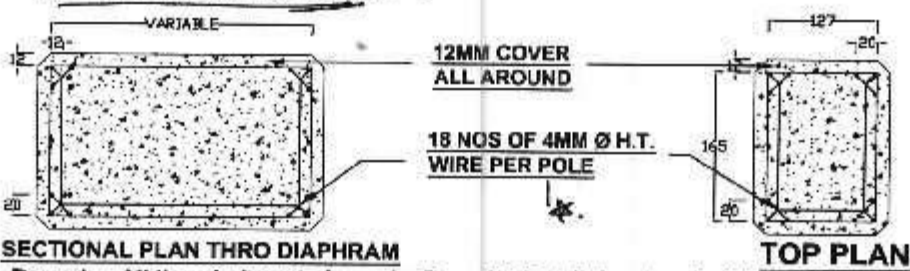
 15/6/11

SR.NO.	NO OF RING	RING SIZE FROM BOTTOM (APPROX)	WINDOW SIZE FROM BOTTOM	WINDOW RADIUS AT TOP / BOTTOM OF WINDOW	
				R2 R1	135 140
1.	5 NOS	390X145	1. $\frac{270}{280} \times 490$		
2.	3 NOS	355X145	2. $\frac{250}{270} \times 470$	R4 R3	$\frac{125}{135}$
3.	3 NOS	315X145	3. 155MMDIA.	---	---
4.	5 NOS	290X145	4. $\frac{220}{230} \times 760$	R6 R5	$\frac{110}{115}$
5.	3 NOS	270X145	5. $\frac{190}{210} \times 760$	R8 R7	$\frac{95}{105}$
6.	3 NOS	250X145	6. $\frac{160}{180} \times 760$	R10 R9	$\frac{80}{90}$
7.	3 NOS	200X145	7. $\frac{135}{155} \times 760$	R12 R11	$\frac{67.5}{77.5}$
8.	3 NOS	170X145	8. $\frac{110}{130} \times 760$	R14 R13	$\frac{55}{65}$
9.	6 NOS	140X145	9. $\frac{85}{105} \times 760$	R16 R15	$\frac{42.5}{52.5}$
10.	11 NOS	110X145	10. $\frac{65}{85} \times 760$	R18 R17	$\frac{32.5}{42.5}$
45 NOS -					

NOTE:-

1. THE DIMENSIONS SHOWN ARE IN MM.
2. ALL STIRRUPS SHALL BE WELDED AT LAPS.
3. APPROXIMATE WEIGHT OF POLE 650 KG.
4. BOTTOM & TOP OF PSC POLE SHALL BE PAINTED WITH ANTICORROSIVE BLACK EPOXY BASE BITUMINOUS PAINTS.
5. 4 MM Ø H.T. STEEL STIRRUPS 45 NOS. *
6. TENSION WIRE 4MM H.T. STEEL -18NOS.
7. CONCRETE GRADE -M-45.
8. WORKING LOAD 270 KG.
9. FACTOR OF SAFETY - 2.5
10. WEB THICKNESS 63MM. *

