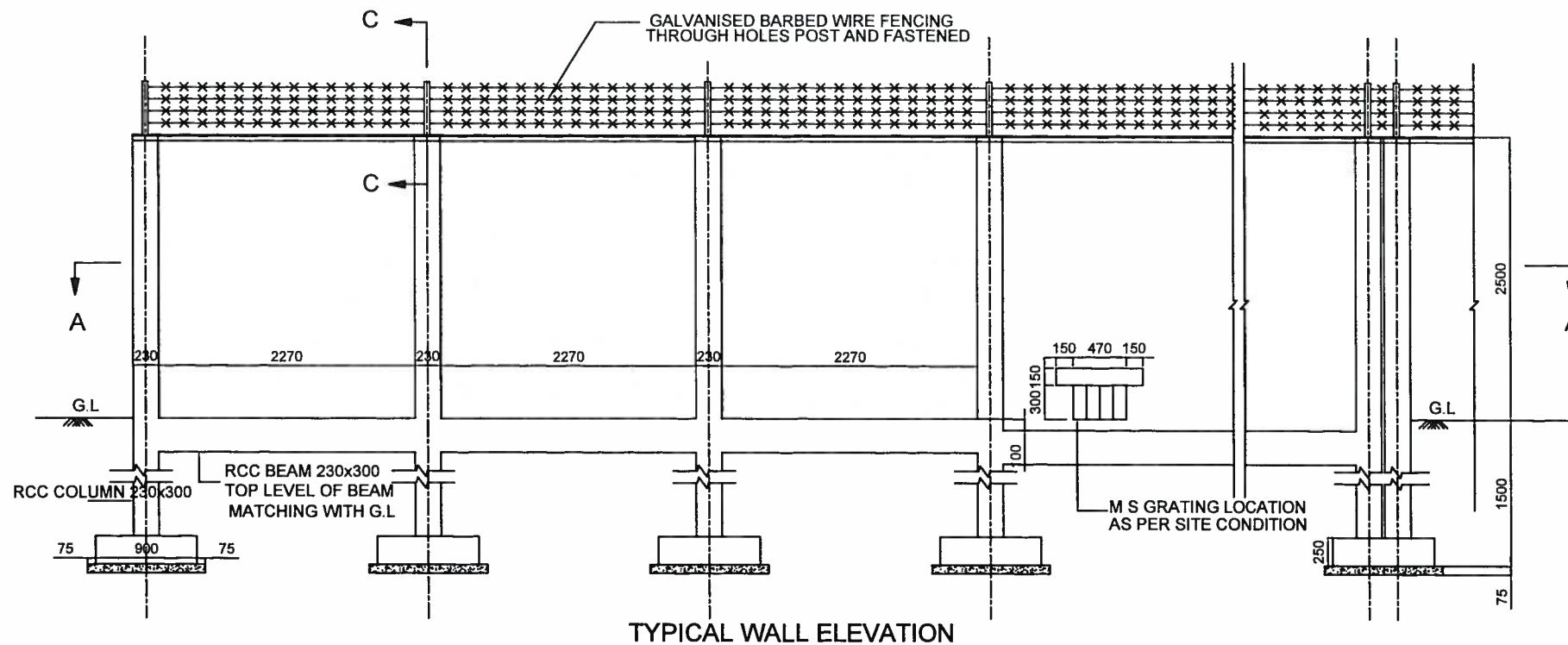
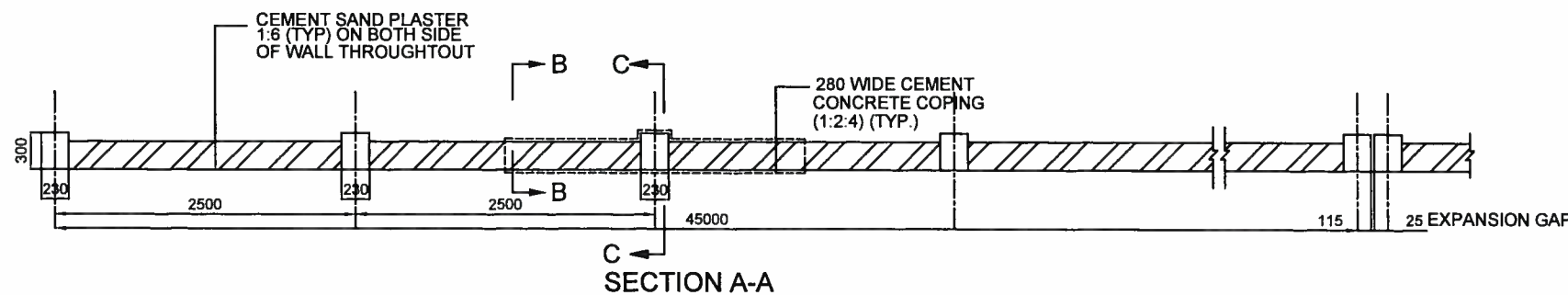
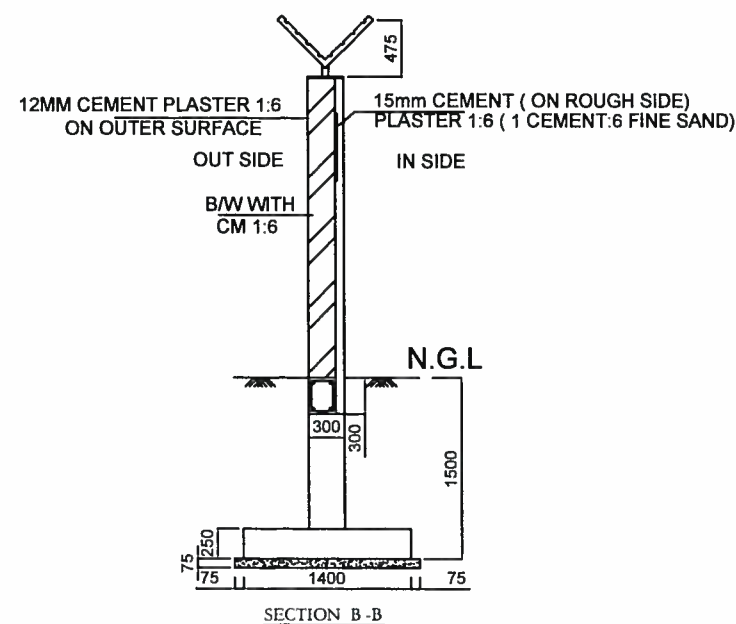




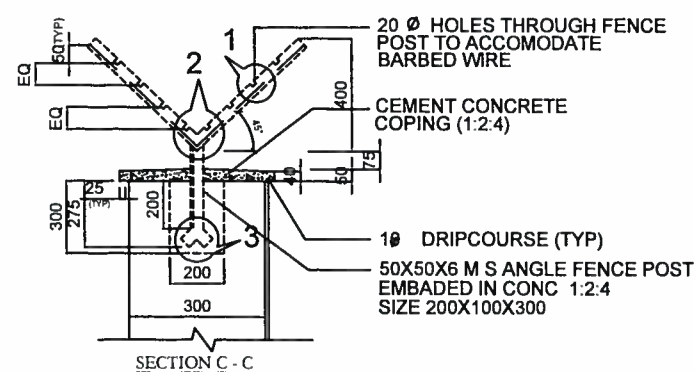
TYPICAL WALL ELEVATION



SECTION A-A



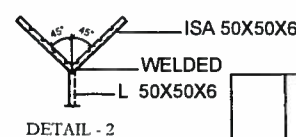
SECTION B-B



SECTION C-C



DETAIL - 1



DETAIL - 2

NOTES:

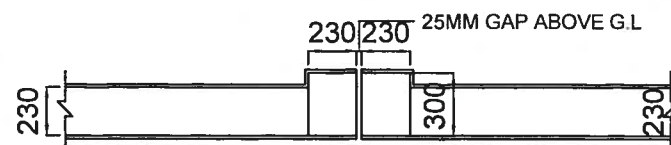
- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
- LOCATION OF BOUNDARY WALL SHALL BE AS PER GA / DRG. LATEST APPROVED.
- PROVIDE BRICK WORK IN ENGLISH BOND IN 1:6 CEMENT MORTAR (1CEMENT : 6 COARSE SAND).
- CONC GROUTING FOR ANGLE POST AT TOP OF BOUNDARY WALL SHALL BE IN 1:2:4 (1CEMENT:2COURSE SAND:4 STONEAGGREGATE).
- BARBED WIRE SHALL BE GALVANISED STEEL BARBED WIRE AND SHALL BE IN AS A-4-IS:278 CONFORMING TO IS:278.
- a). BRICK TO BE DONE WITH BRICK OF FIRST CLASS DESIGNATION-75
b). PLASTER WORK SHALL BE IN CEMENT MORTAR 1:6 (1CEMENT:6 FINE SAND)
- THE LAST 300mm EXCAVATION IN SOIL IS TO BE DONE JUST PRIOR TO THE PLACING OF FOUNDATION P.C.C.
- P.C.C. OF 1:4:8 GRADE SHALL BE WITH 40mm NOMINAL SIZE AGGREGATE.
- EXPANSION JOINTS ARE TO BE PROVIDED MIN BOUNDARY WALL AT
a). MAXIMUM OF 45.0 M.
- ALL EXPOSED PLASTER SURFACES ARE TO BE PAINTED WITH WATER PROOFING CEMENT PAINT
- STRUCTURAL STEEL FOR ANGLE POSTS SHALL CONFORM TO IS:2062, ANGLE POST SHALL BE PAINTED WITH TWO OR MORE COATS OF ENAMEL PAINTS OF APPROVED BRAND AND MANUFACTURE OVER A PRIMING COAT OF APPROVED STEEL PRIMER.
- THE RISE/FALL IN BOUNDARY WALL FOUNDATION SHALL BE PROVIDED WHEREVER THE DIFFERENCE IN GROUND LEVEL IS MORE THAN 500mm.
- NO FOUNDATION SHALL REST ON THE FILLED UP SOIL, IF ANY, THE FOUNDATION SHALL BE MINIMUM 500mm, BELOW VERGIN SOIL.
- THE HEIGHT OF BOUNDARY WALL EXCLUDING FENCE A TOP SHALL NOT BE MORE THAN 2500mm, ABOVE GROUND LEVEL OR FORMATION LEVEL.
- NO. OF M.S. GRATING AND THEIR LOCATION TO BE INSTALLED IN BOUNDARY WALL ALONG WITH THE LEVELS SHALL BE DECIDED BY THE SITE AS/ THE SITE CONDITION KEEPING IN VIEW THE MAX. POSSIBLE CATCHMENT AREA FOR EACH GRATING.
- ALL M.S SECTION USED FOR GRATING SHALL BE PAINTED WITH TWO OR MORE COATS OF BLACK ANTICORROSIVE BITUMASTIC PAINT OF APPROVED BRAND AND MANUFACTURE OVER A PRIMING COAT OF APPROVED STEEL PRIMER.
- CONC. FOR R.C.C WORK SHALL BE OF GRADE M25
- REINF. BARS SHALL BE H.Y.S.D. BARS OR TMT BARS CONFORMING TO IS:1786 LATEST REVISION.
- STRUCTURE STEEL USED FOR GRATING SHALL CONFORM TO IS:2062 LATEST EDITION.
- LAP/ANCHORAGE SHALL BE 50 X DIA OF BAR
a) FOOTING - 50MM (b) SLAB - 20MM (c) COLOUMN - 40MM,
d) BEAMS - 25MM
- TOP OF PLINTH BEAM SHALL BE REDUCED BY 100mm WHEREVER MS GRATING IS TO BE PROVIDED
- INCASE BLACK COTTON SOIL IS ENCOUNTERED SUITABLE TREATMENT IN FOUNDATION SHALL BE PROVIDED.

