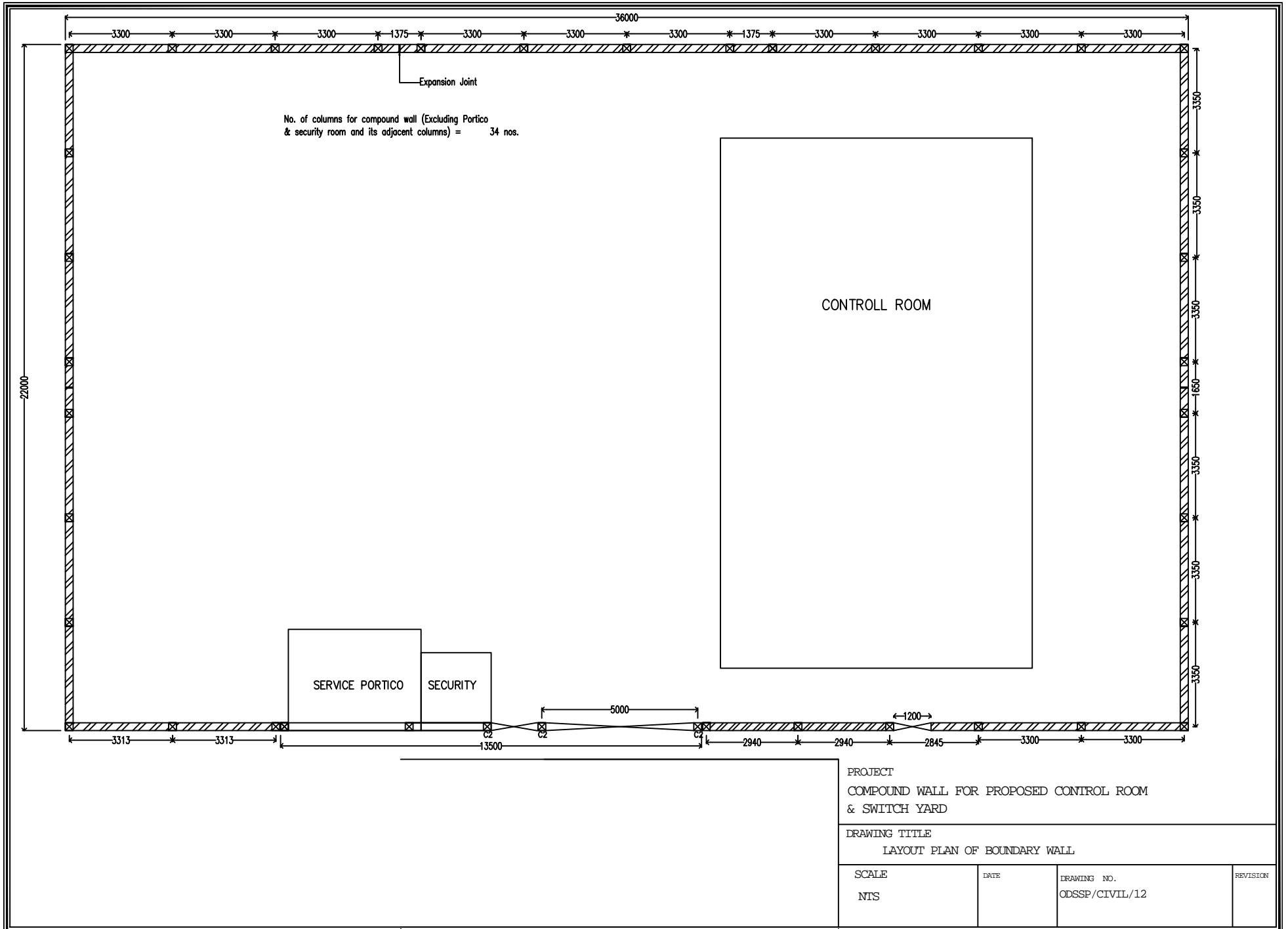


ROAD INSIDE SUBSTATION

DEG NO-ODSSP/CIVIL/11/REV-B



No. of columns for compound wall (Excluding Portico & security room and its adjacent columns) = 34 nos.

CONTROL ROOM

SERVICE PORTICO

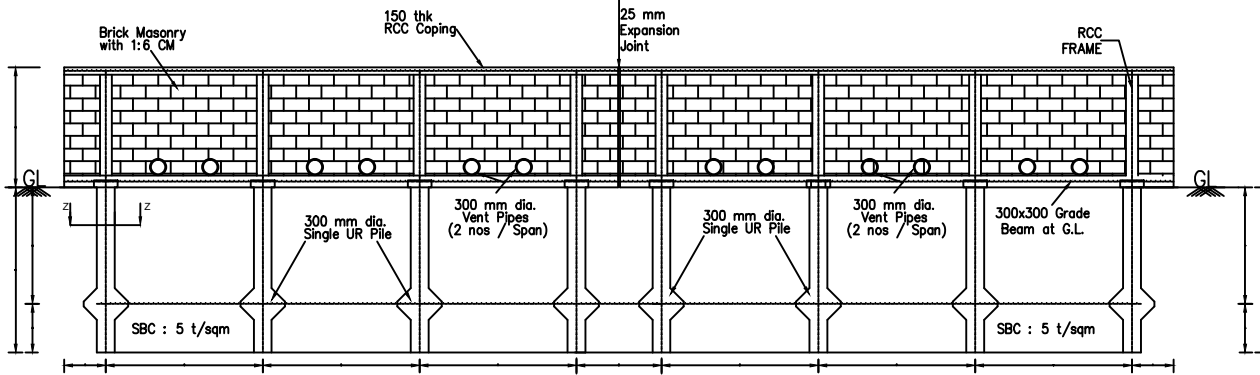
SECURITY

PROJECT
 COMPOUND WALL FOR PROPOSED CONTROL ROOM
 & SWITCH YARD

DRAWING TITLE
 LAYOUT PLAN OF BOUNDARY WALL

| SCALE | DATE | DRAWING NO. | REVISION |
|-------|------|----------------|----------|
| NTS | | ODSSP/CIVIL/12 | |

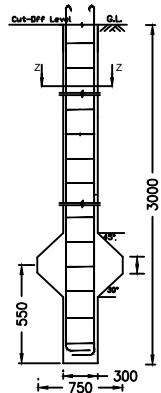
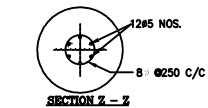
PILE FOUNDATION



G.A. FOR TWO CONSEQUITIVE UNITS

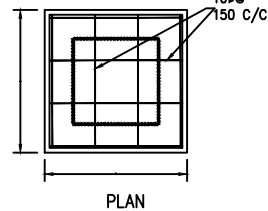
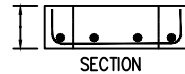
NOTES

1. All dimensions are in mm and m.
2. All levels are in m.
3. All grades of RCC are in M20.
4. All grades of Steel are in Fe500.
5. All cover to column reinforcement 40mm and beam 25mm.
6. Lap length 55 ϕ , Not more than 50% bars are to be lapped at one level.
7. All service detailings conforming to SP:34.
8. Safe bearing capacity of soil : 05 t/sqm.

