

FOUNDATION KEY PLAN

NOTES

- ALL DIMENSIONS ARE IN MM UNLESS NOTED OTHERWISE.
- USE M20 GRADE CONCRETE AND Fe 415 GRADE FOR STEEL.
- CLEAR COVER TO MAIN REINFORCEMENT:-
(a) 50MM FOR FOUNDATION (b) 25MM FOR BEAMS
(c) 40MM FOR COLUMNS
- PRIOR TO AND DURING CONCRETING ALL BOLTS SHALL BE SECURELY HELD IN POSITION BY USE OF TEMPLATE.
- BEFORE COMMENCEMENT OF CONSTRUCTION USING THIS DESIGN, CLIENT/CONTRACTOR SHALL CARRY OUT DETAILED SOIL INVESTIGATION OF EVERY SITE.
- THIS FOUNDATION DESIGN SHALL NOT BE USED IN CASE HIGHLY SOIL ARE FOUND AT ANY DEPTH DURING SOIL INVESTIGATION.
- CONCRETE SHALL BE MECHANICALLY MIXED & VIBRATED.
- SPLICING OF BARS SHALL NOT BE MORE THAN 50% AT ANY LOCATION.
- PROPER CURING OF CONCRETE SHALL BE DONE.
- BENDING OF BARS SHALL BE AS PER IS:2502.
- ANY DISCREPANCY SHOULD BE BROUGHT TO THE CONSULTANT'S ATTENTION.

GENERAL DETAILS

S.No	DESCRIPTION	DETAILS
1	SOIL BEARING CAPACITY	10.00 T/SQM
2	DRY DENSITY OF SOIL	1.8 T/SQM
3	ANGLE OF REPOSE	30.00 DEGREE