POWER GRID CORPORATION
OF INDIA LIMITED

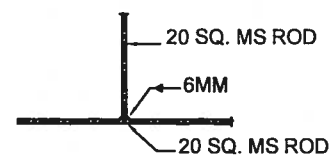
(A Government of India Enterprise)



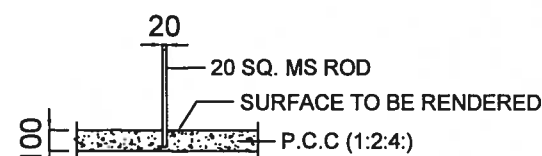
PROJECT :	400/220 KV SUB-STATION AT TUGHLAKABAD
TITLE :	DETAILS OF BOUNDARY WALL
DRAWING NO.	C/ENGG/NR-1/TUGH/BW-01
SCALE	NTS
REV.	0



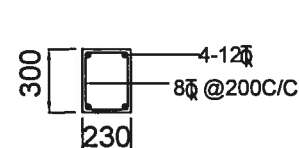
TYP.DETAIL OF EXPANSION JOINT



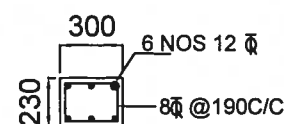
DETAIL - Y



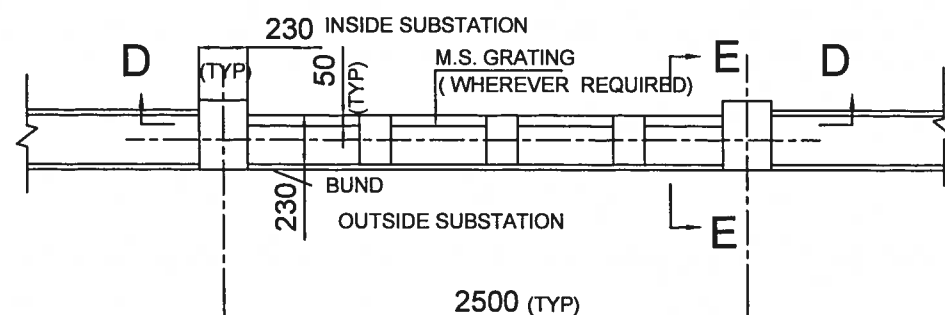
TYP.DETAIL OF 'X'



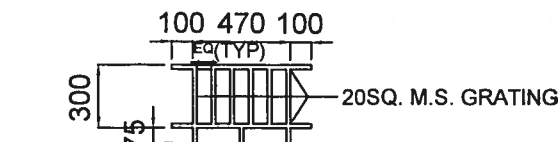
SECTION F-F



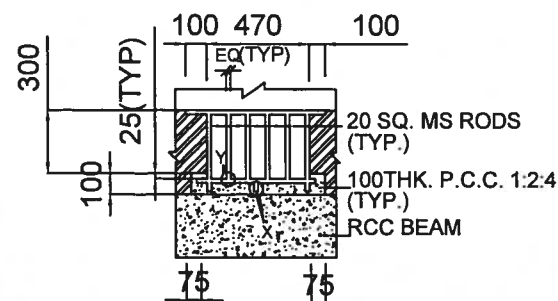
TYP. COLUMN REINFORCEMENT DETAILS



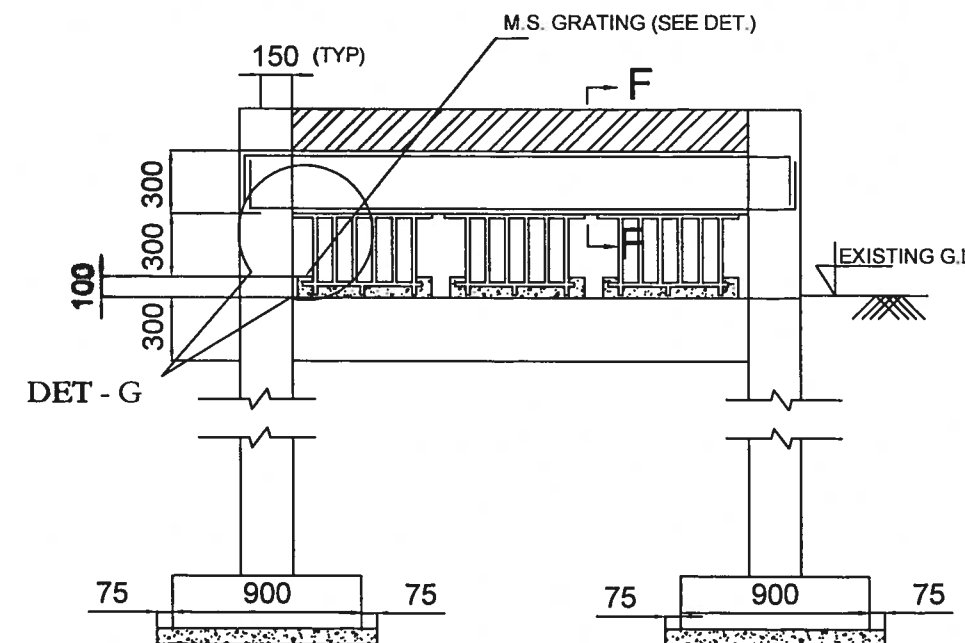
PLAN AT PLINTH LEVEL GRATING LOCATIONS



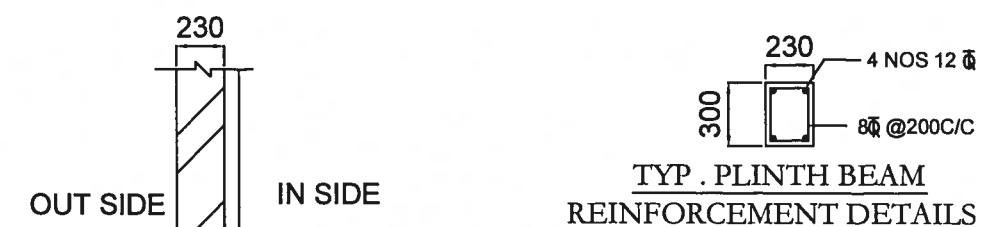
M S GRATING FOR DRAINAGE THROUGH BOUNDARY WALL



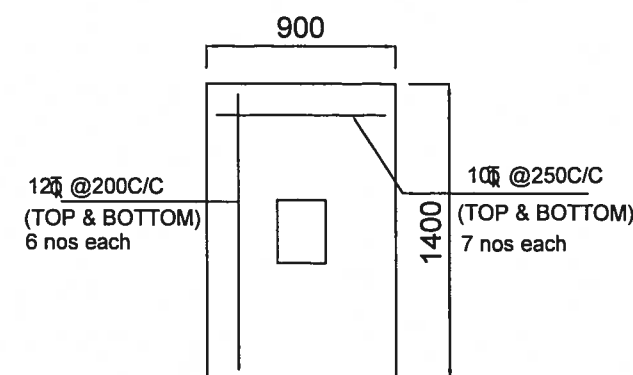
M.S GRATING FOR DRAINAGE THROUGH BOUNDARY WALL DETAIL 'G'