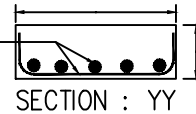


SINGLE UNDER REAMED PILE

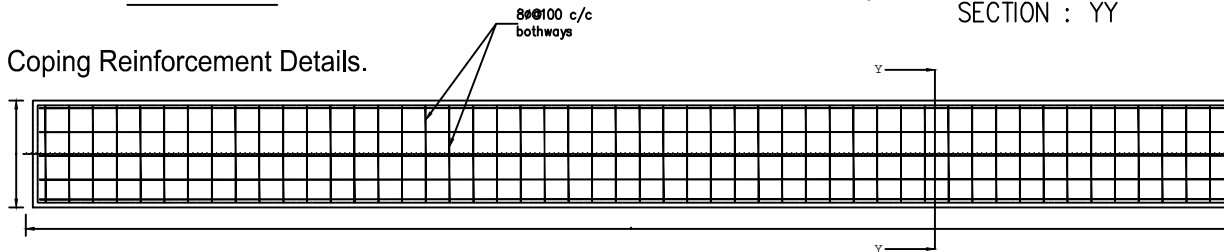
Pile head block details.



8#@100 c/c bothways



Coping Reinforcement Details.



Column Reinforcement

| C | Size | Main Rf. | Links |
|---|---------|-----------------|----------------------|
| | 250x250 | 4-12 ϕ tor | 8 ϕ tor 200 c/c |

Beam at Mid height

| | Size | Main Rf. | Stirrups |
|--|---------|-----------------|----------------------|
| | 250x200 | 6-12 ϕ tor | 8 ϕ tor 200 c/c |

Tie Beam at G.L.

| | Size | Main Rf. | Stirrups |
|--|---------|-----------------|----------------------|
| | 300x200 | 6-12 ϕ tor | 8 ϕ tor 200 c/c |

PROJECT

COMPOUND WALL FOR PROPOSED CONTROL ROOM & SWITCH YARD

DRAWING TITLE

STRUCTURAL DESIGN & DETAILINGS.

SCALE

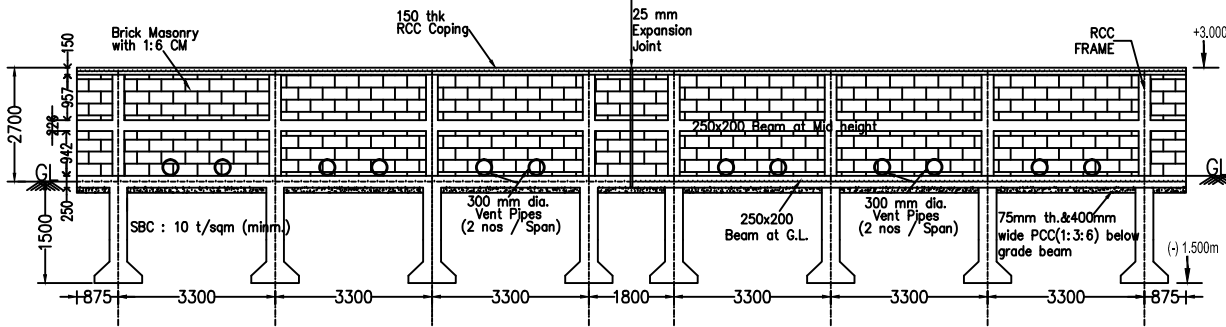
NTS

DATE

DRAWING NO.

ODSSP/CIVIL/13,SHEET-1/2

OPEN FOUNDATION



G.A. FOR TWO CONSEQUITIVE UNITS

Column Reinforcement

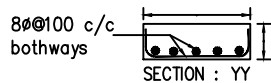
| C | Size | Main Rf. | Links |
|---|---------|-----------------|----------------------|
| | 250x250 | 4-12 ϕ tor | 8 ϕ tor 200 c/c |

Beam at mid height

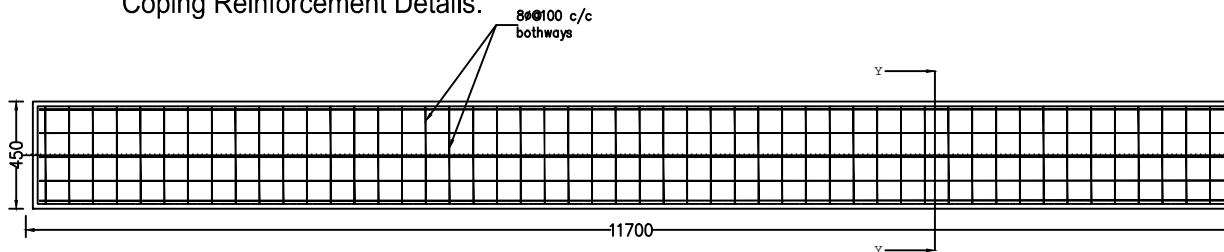
| | Size | Main Rf. | Stirrups |
|--|---------|-----------------|----------------------|
| | 250x200 | 6-12 ϕ tor | 8 ϕ tor 200 c/c |

Tie Beam at G.L.

| | Size | Main Rf. | Stirrups |
|--|---------|-----------------|----------------------|
| | 250x200 | 6-12 ϕ tor | 8 ϕ tor 200 c/c |



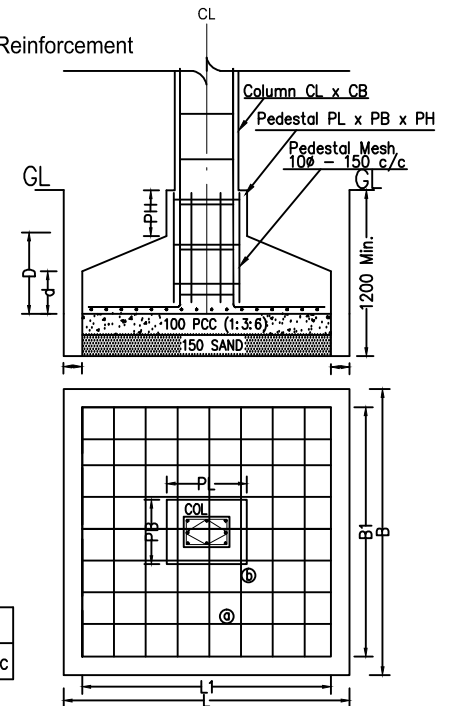
Coping Reinforcement Details.