BILL OF MATERIALS

ITEM	UNIT	TOTAL
EXCAVATION	CUM	76.3
PCC-(1:4:8)	CUM	2.85
RCC-M20	CUM	13.6
STEEL-Fe415	KG	1200

CHAIRS SHALL BE PROVIDED WHEREEVER REQUIRED

REVISION NOTES

REV. NO.	DESCRIPTION	DATE	SIGN.
DRAWN	CHECKED	APPROVED	DATE
S.K.Chauhan	MOHIT GUPTA	MOHIT GUPTA	25-01-2024

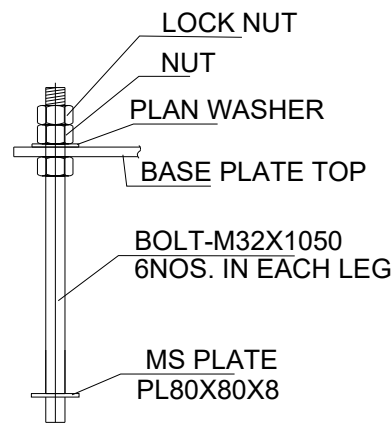
CLIENT: BHUTAN TELECOM LTD. BHUTAN

DESIGN BY: ICON POWER SOLUTIONS PVT. LTD. GURGAON

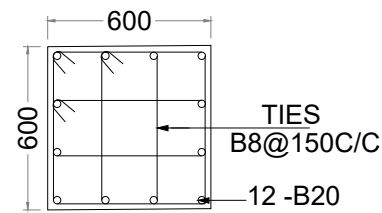
PROJECT: GENERIC ISOLATED FOUNDATION DESIGN BHUTAN

TITLE: FOUNDATION DETAILS FOR 30M HIGH TRIANGULAR TOWER SBC : 10 T/SQM

DRAWING No.	SH. NO.	REV.
AGD-438		

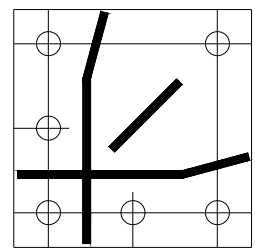


ANCHOR BOLT

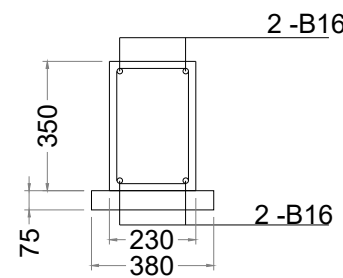


SECTION 2

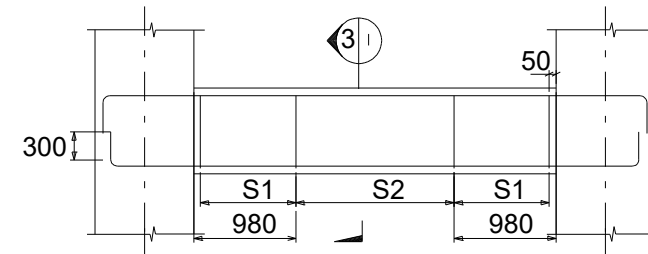
COLUMN 600X600



BASE PLATE



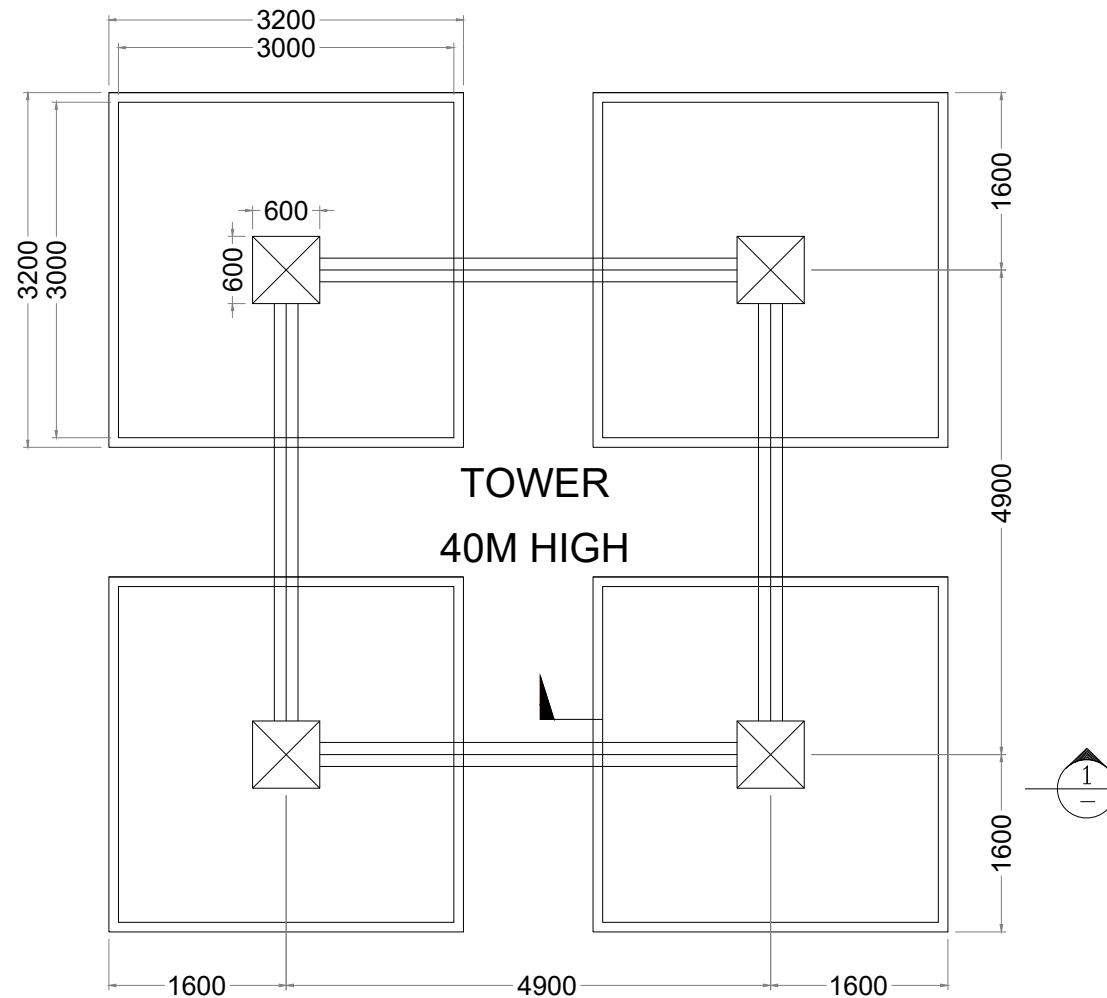
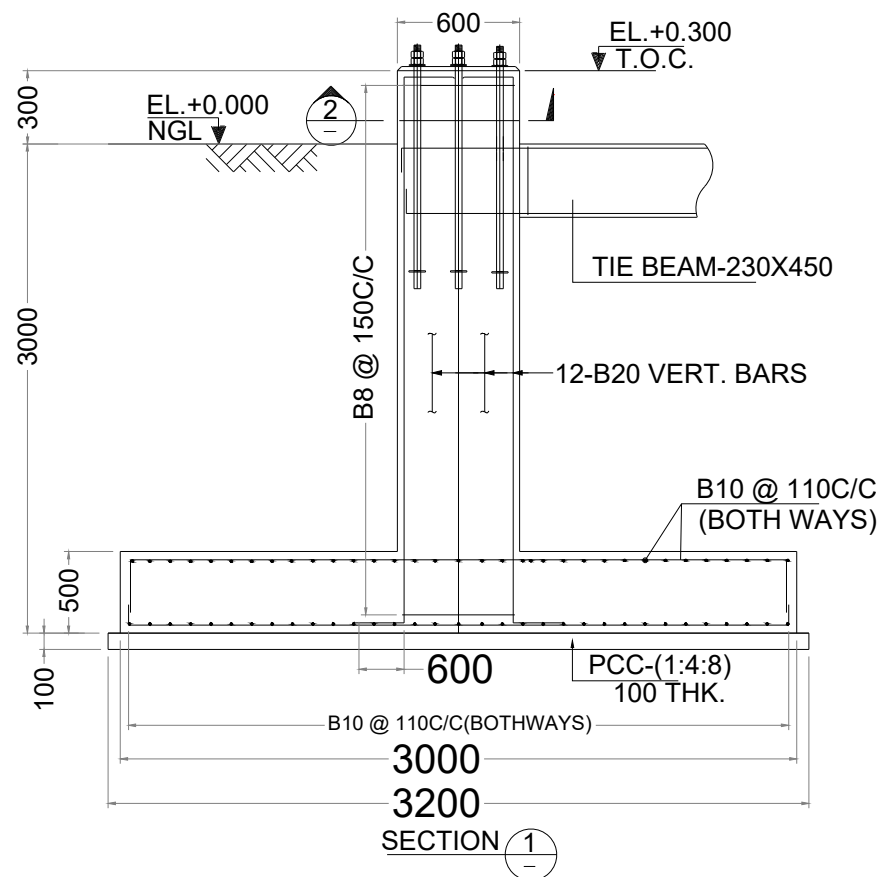
SECTION 3