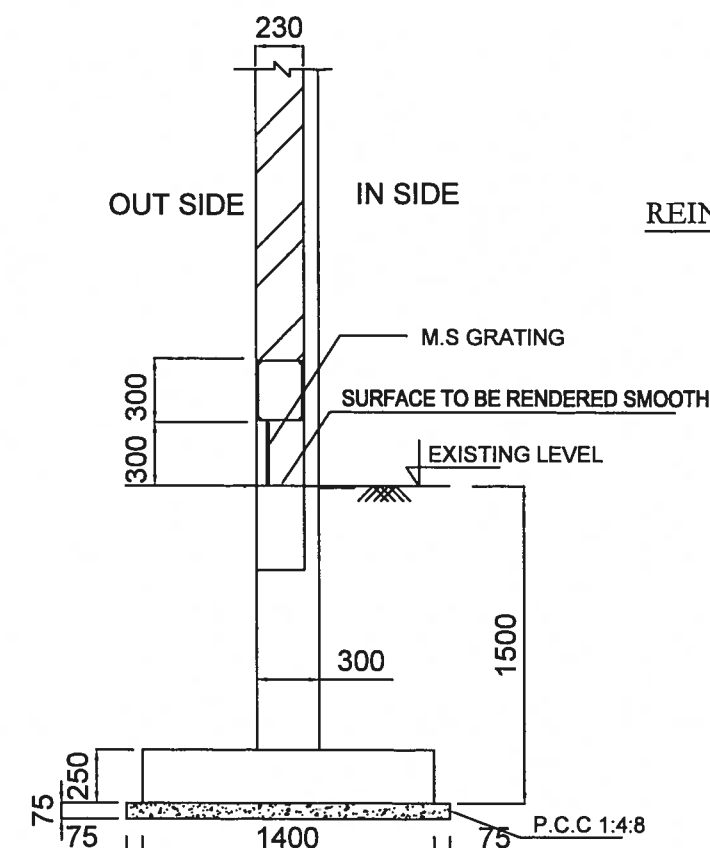
SECTION D - D



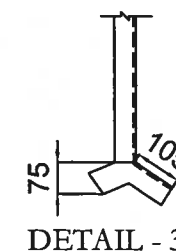
TYP. PLINTH BEAM REINFORCEMENT DETAILS



TYP. FOOTING REINFORCEMENT DETAILS

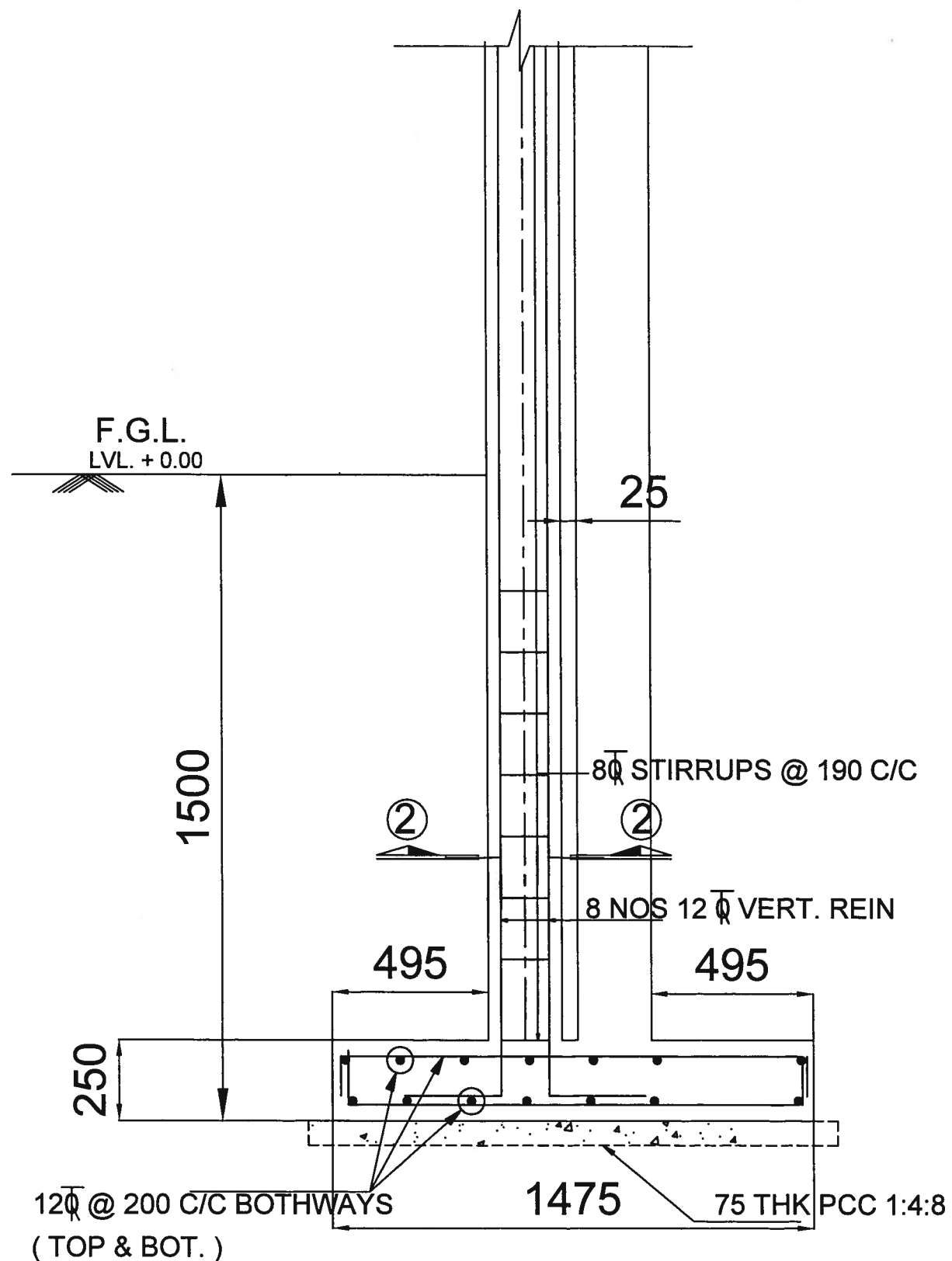


SECTION E-E

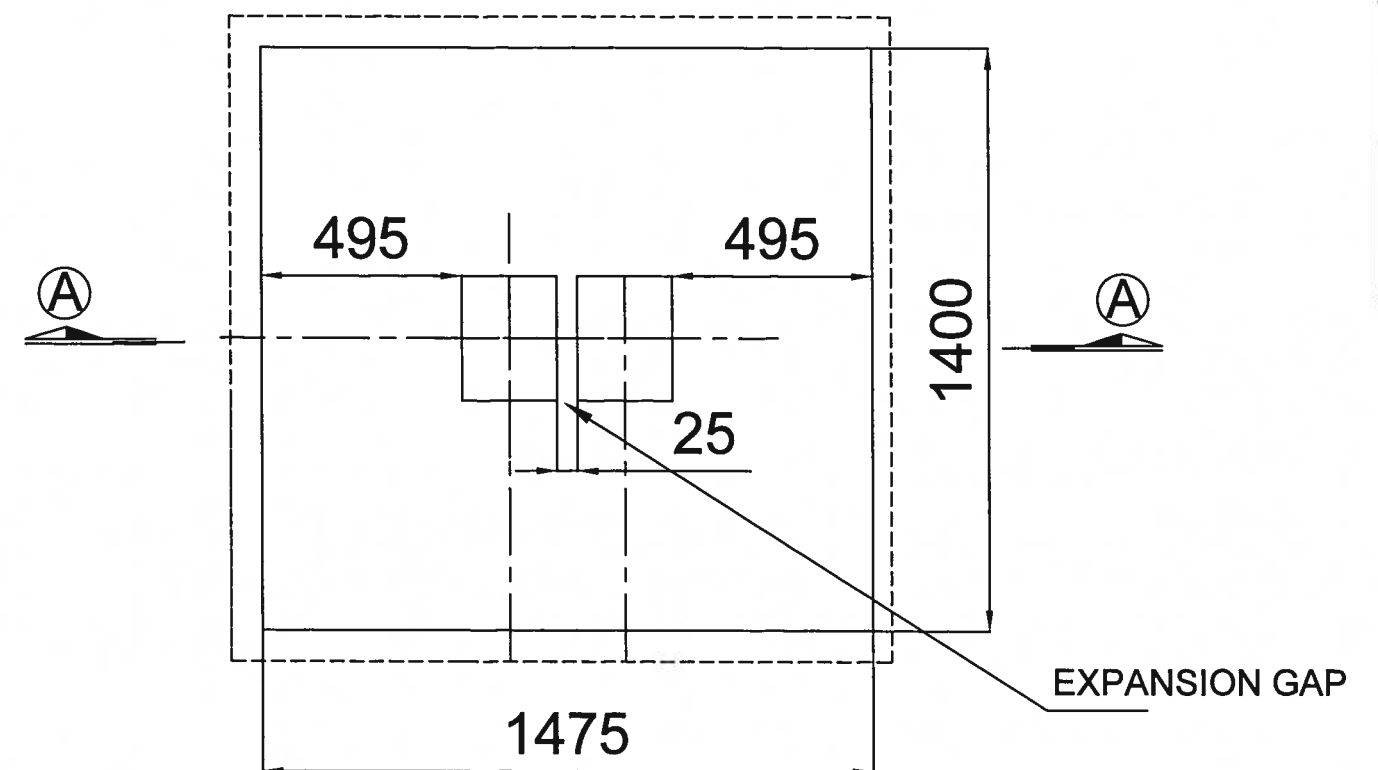


DETAIL - 3

						POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)	
						PROJECT :	400/220 KV SUB-STATION AT TUGHLAKABAD
						TITLE :	DETAILS OF BOUNDARY WALL
						DRAWING NO.	C/ENGG/NR-I/TUGH/BW-01
						SCALE	NTS
						REV	0
REV.	DESCRIPTION	CIVIL	REVD.	REVD.	APPD. DATE		
0	RELEASED FOR CONSTRUCTION						

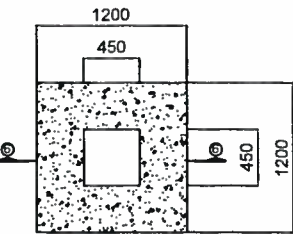


SECTION A-A

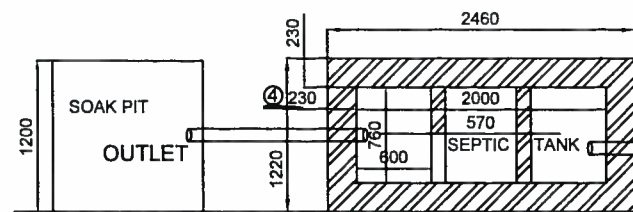


PLAN OF FOOTING FOR TWIN COLUMNS

						POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)		
						PROJECT :	400/220 KV SUB-STATION AT TUGHLAKABAD	
						TITLE :	FOOTING DETAIL OF TWIN COLUMNS IN BOUNDARY WALL.	
0	RELEASED FOR CONSTRUCTION					DRAWING NO.	C/ENGG/NR-I/TUGH/BW-01 (SH.3 OF 8)	SCALE NTS
REV.	DESCRIPTION	CIVIL	REVD.	REVD.	APPD. DATE			REV. 0