NOTES

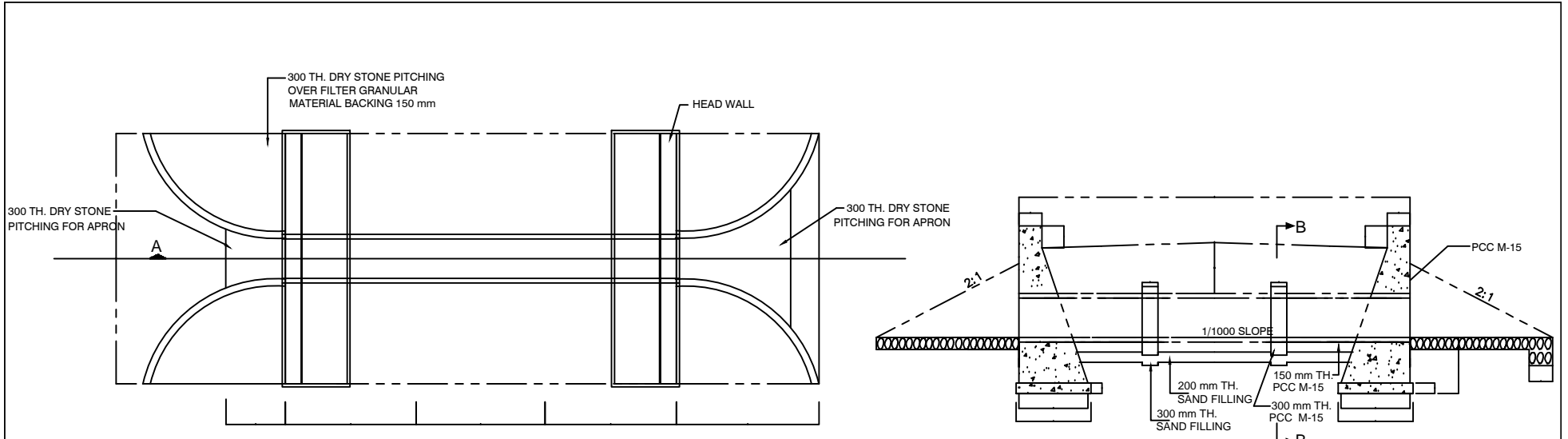
1. All dimensions are in mm and m.
2. All levels are in m.
3. All grades of RCC are in M20.
4. All grades of Steel are in Fe-500.
5. All cover to column reinforcement 40mm and beam 25mm.
6. Lap length 55 ϕ , Not more than 50% bars are to be lapped at one level.
7. All service detailings conforming to SP:34.
8. Safe bearing capacity of soil : 10 t/sqm.
9. 75 mm th. and 400mm wide PCC (1:3:6) will be provided below grade beams.

Footing Reinforcement



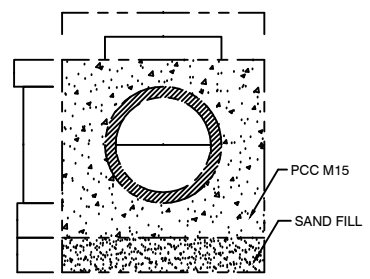
| FTG. | COL | CL | CB | PL | PB | PH | L | B | L1 | B1 | D | d | a | b |
|------|-----|-----|-----|-----|-----|------|------|------|-----|-----|-----|-----|-------------------------|-------------------------|
| F1 | C | 250 | 250 | 300 | 300 | 1000 | 1050 | 1050 | 900 | 900 | 450 | 150 | 10 ϕ Tor @ 150 c/c | 10 ϕ Tor @ 150 c/c |

| | | |
|--|------|--------------------------------------|
| PROJECT COMPOUND WALL FOR PROPOSED CONTROL ROOM & SWITCH YARD | | |
| DRAWING TITLE COMPOUND WALL DETAILS (OPEN FOUNDATION) | | |
| SCALE NTS | DATE | DRAWING NO. ODSSP/CIVIL/13-REV-A, |
| | | SHEET-2/2 |