TIE BEAM (TYP DETAILS)

STIRRUP DETAILS
 S1:-2 LEGGED Y8 @ 100 C/C
 S2:-2 LEGGED Y8 @ 200 C/C





FOUNDATION KEY PLAN

- NOTES**
- ALL DIMENSIONS ARE IN MM UNLESS NOTED OTHERWISE.
 - USE M20 GRADE CONCRETE AND Fe 415 GRADE FOR STEEL.
 - CLEAR COVER TO MAIN REINFORCEMENT:-
(a) 50MM FOR FOUNDATION (b) 25MM FOR BEAMS
(c) 40MM FOR COLUMNS
 - PRIOR TO AND DURING CONCRETING ALL BOLTS SHALL BE SECURELY HELD IN POSITION BY USE OF TEMPLATE.
 - BEFORE COMMENCEMENT OF CONSTRUCTION USING THIS DESIGN, CLIENT/CONTRACTOR SHALL CARRY OUT DETAILED SOIL INVESTIGATION OF EVERY SITE.
 - THIS FOUNDATION DESIGN SHALL NOT BE USED IN CASE HIGHLY SOIL ARE FOUND AT ANY DEPTH DURING SOIL INVESTIGATION.
 - CONCRETE SHALL BE MECHANICALLY MIXED & VIBRATED.
 - SPLICING OF BARS SHALL NOT BE MORE THAN 50% AT ANY LOCATION.
 - PROPER CURING OF CONCRETE SHALL BE DONE.
 - BENDING OF BARS SHALL BE AS PER IS:2502.
 - ANY DISCREPANCY SHOULD BE BROUGHT TO THE CONSULTANT'S ATTENTION.