Handwritten signature and date: 15/6/11



SECTIONAL PLAN THRO DIAPHRAM


TOP PLAN

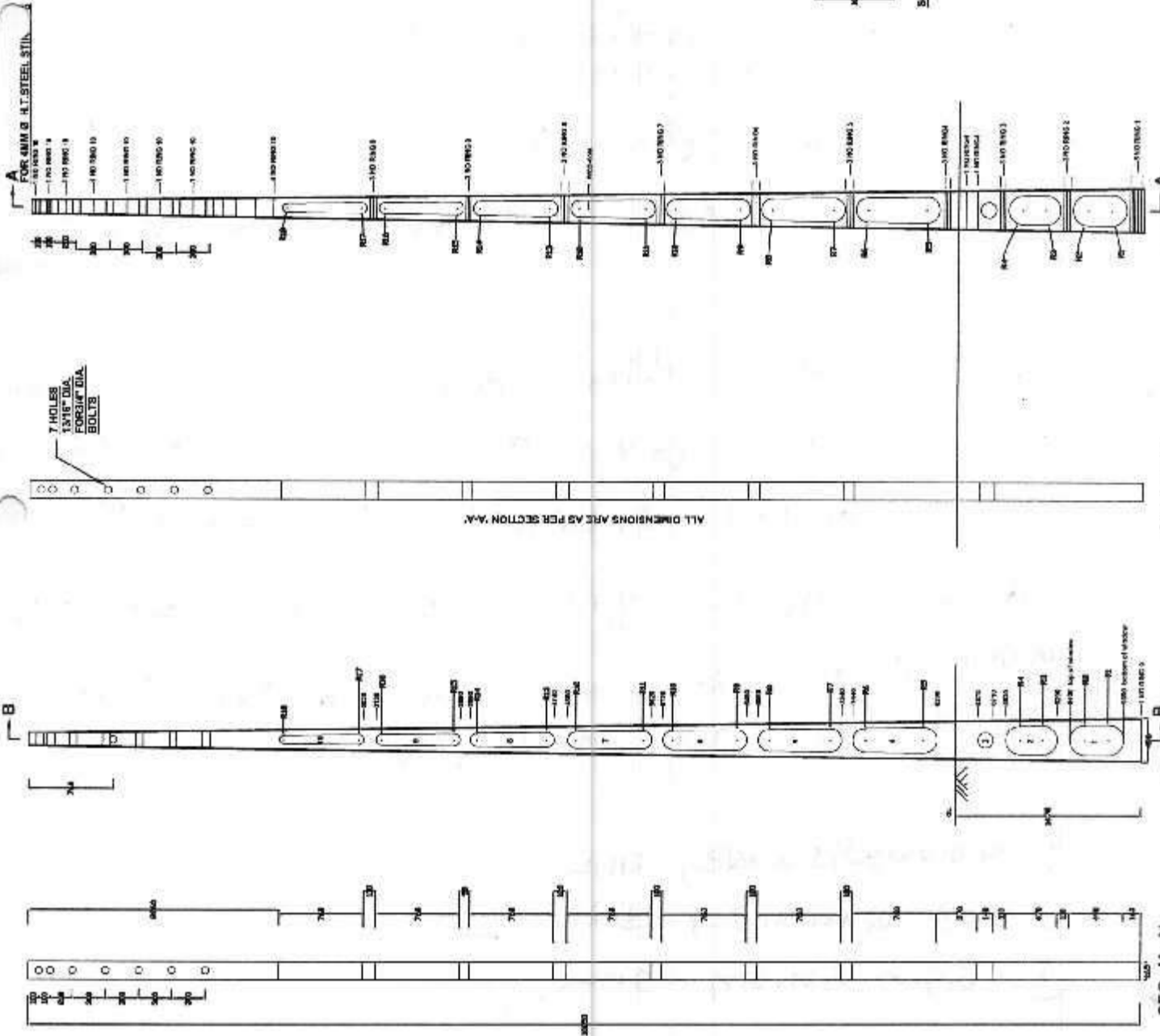
Remarks: All the windows to be make Round & Detail drawing shall be provided to Successful bidder with order / LOI.

UTTAR GUJARAT VIJ COMPANY LTD.

Prestressed Concrete Pole 10 Mtr/270Kg.s showing detailed dimensions for readymade PSC Pole.