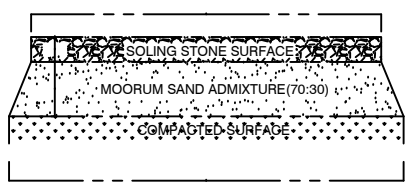


PLAN OF SINGLE ROW CULVERT

SECTION-AA
CULVERT SINGLE ROW & DOUBLE ROW

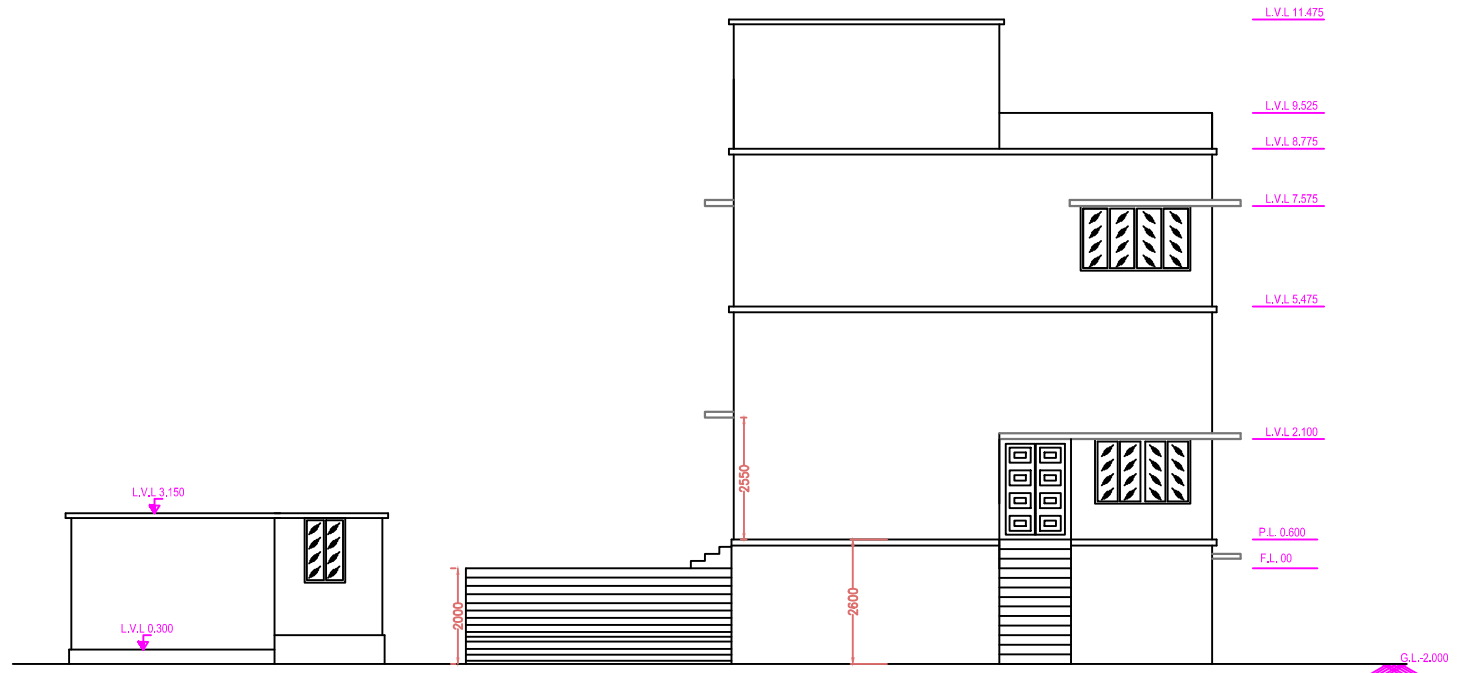


SECTION-BB
SINGLE ROW CULVERT

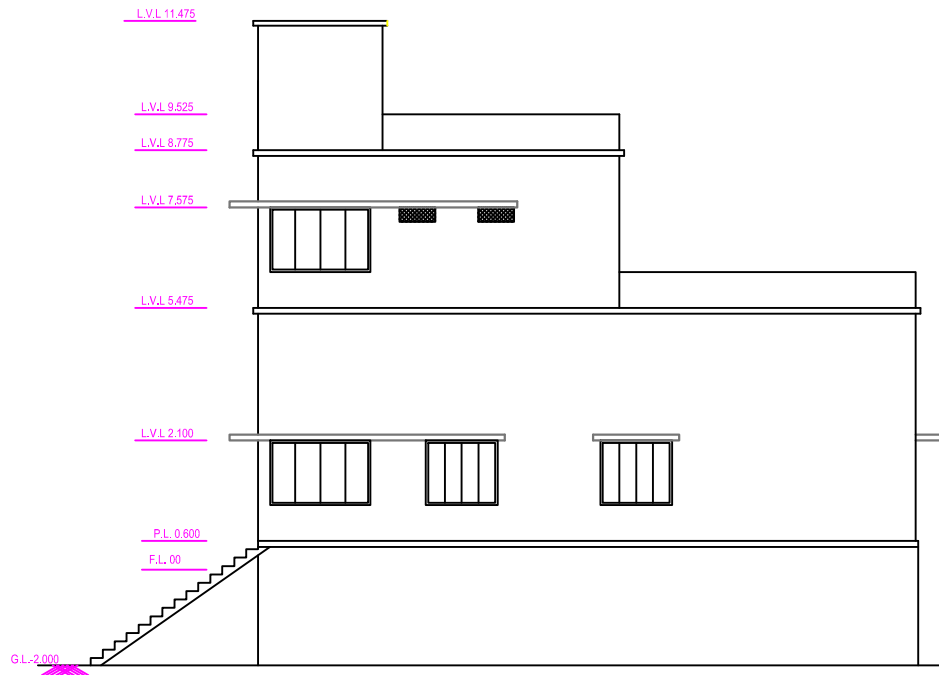


CROSS SECTION OF APPROACH ROAD

| | | |
|---|----------------|---------|
| PROPOSED | | PROJECT |
| CONTROL ROOM cum SWITCH GEAR BUILDING. (TYPICAL) | | |
| DRAWING TITLE | | |
| TYPICAL CROSS SECTION OF APPROACH ROAD & H.P. CULVERT | | |
| REVISION | DRAWING NO. | SCALE |
| | ODSSP/CIVIL/14 | NTS |