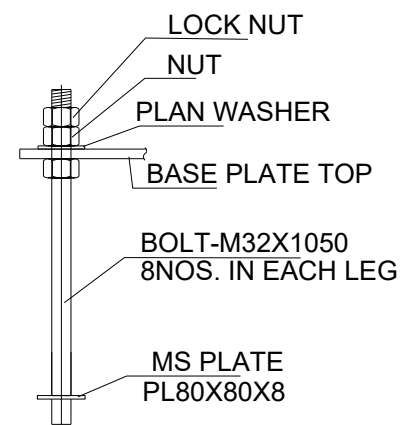
GENERAL DETAILS

S.No	DESCRIPTION	DETAILS
1	SOIL BEARING CAPACITY	10.00 T/SQM
2	DRY DENSITY OF SOIL	1.8 T/SQM
3	ANGLE OF REPOSE	30.00 DEGREE

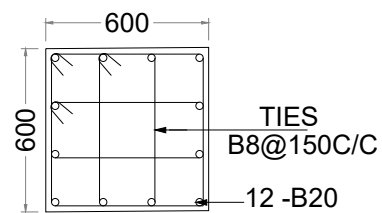
BILL OF MATERIALS

ITEM	UNIT	TOTAL
EXCAVATION	CUM	131.0
PCC-(1:4:8)	CUM	4.85
RCC-M20	CUM	23.81
STEEL-Fe415	KG	2180

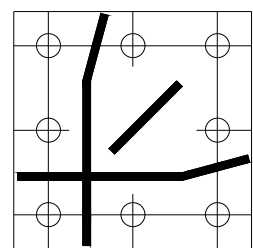
CHAIRS SHALL BE PROVIDED WHEREEVER REQUIRED



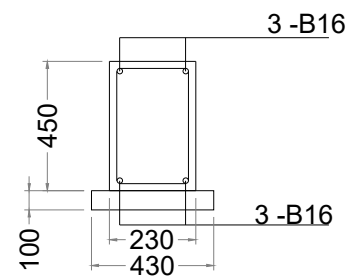
ANCHOR BOLT



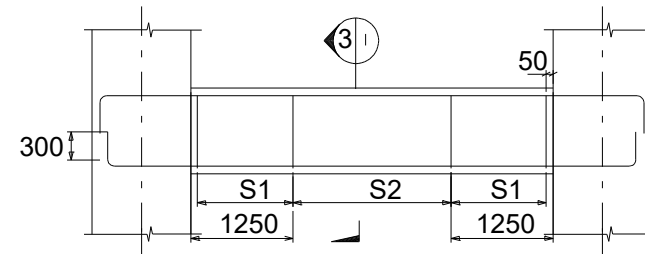
SECTION 2
COLUMN 600X600



BASE PLATE



SECTION 3



TIE BEAM (TYP DETAILS)

STIRRUP DETAILS
S1:-2 LEGGED Y8 @ 100 C/C
S2:-2 LEGGED Y8 @ 200 C/C

REVISION NOTES

REV. NO.	DESCRIPTION	DATE	SIGN.
DRAWN	CHECKED	APPROVED	DATE
S.K.Chauhan	MOHIT GUPTA	MOHIT GUPTA	25-01-2024

CLIENT: **BHUTAN TELECOM LTD. BHUTAN**
 DESIGN BY: **ICON POWER SOLUTIONS PVT. LTD. GURGAON**
 PROJECT: **GENERIC ISOLATED FOUNDATION DESIGN BHUTAN**