Regenerated from GEB Drg. no. PKM/PSC/POLE/01/

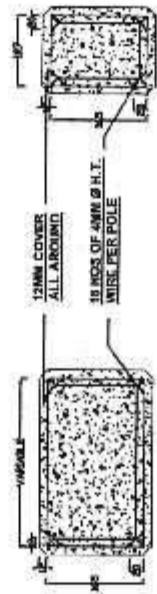
DRAWN:	CHECKED:	APPD:	 SIZE: A4
SCALE:	DATE:	DRG. NO:	
N. T. S.	18/06/2011	UGVCL/CIVIL/10MTR PSC Pole/1	SHEET: 2 OF 2 REV: R0



SR.NO OF RING	RING SIZE FROM BOTTOM (APPROX)	WINDOW SIZE FROM BOTTOM	WINDOW RADIIUS AT TOP / BOTTOM OF WINDOW
1.	5 NOS 390X145	1. 270 X 490 280	R2 R1 135 140
2.	3 NOS 355X140	2. 250 X 470 270	R4 R3 125 135
3.	3 NOS 315X145	3. 155MM DIA.	---
4.	5 NOS 290X145	4. 220 X 760 230	R6 R5 110 115
5.	3 NOS 270X145	5. 190 X 760 210	R8 R7 95 105
6.	3 NOS 250X145	6. 168 X 760 188	R10 R9 80 90
7.	3 NOS 200X145	7. 135 X 760 155	R12 R11 67.5 77.0
8.	3 NOS 170X145	8. 110 X 700 136	R14 R13 95 85
9.	6 NOS 140X145	9. 85 X 700 105	R16 R15 42.0 52.5
10.	11 NOS 110X145	10. 65 X 760 85	R18 R17 32.5 42.5

NOTE:-

1. THE DIMENSIONS SHOWN ARE IN MM.
2. ALL STIRRUPS SHALL BE WELDED AT LAPS.
3. APPROXIMATE WEIGHT OF POLE 650 KG.
4. BOTTOM & TOP OF PSC POLE SHALL BE PAINTED WITH ANTICORROSIVE BLACK EPOXY BASE BITUMINOUS PAINTS.
5. 4 MM Ø H.T. STEEL STIRRUPS 45 NOS.
6. TENSION WIRE -4MM H.T. STEEL -18NOS.
7. CONCRETE GRADE -M-45.
8. WORKING LOAD 270 KG.
9. FACTOR OF SAFETY - 2.5
10. WEB THICKNESS 65MM.



SECTIONAL PLAN THRU DIAPHRAM
TOP PLAN
 Remarks: All the windows to be made Round & Detail drawing shall be provided to Successful bidder with order / L.OI.