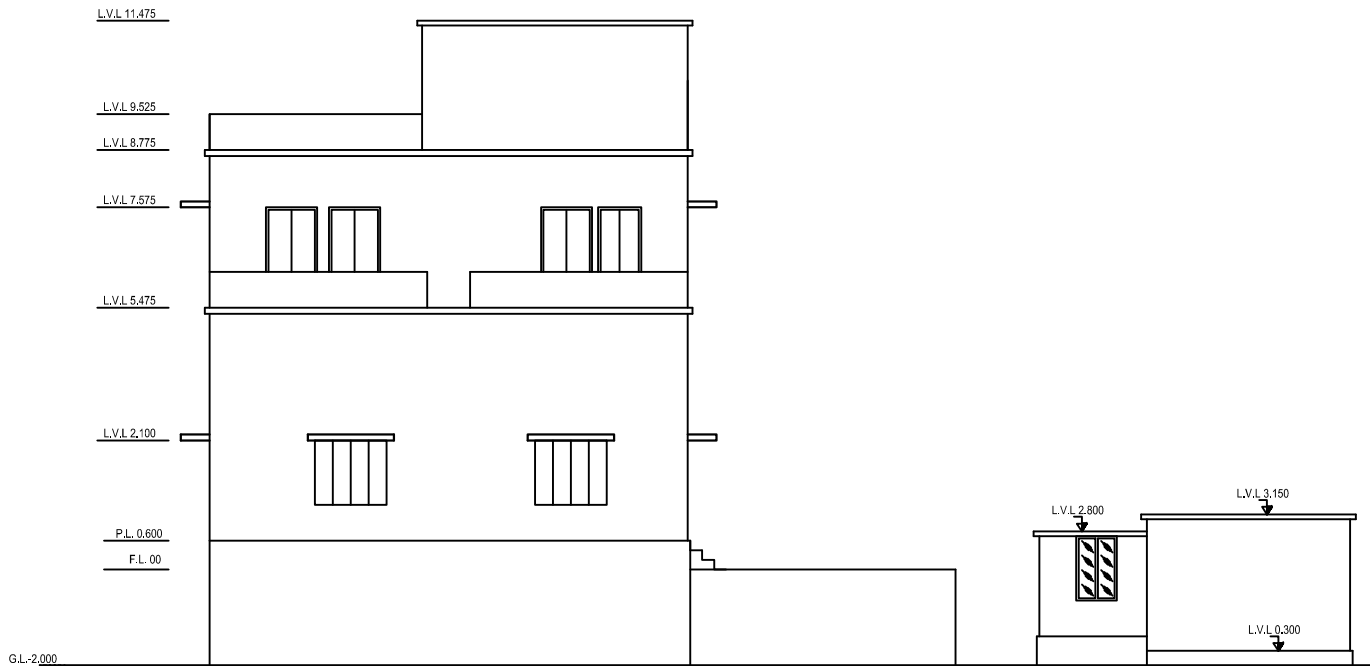


FRONT ELEVATION

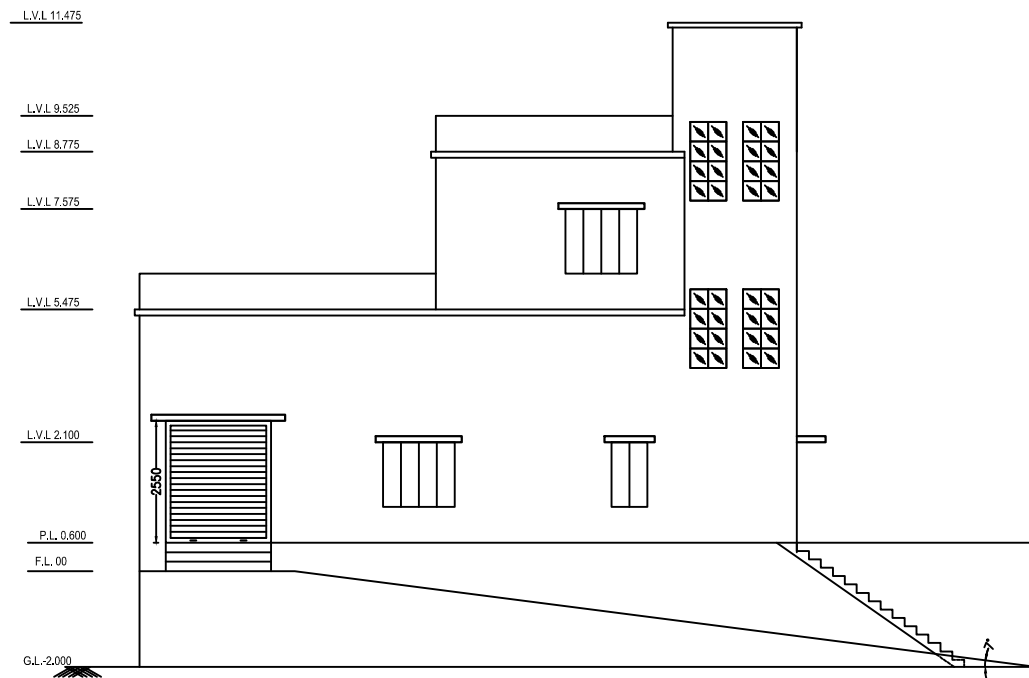


LEFT SIDE ELEVATION

| | | |
|--|---------------------------------|-------|
| PROJECT | | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. | | |
| PILE FOUNDATION IN FLOOD ZONE | | |
| DRAWING TITLE | | |
| FRONT & LEFT SIDE ELEVATION | | |
| REVISION | DRAWING NO. | SCALE |
| | ODSSP/CIVIL/15-REV-A, SHEET 1/5 | NIS |