TITLE: **FOUNDATION DETAILS FOR 40M HIGH SQUARE TOWER SBC : 10 T/SQM**

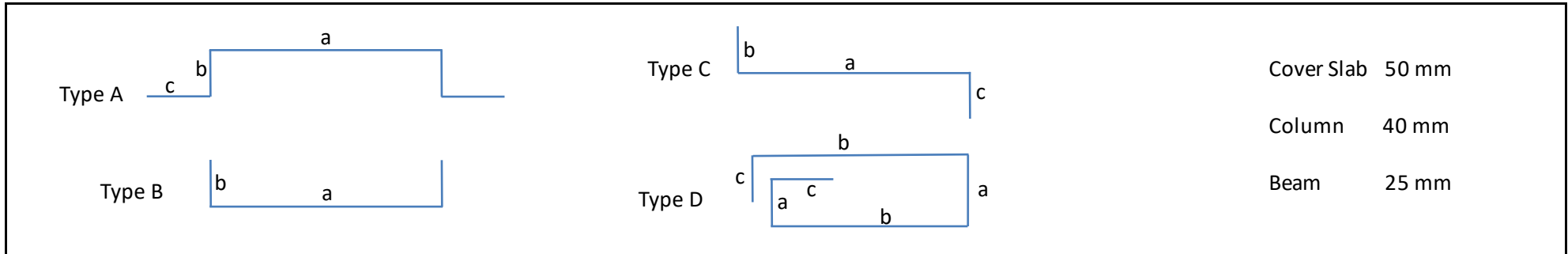
DRAWING No.	SH. NO.	REV.
AGD-436		



ICON POWER SOLUTIONS PVT LTD

112 113, Sector 5, IMT Manesar, Gurgaon -122050, Haryana - INDIA

40 Mtr 4L Tower Bar Bending Schedule



Item	Position	Type	Dia. Of Rebar (mm)	Size	Size	Size	Length (mm)	Qty in Nos both ways or total	Unit wt (kg/m)	Total Weight of (kg)	
				a (mm)	b (mm)	c (mm)					
Raft Slab	Top	B	B10	2900	300	-	3500	224	0.62	486.08	
	Bottom	B	B10	2900	300	-	3500	224	0.62	486.08	
Tie Beams	Top	B	B16	5400	300	-	6000	12	1.58	113.76	
	Bottom	B	B16	5400	300	-	6000	12	1.58	113.76	
	Strips	D	B8	180	400	80	1320	128	0.40	67.58	
Column	Main	C	B20	3200	480	600	4280	48	2.47	507.44	
	Ties	D	B8	520	520	80	2240	88	0.40	78.85	
		D	B8	520	200	80	1600	352	0.40	225.28	
Total (Approx. 0.5% extra considered)											2180.00

* Chairs Shall be Provided whenever required

Notes :

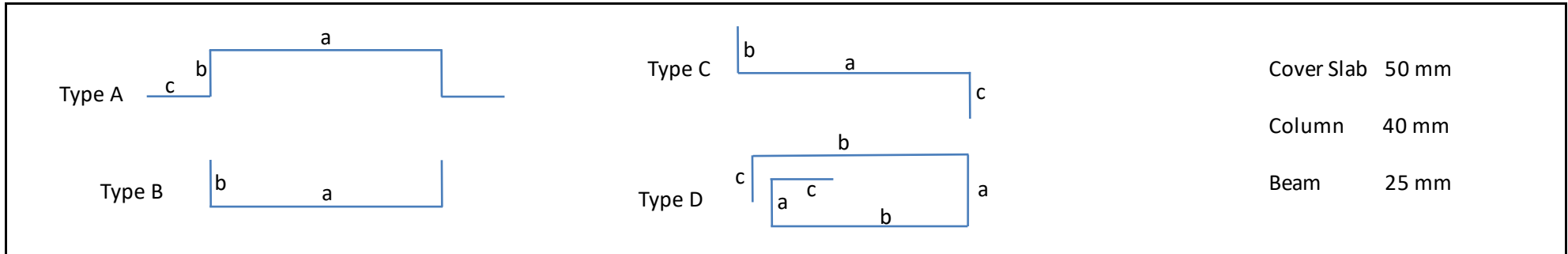
1. Dimensions of Bars are along the Center Lines.
3. Splicing of Bars should not be more than 50%. Length of splice as per Standards.



ICON POWER SOLUTIONS PVT LTD

112 113, Sector 5, IMT Manesar, Gurgaon -122050, Haryana - INDIA

30 Mtr 3L Tower Bar Bending Schedule



Item	Position	Type	Dia. Of Rebar (mm)	Size a	Size b	Size c	Length (mm)	Qty in Nos both ways or total	Unit wt	Total Weight of
				(mm)	(mm)	(mm)			(kg/m)	(kg)
Raft Slab	Top	B	B10	2600	300	-	3200	126	0.62	249.98
	Bottom	B	B10	2600	300	-	3200	126	0.62	249.98
Tie Beams	Top	B	B16	4378	300	-	4978	6	1.58	47.19
	Bottom	B	B16	4378	300	-	4978	6	1.58	47.19
	Strips	D	B8	180	300	80	1120	72	0.40	32.26
Column	Main	C	B20	3100	480	650	4230	36	2.47	376.13
	Ties	D	B8	512	512	80	2208	69	0.40	60.94
		D	B8	512	191	80	1566	132	0.40	82.68
	Total (Approx. 5% extra considered)									

* Chairs Shall be Provided whenever required

Notes :

1. Dimensions of Bars are along the Center Lines.
3. Splicing of Bars should not be more than 50%. Length of splice as per Standards.