PLAN SOAK PIT

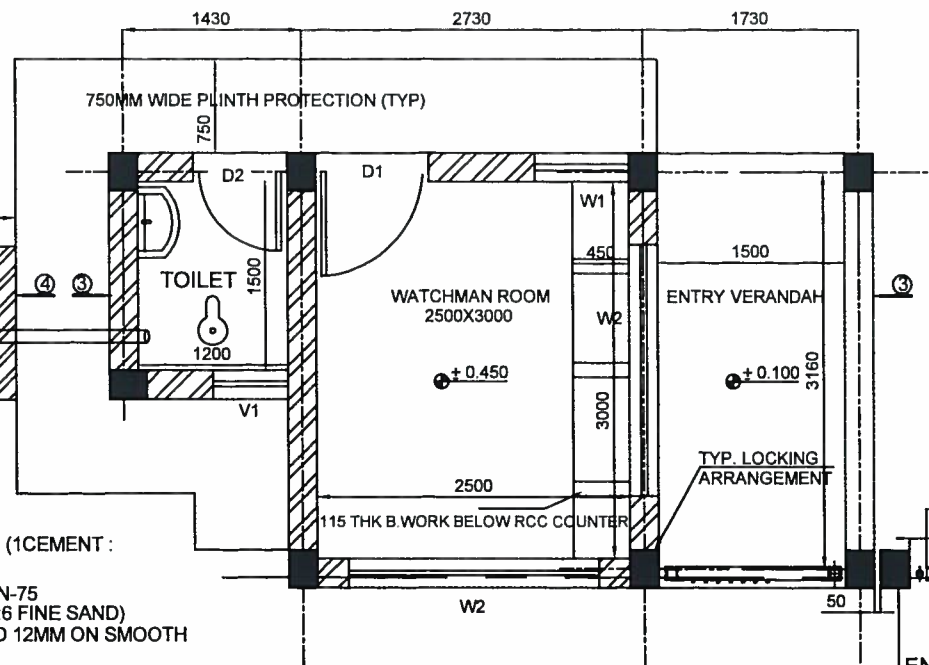


NOTES:

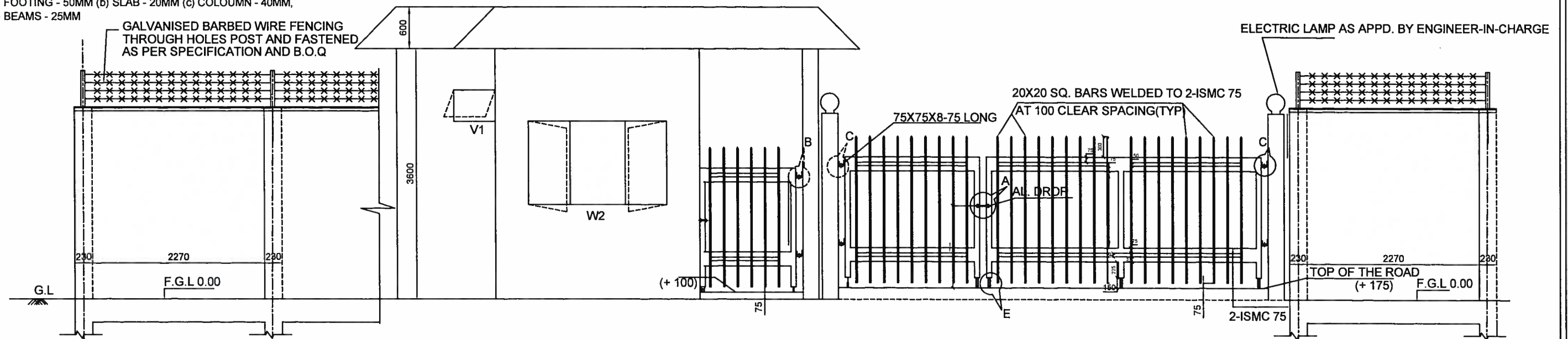
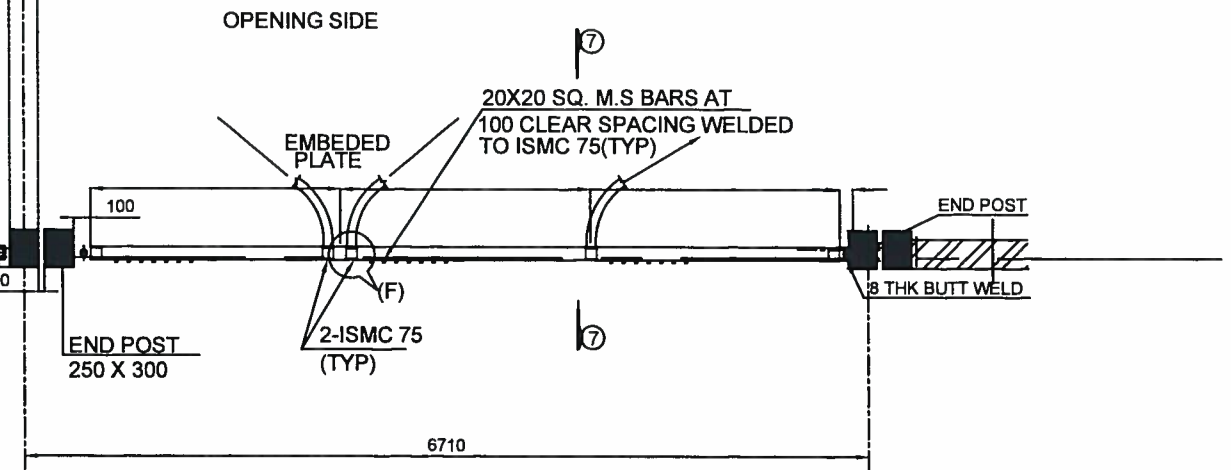
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
2. PROVIDE BRICK WORK IN ENGLISH BOND IN 1:6 CEMENT MORTAR (1CEMENT : 6 COARSE SAND).
3. a). BRICK TO BE DONE WITH BRICK OF FIRST CLASS DESIGNATION-75
b). PLASTER WORK SHALL BE IN CEMENT MORTAR 1:6 (1CEMENT:6 FINE SAND) THICKNESS OF PLASTER SHALL BE 15 MM ON ROUGH SIDE AND 12MM ON SMOOTH SIDE OF BRICK WORK.
4. ALL EXPOSED PLASTER SURFACES ARE TO BE PAINTED WITH MINIMUM OF TWO COATS OF OIL BOUND DISTEMPER OF APPROVED SHADE DSR 2016 ITEM NO. 13.41.1
5. ALL STRUCTURAL STEEL SHALL CONFORM TO IS:2062, AND SHALL BE PAINTED WITH TWO OR MORE COATS OF ENAMEL PAINTS OF APPROVED BRAND AND MANUFACTURE OVER A PRIMING COAT OF APPROVED STEEL PRIMER.
6. CONC. FOR R.C.C WORK SHALL BE OF GRADE M25.
7. REINF. BARS SHALL BE H.Y.S.D. BARS CONFORMING TO IS:1786 LATEST REVISION. OR EQUIVLENT GRADE TMT BARS
8. STRUCTURE STEEL USED FOR GRATING SHALL CONFORM TO IS:2062 LATEST EDITION.
9. LAP/ANCHORAGE SHALL BE 50 X DIA OF BAR
10. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS
a) FOOTING - 50MM (b) SLAB - 20MM (c) COLOUMN - 40MM,
d) BEAMS - 25MM

DOOR WINDOW SCHEDULE

TYPE	SIZE	SILL LEVEL	LINTEL LEVEL	TOTAL NOS
D1	900X2100	+0.450	+2.55	1
D2	750X2100	+0.450	+2.55	1
W1	900X1200	+1.350	+2.55	1
W2	2000X1200	+1.350	+2.55	2
V1	600X450	+2.100	+2.55	1



PLAN OF SECURITY ROOM & GATE



FRONT ELEVATION OF SECURITY ROOM & GATE

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



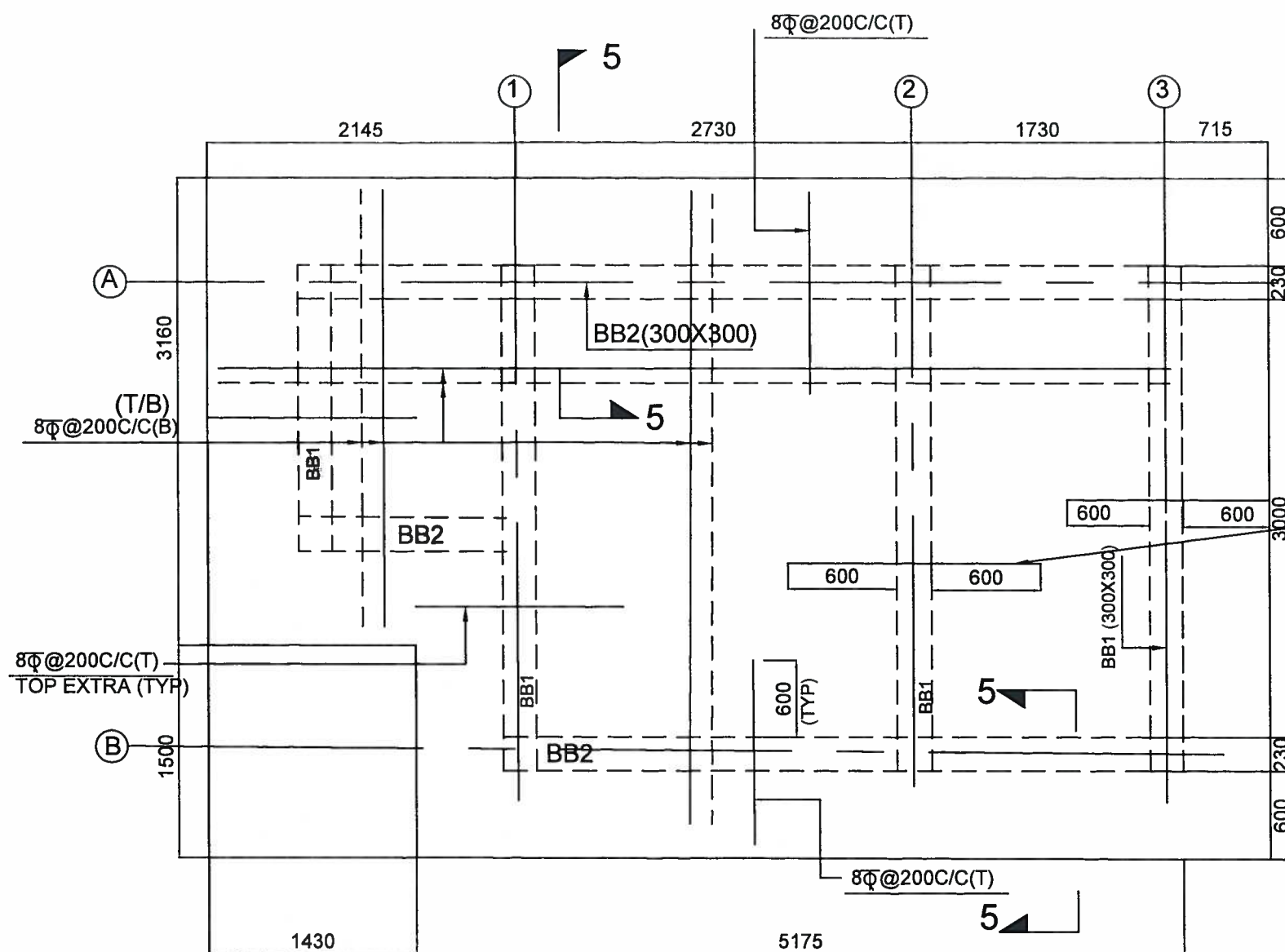
PROJECT : 400/220 KV SUB-STATION AT TUGHLAKABAD