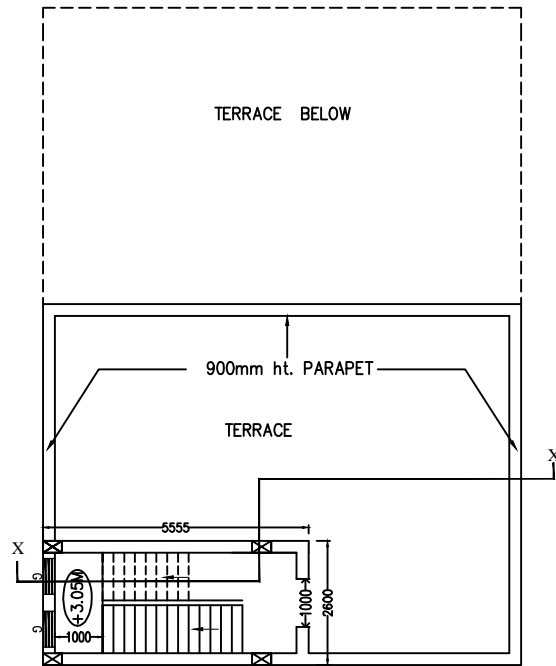


REAR ELEVATION

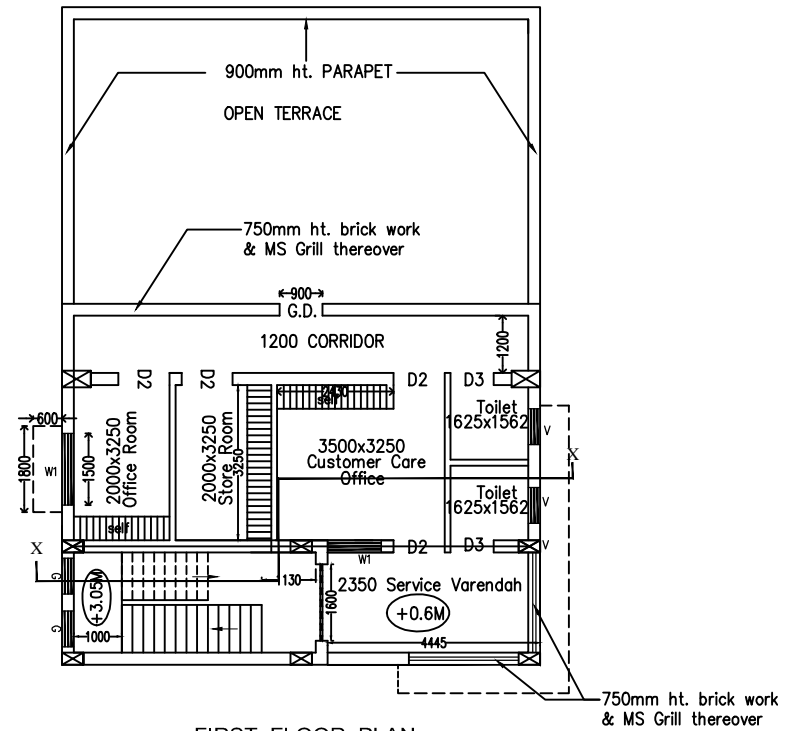


RIGHT SIDE ELEVATION

| | | | |
|---|--------------------------|----------|-------|
| PROJECT | | PROPOSED | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. IN FLOOD ZONE | | | |
| DRAWING TITLE | | | |
| REAR & RIGHT SIDE ELEVATION | | | |
| REVISION | DRAWING NO. | DATE | SCALE |
| | ODSSP/CIVIL/15,SHEET 2/5 | | NTS |



TERRACE PLAN



FIRST FLOOR PLAN

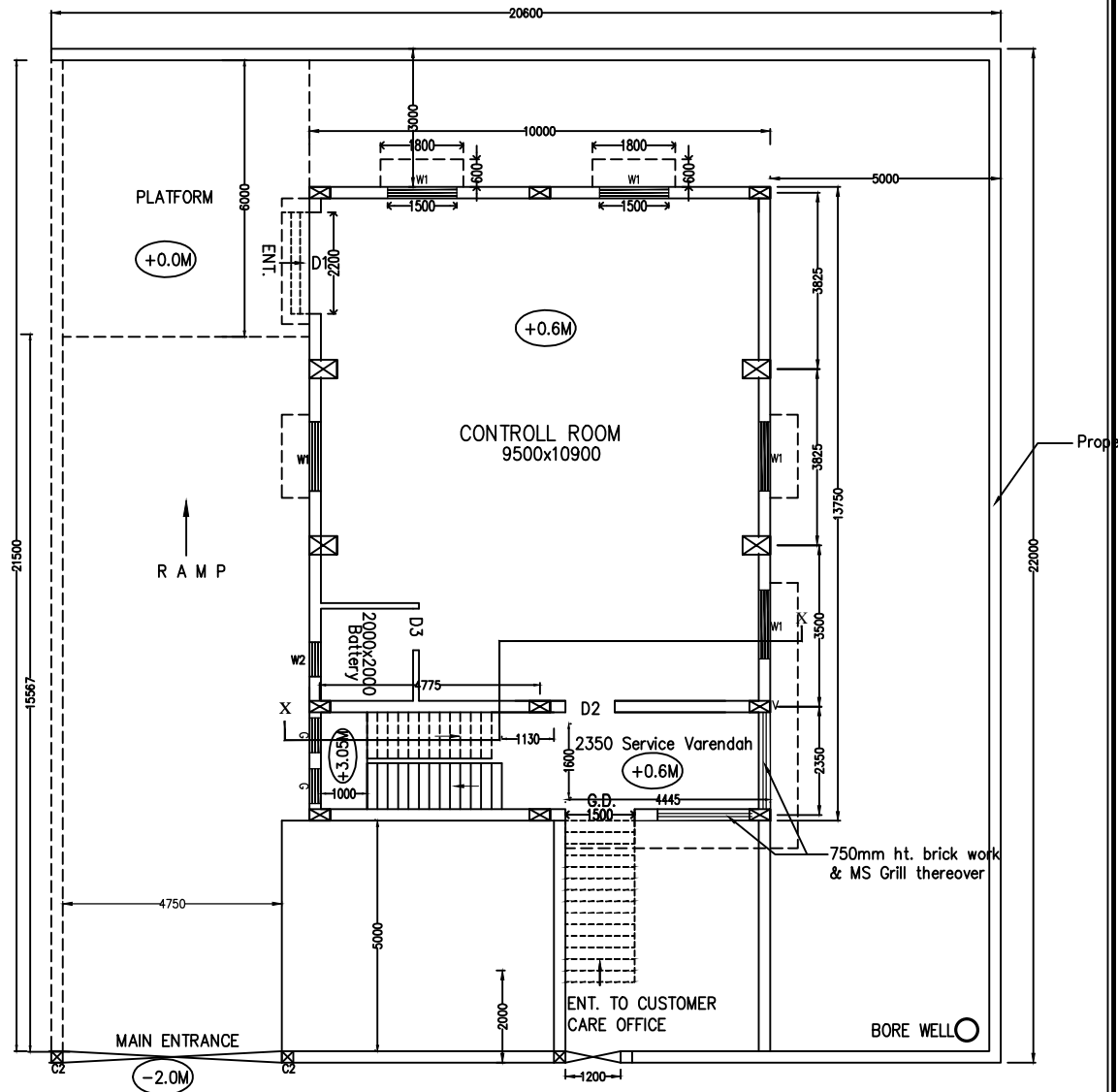
Schedule of Doors and Windows.

| Size | Specifications |
|--------------|---------------------------------|
| D1 2200x2550 | Four fold collapsible Iron door |
| D2 1070x2100 | Wooden door |
| D3 900x2100 | Wooden door |
| D3 900x2100 | Fibre door |
| W 1500x1350 | Glazed Sliding Window with net |
| V 750x600 | Iron railed with tinted glass |
| STAIR : | T-225 / R-175 |