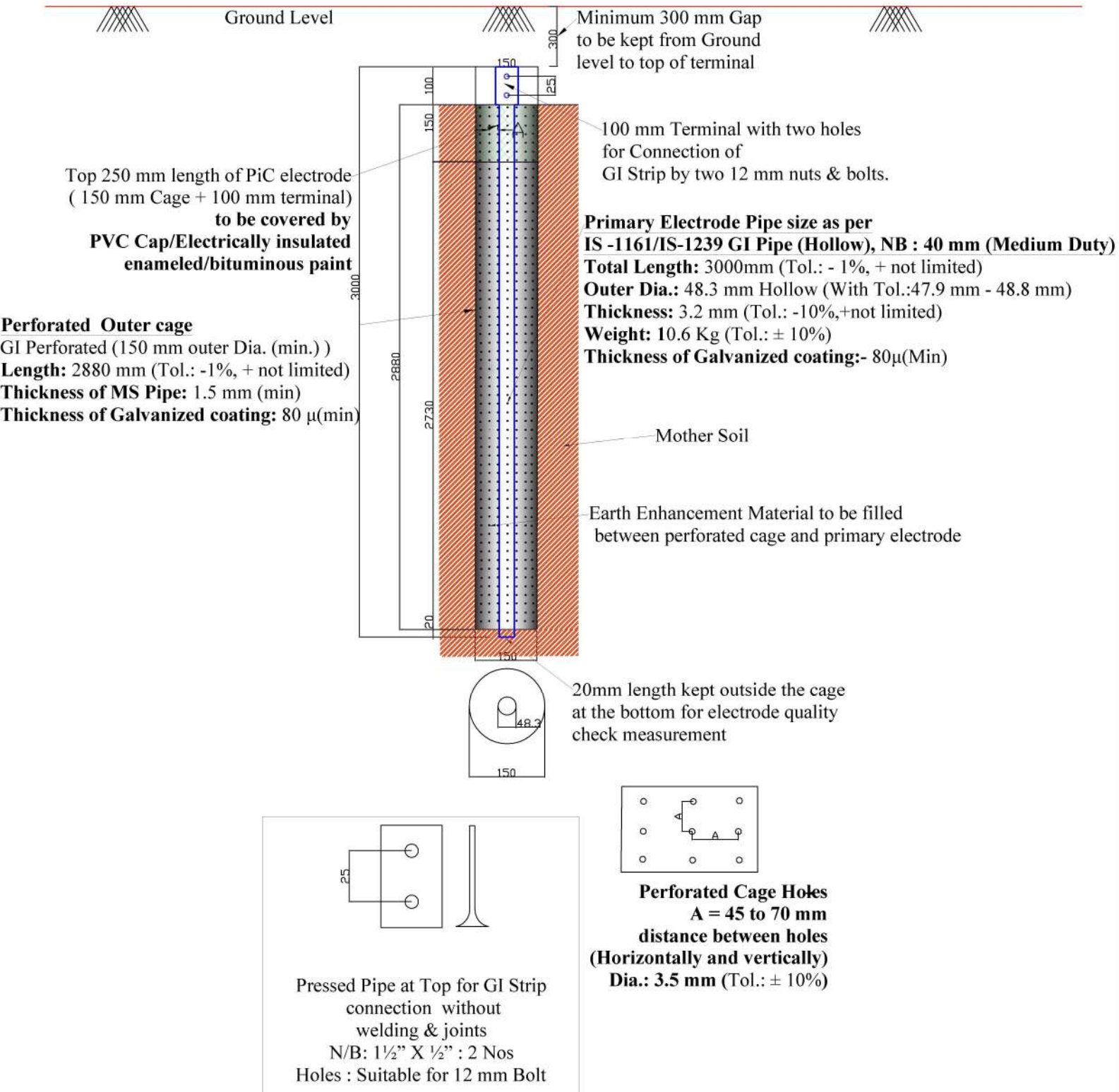
UTTAR GUJARAT VIJ COMPANY LTD.

Prestressed Concrete Pole 10 Mtr/270Kg.s showing detailed dimensions for readymade PSC Pole.
 Regenerated from GEB Drg. no. PKM/PSC/POLE/MT/

DRAWN:	CHECKED:	APP'D:	SIZE:	REV:
SCALE:	DATE:	DRG. NO:	A4	R3
N. T. S.	-/-2011			1 OF 1

Drawing No.: GPRD-17 (Revision:2)

Maintenance Free, Eco-Friendly Ready Capsule - Pipe in Cage(PiC) type 3000 mm Earthing



Gujarat Power Research & Development Cell, GUVNL, Gandhinagar

Project : Maintenance Free, Eco-Friendly Ready Capsule - Pipe in Cage (PiC) type 3000 mm Earthing

Prepared By: H.M.Sakariya, JE (R&D)