TITLE : LAYOUT & PLAN SECURITY ROOM & GATE

DRAWING NO. C/ENGG/NR-1/TUGH/BW-01
(SH.4 OF 8)

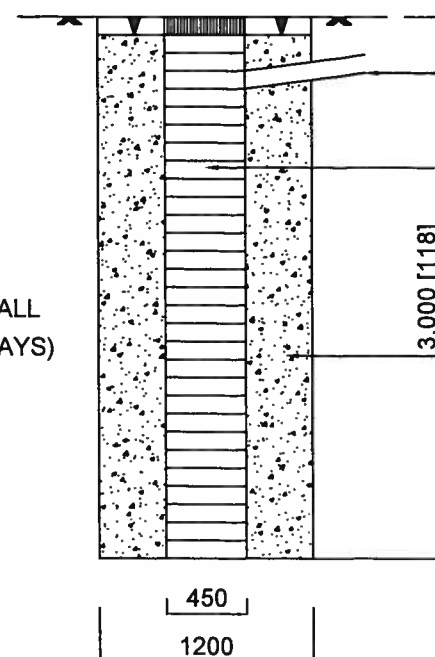
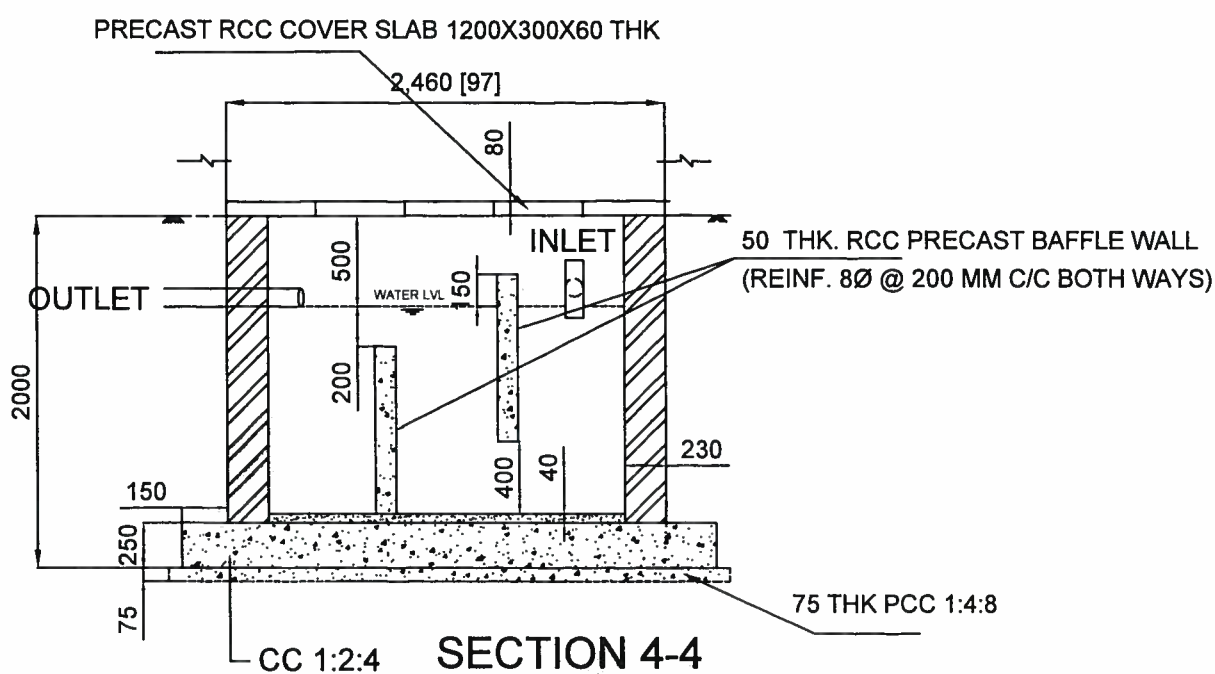
SCALE NTS
REV. 0

REV.	DESCRIPTION	CIVIL	REVD.	REVD.	APPD. DATE
0	RELEASED FOR CONSTRUCTION				

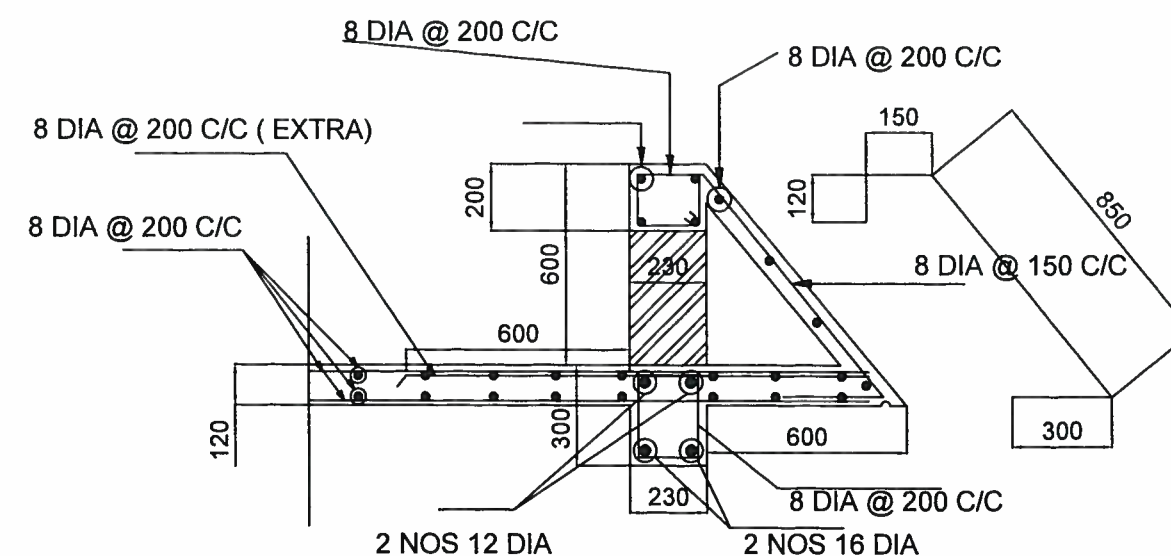


REINFORCEMENT DETAIL OF ROOF SLAB

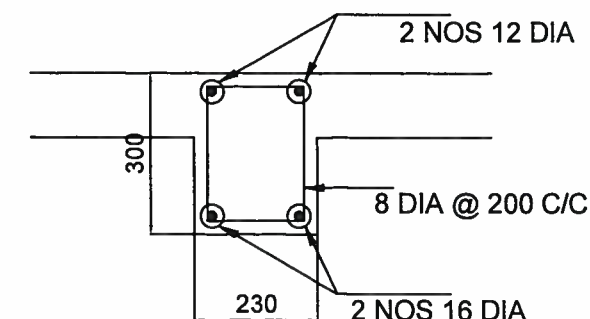
THICKNESS OF SLAB 120



SECTION 6-6



SECTION 5-5



TYP. DETAILS OF BEAM BB1 & BB2

- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
- CONC. FOR R.C.C WORK SHALL BE OF GRADE M25.
- REINF. BARS SHALL BE H.Y.S.D. BARS CONFORMING TO IS:1786 LATEST REVISION OR EQUIVALENT GRADE TMT BARS
- LAP/ANCHORAGE SHALL BE 50 X DIA OF BAR
- CLEAR COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS
 - FOOTING - 50MM
 - SLAB - 20MM
 - COLOUMN - 40MM,
 - BEAMS - 25MM
- PROVIDE 230 THK BRICK WORK IN ENGLISH BOND IN 1:6 CEMENT MORTAR (1CEMENT : 6 COARSE SAND), & 115 THK BRICKWORK IN 1:4 CEMENT MORTAR
- BRICK TO BE DONE WITH BRICK OF FIRST CLASS DESIGNATION-75
 - PLASTER WORK SHALL BE IN CEMENT MORTAR 1:6 (1CEMENT:6 FINE SAND) OF THICKNESS 15 MM ON ROUGH SIDE AND 12MM ON SMOOTH SIDE OF BRICKWORK.