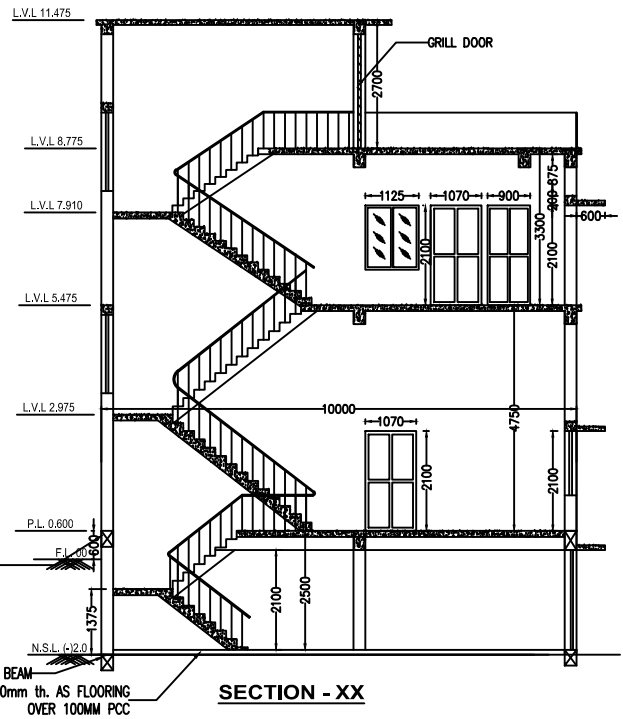
Levels.

| | |
|-----------------------------|-----------|
| Office & Other room floor | (+)5.475m |
| Landing Level | (+)7.125m |
| Top of First Floor Roof | (+)8.775m |
| Window sill level-1st Floor | (+)6.225 |
| Lintel bottom level | (+)7.575 |

| | | | |
|---|---------------------------|----------|-------|
| PROJECT | | PROPOSED | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. IN FLOOD ZONE | | | |
| DRAWING TITLE | | | |
| ARCHITECTURAL DRAWING (FIRST FLOOR & TERRACE PLAN) | | | |
| REVISION | DRAWING NO. | DATE | SCALE |
| | ODSSP/CIVIL/15, SHEET 3/5 | | NTS |



GROUND FLOOR PLAN



SECTION - XX

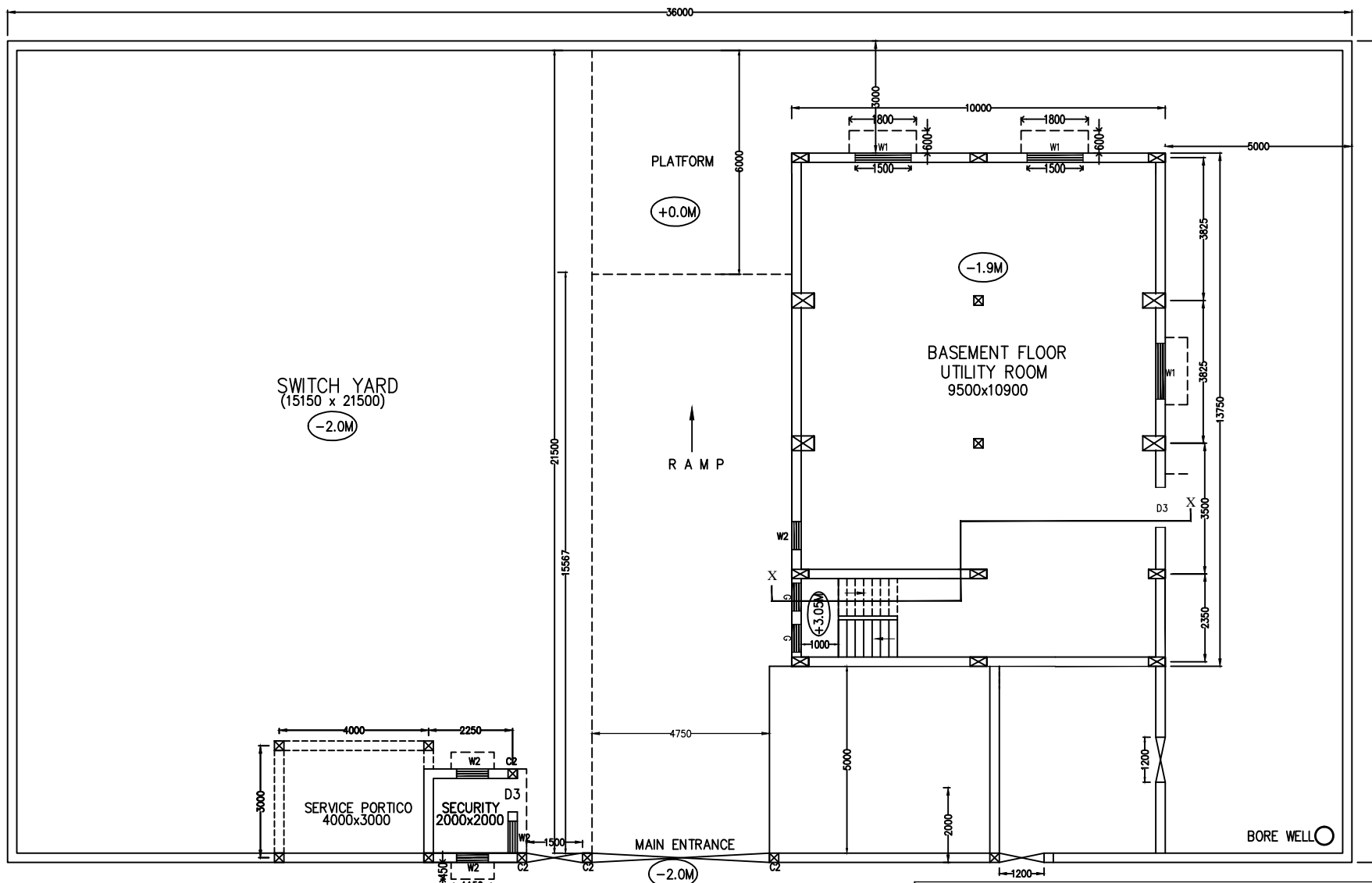
Schedule of Doors and Windows.

| Size | Specifications |
|--------------|---------------------------------|
| D1 2200x2550 | Four fold collapsible Iron door |
| D2 1070x2100 | Wooden door |
| D3 900x2100 | Wooden door |
| D3 900x2100 | Fibre door |
| W 1500x1350 | Glazed Sliding Window with net |
| V 750x600 | Iron railed with tinted glass |
| STAIR : | T-250 / R-150 |