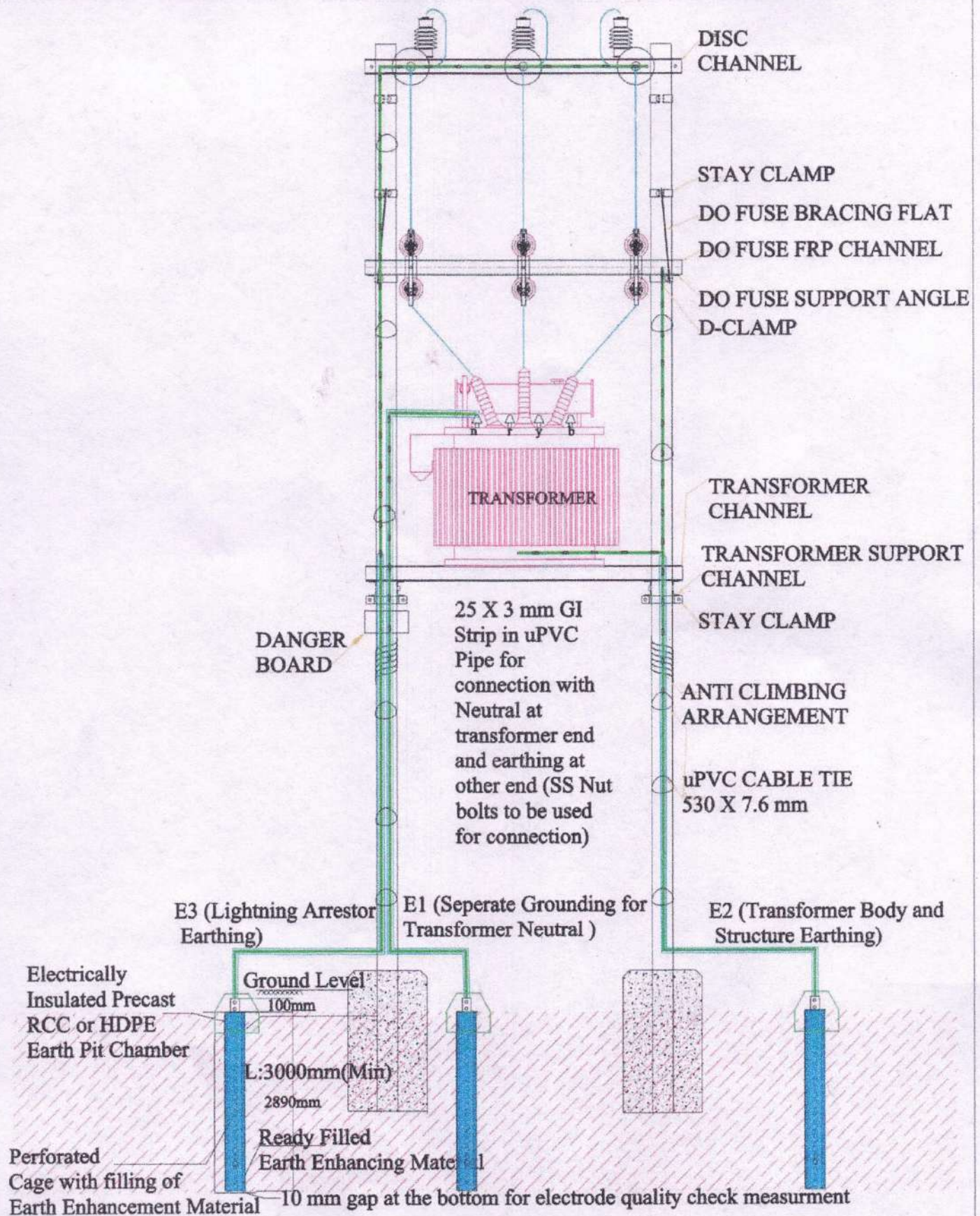
Date : 13/08/2021

Checked By : D.R.Shah, DE (R&D)

Revision : 2

Approved By : J.B.Upadhyay, i/C SE (R&D)

Scale: N.T.S.



FRONT VIEW



Gujarat Power Research & Development Cell, GUVNL, Gandhinagar

Project : Indicative Drawing of Maintenance Free, Ready Capsule Type Earthing on Transformer Center

Prepared By: H.M.Sakariya, JE (R&D)

Date : 01/03/2019

Checked By: D.R.Shah, DE (R&D)

Dr. No.: GPRD-30

Approved By: R B Patel, SE (R&D)

Scale: N.T.S.

[Handwritten signature]
24/5/19