POWER GRID CORPORATION
OF INDIA LIMITED

(A Government of India Enterprise)



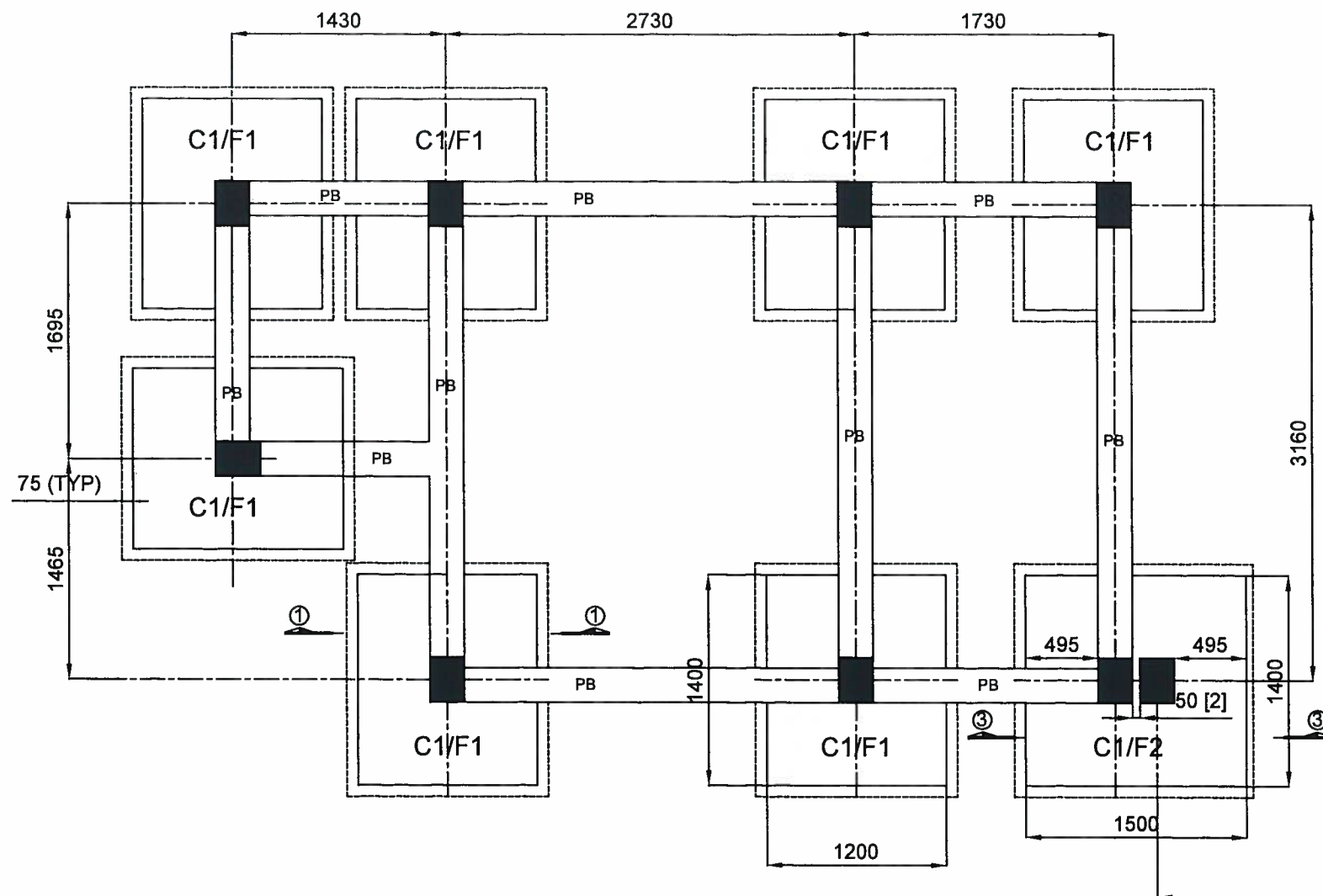
PROJECT : 400/220 KV SUB-STATION AT TUGHLAKABAD

TITLE : SECURITY ROOM & GATE DETAILS

DRAWING NO. C/ENGG/NR-1/TUGH/BW-01 (SH.5 OF 8)

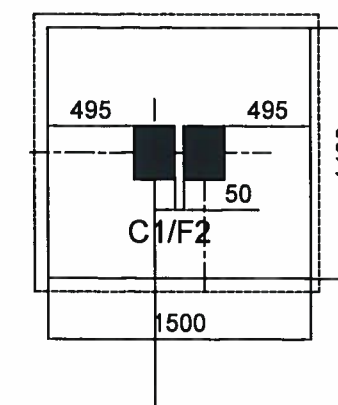
SCALE NTS
REV. 0

REV.	DESCRIPTION	CIVIL	REVD.	REVD.	APPD. DATE
0	RELEASED FOR CONSTRUCTION				

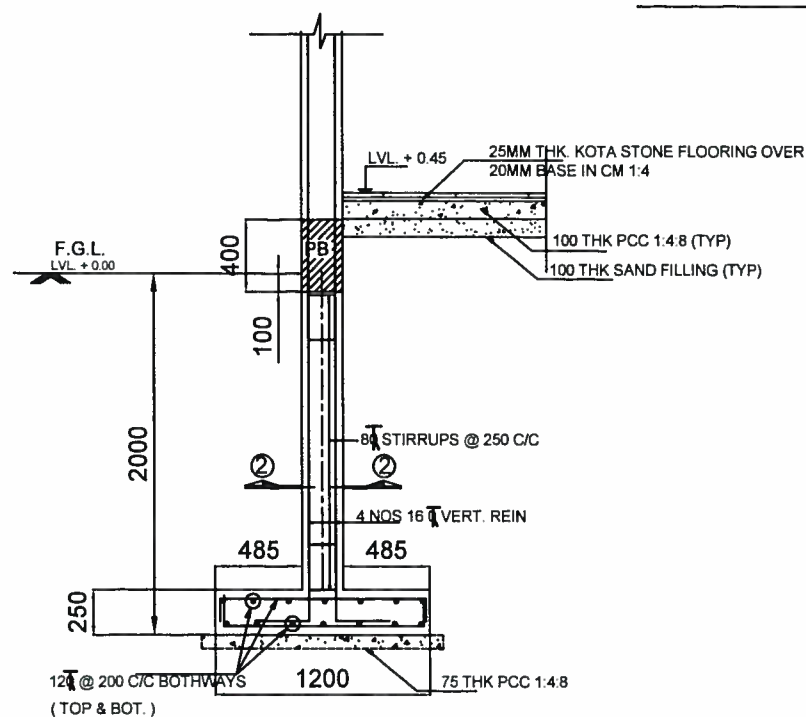


NOTES:

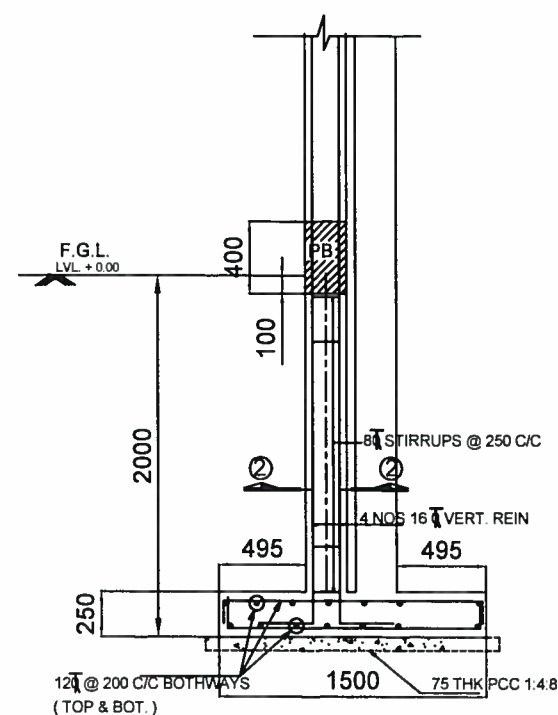
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
2. LOCATION OF SECURITY ROOM SHALL BE AS PER GA/ DRG. LATEST APPROVED.
3. THE LAST 300mm EXCAVATION IN SOIL IS TO BE DONE JUST PRIOR TO THE PLACING OF FOUNDATION P.C.C.
4. P.C.C. OF 1:4:8 GRADE SHALL BE WITH 40mm NOMINAL SIZE AGGREGATE.
5. CONC. FOR R.C.C WORK SHALL BE OF GRADE M25
6. REINF. BARS SHALL BE H.Y.S.D. BARS CONFORMING TO IS:1786 LATEST REVISION.
7. LAP/ANCHORAGE SHALL BE 50 X DIA OF BAR
8. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS
 - a) FOOTING - 50MM
 - (b) SLAB - 20MM
 - (c) COLOUMN - 40MM,
 - d) BEAMS - 25MM



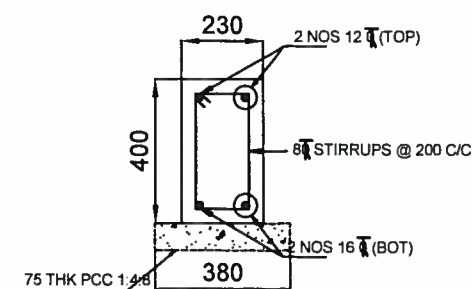
FOUNDATION LAYOUT OF SECURITY ROOM & GATE



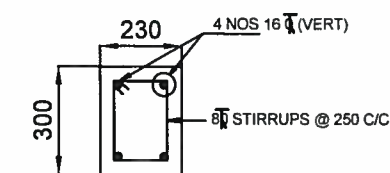
SECTION 1-1



SECTION 3-3



DETAIL OF PB (TYP)



SECTION 2-2

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



PROJECT : 400/220 KV SUB-STATION AT TUGHLAKABAD

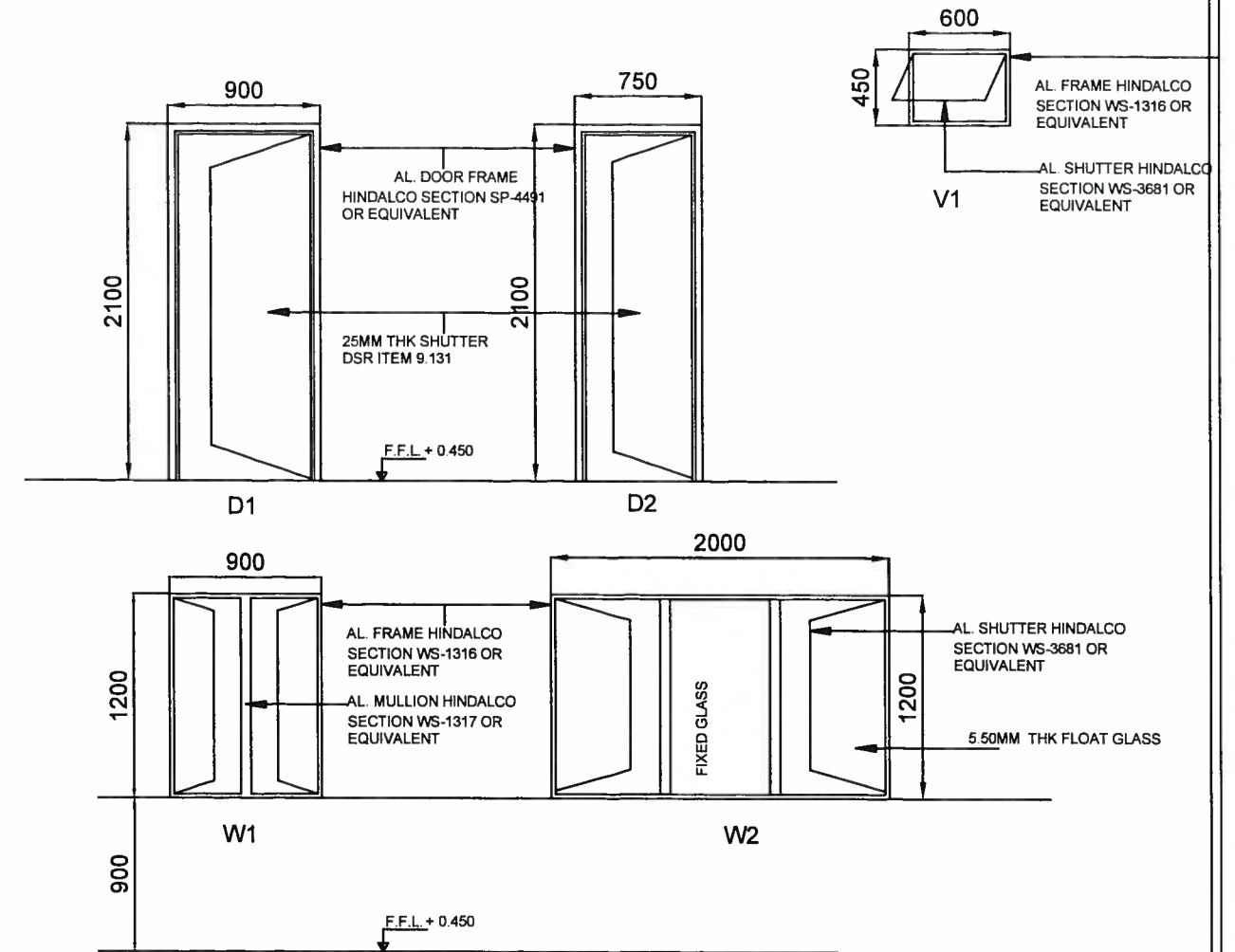
TITLE : SECURITY ROOM & GATE DETAILS

DRAWING NO. C/ENGG/NR-I/TUGH/BW-01 (SH.6 OF 8)

SCALE NTS
REV. 0

REV.	DESCRIPTION	CIVIL	REVD.	REVD.	APPD. DATE
0	RELEASED FOR CONSTRUCTION				

DETAILS OF AL. DOORS, WINDOWS & VENTILATORS

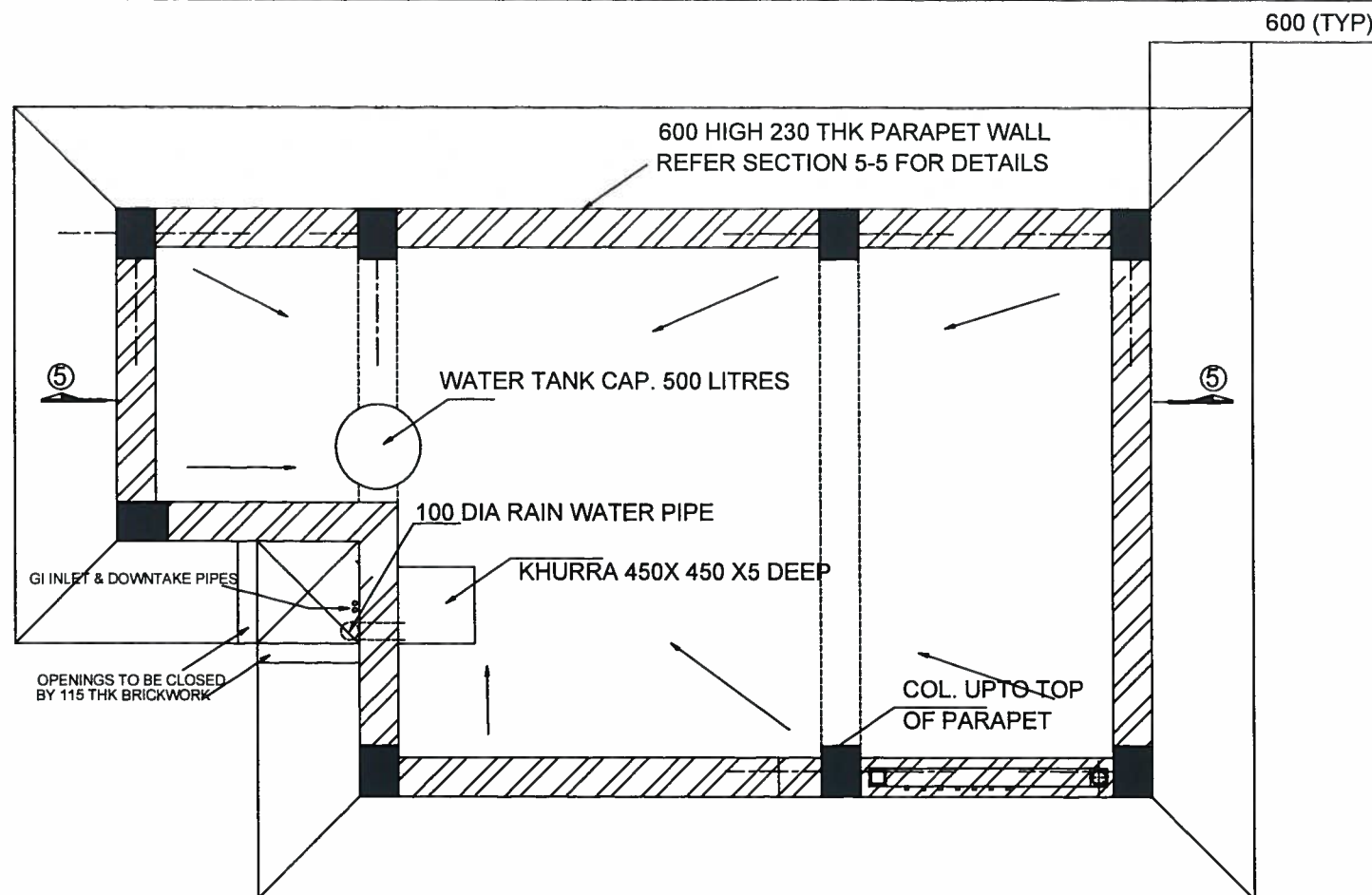


NOTES:

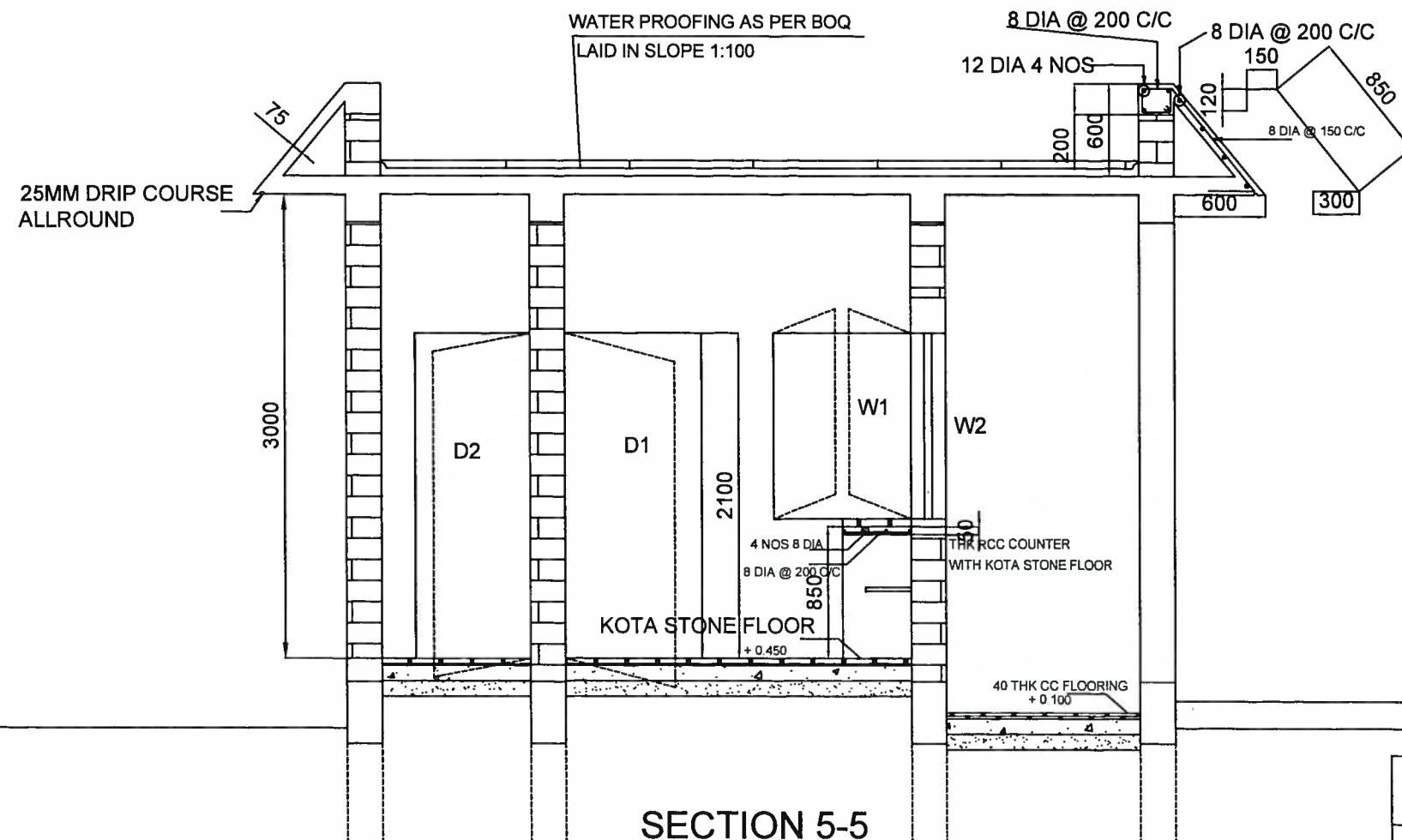
- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
- PROVIDE 230 THK BRICK WORK IN ENGLISH BOND IN 1:6 CEMENT MORTAR (1CEMENT : 6 COARSE SAND). & 115 THK BRICKWORK IN 1:4 CEMENT MORTAR
- a). BRICK TO BE DONE WITH BRICK OF FIRST CLASS DESIGNATION-75
b). PLASTER WORK SHALL BE IN CEMENT MORTAR 1:6 (1CEMENT:6 FINE SAND) THICKNESS OF PLASTER SHALL BE AS PER B.O.Q.
- ALL EXPOSED PLASTER SURFACES ARE TO BE PAINTED WITH MINIMUM OF TWO COATS OF OIL BOUND DISTEMPER OF APPROVED SHADE DSR 2016 ITEM NO. 13.41.1

REV.	DESCRIPTION	CIVIL	REVD.	REVD.	APPD.	DATE
0	RELEASED FOR CONSTRUCTION					

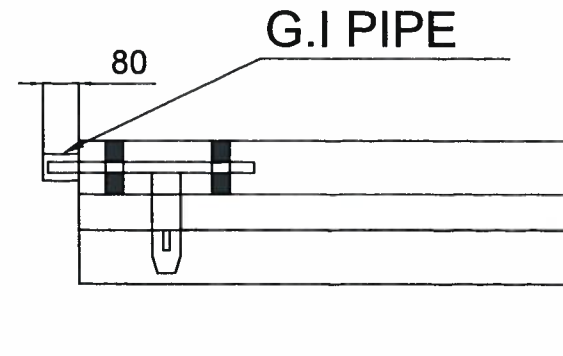
POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)		PROJECT : 400/220 KV SUB-STATION AT TUGHLAKABAD		TITLE : SECURITY ROOM & GATE DETAILS	
DRAWING NO. C/ENGG/NR-1/TUGH/BW-01 (SH.7OF 8)		SCALE : NTS		REV. : 0	



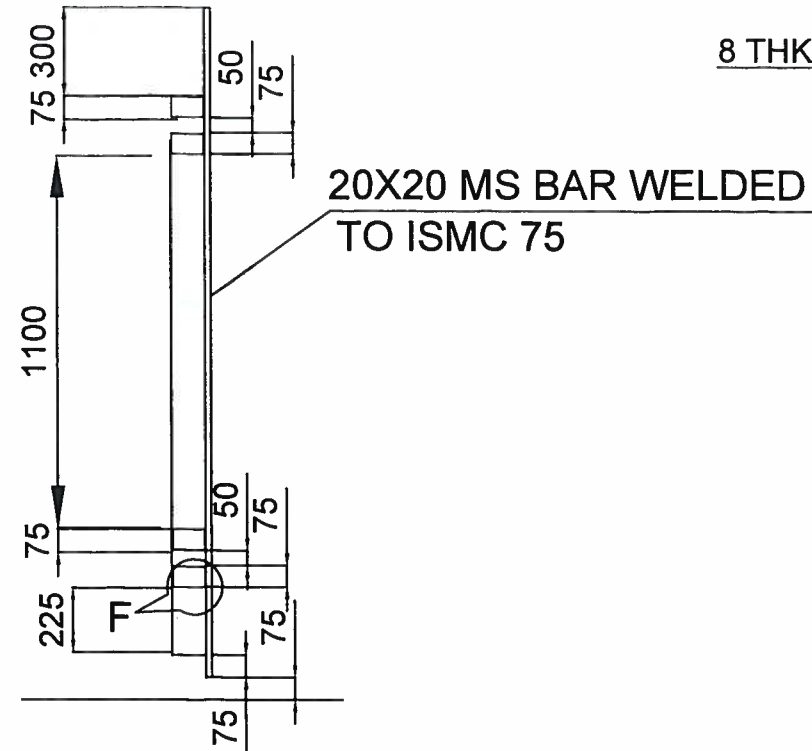
ROOF PLAN



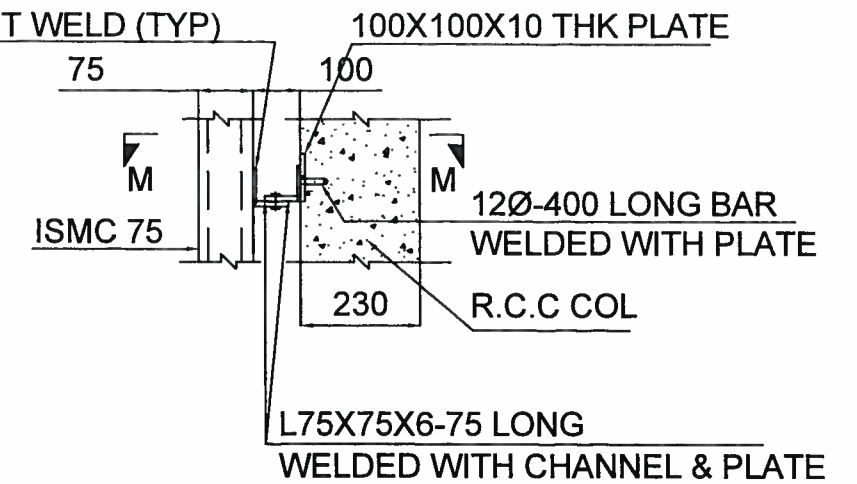
SECTION 5-5



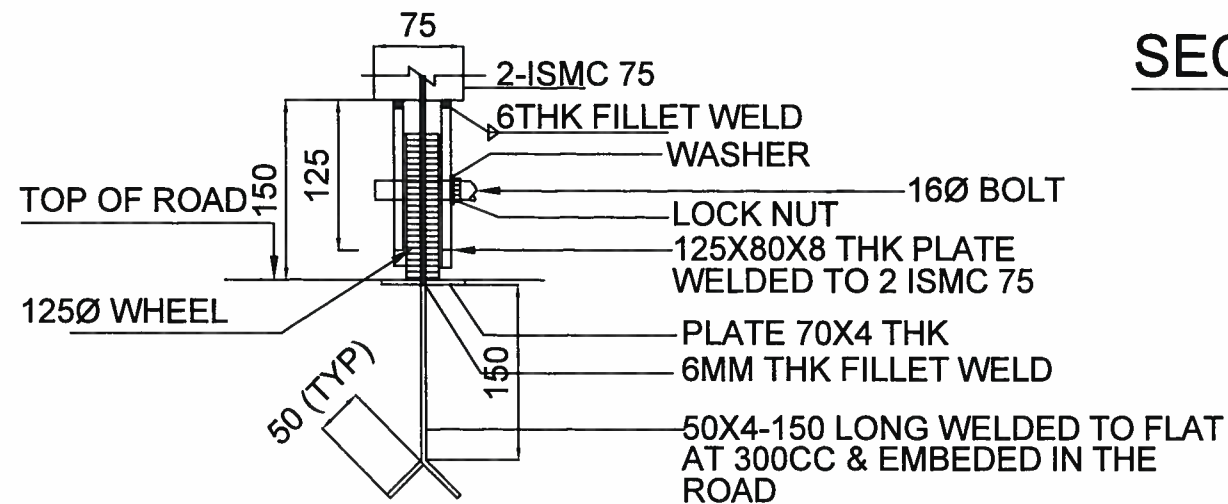
**TYPICAL LOCKING ARRANGEMENT
DETAIL-A**



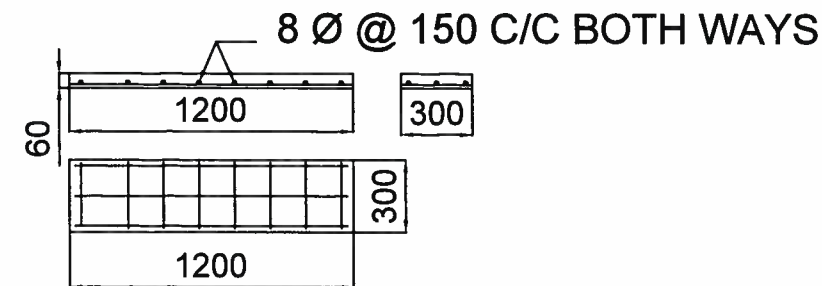
SECTION 7-7



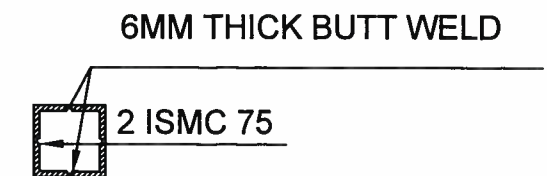
DETAIL-B & C



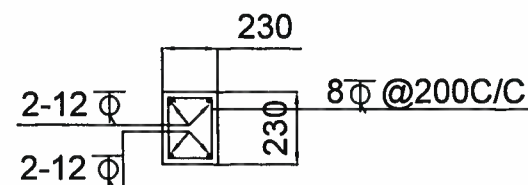
DETAIL-E



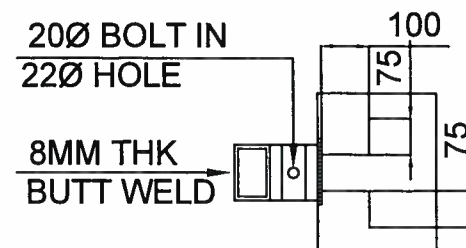
PRECAST COVER SLAB



DETAIL-F



CROSS SEC. OF LINTEL



SECTION M-M

NOTES:

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
2. STRUCTURAL STEEL USED SHALL CONFORM TO IS:2062, AND SHALL BE PAINTED WITH TWO OR MORE COATS OF ENAMEL PAINT OF APPROVED BRAND OVER A PRIMING COAT OF APPD. PRIMER

REV.	DESCRIPTION	CIVIL	REVD.	REVD.	APPD. DATE
0	RELEASED FOR CONSTRUCTION				

POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)		PROJECT :		400/220 KV SUB-STATION AT TUGHLAKABAD	
		TITLE :		SECURITY ROOM & GATE DETAILS	
		DRAWING NO. :		C/ENGG/NR-1/TUGH/BW-01 (SH.8 OF 8)	
		SCALE :		NTS	
		REV. :		0	