Levels. Ground

| | |
|--------------------------------|---------------|
| Formation Level (2m above NSL) | ±0.000m |
| Control Room floor | (+)0.600m |
| Office & Other room floor | (+)5.475m |
| Landing Level | (+)3.050m |
| Top of Service Portico | (+)3.150m |
| Top of Ground Floor Roof | (+)5.475m |
| Window sill level | (+)1.35m |
| Lintel bottom level | +3.150/+2.70m |

| | | | |
|---|---------------------------|----------|-------|
| PROJECT | | PROPOSED | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. | | | |
| IN FLOOD ZONE | | | |
| DRAWING TITLE | | | |
| ARCHITECTURAL DRAWING SHOWING GROUND FLOOR PLAN AND SECTIONAL ELEVATION | | | |
| REVISION | DRAWING NO. | DATE | SCALE |
| | ODSSP/CIVIL/15, SHEET 4/5 | | NTS |

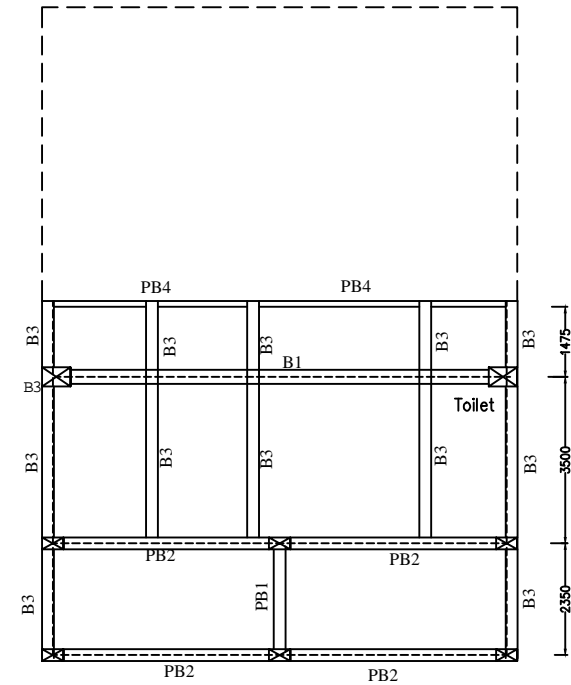


LOWER FLOOR PLAN

| | | | |
|--|---------------------------|----------|-------|
| PROJECT | | PROPOSED | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. | | | |
| IN FLOOD ZONE | | | |
| DRAWING TITLE | | | |
| ARCHITECTURAL DRAWING SHOWING LOWER FLOOR PLAN | | | |
| AND LAYOUT PLAN | | | |
| REVISION | DRAWING NO. | DATE | SCALE |
| | ODSSP/CIVIL/15, SHEET 5/5 | | NTS |

ROOF BEAM REINFORCEMENT DETAILS.

| BEAM TOP LEVEL | BEAM MKD. | END SPAN | MID SPAN |
|----------------|-----------|----------|----------|
| | B1 | | |
| | B2 | | |
| | B3 | | |
| | B4 | | |

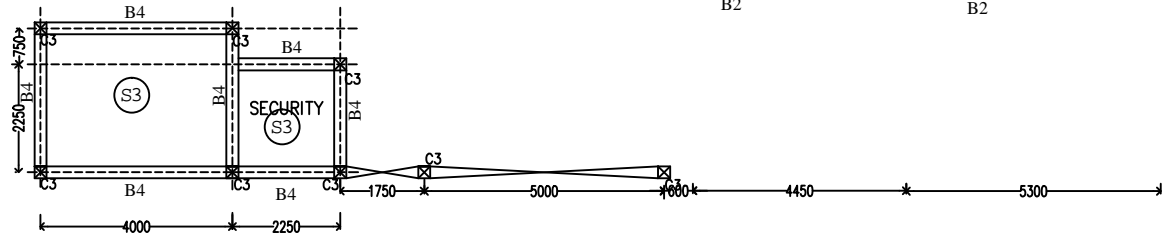


FIRST FLOOR ROOF BEAM LAY OUT.

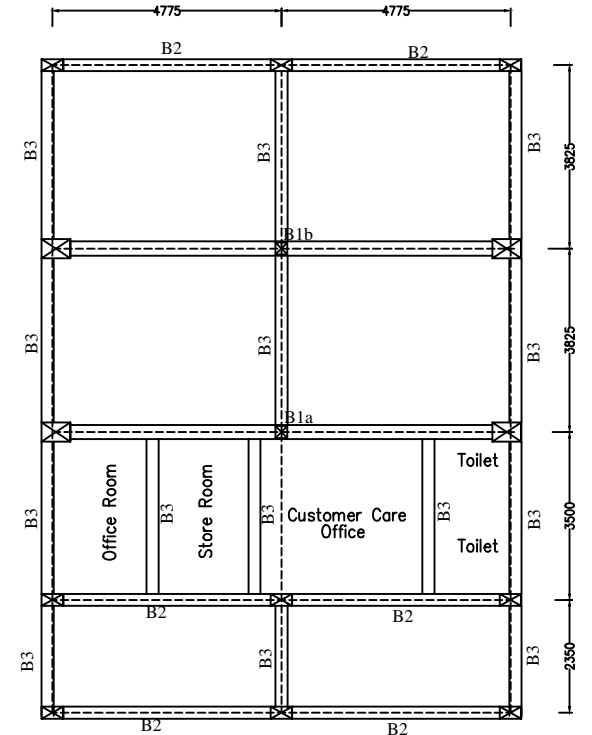
| | | | |
|---|-------------------------|------|-------|
| PROJECT | PROPOSED | | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. | | | |
| IN FLOOD ZONE | | | |
| DRAWING TITLE | | | |
| FIRST FLOOR ROOF BEAM REINFORCEMENT DETAILS | | | |
| REVISION | DRAWING NO. | DATE | SCALE |
| | ODSSP/CIVIL/16,SHEET1/4 | | NTS |

ROOF BEAM REINFORCEMENT DETAILS.

| BEAM TOP LEVEL | BEAM MKD. | END SPAN | MID SPAN |
|----------------|----------------|----------|----------|
| | B1a 350X825 | | |
| | B1b 350X825 | | |
| | B2 250X450 | | |
| | B3 250X400 | | |
| +4.000m | B4 250X300 | | |



ROOF BEAM LAY OUT.

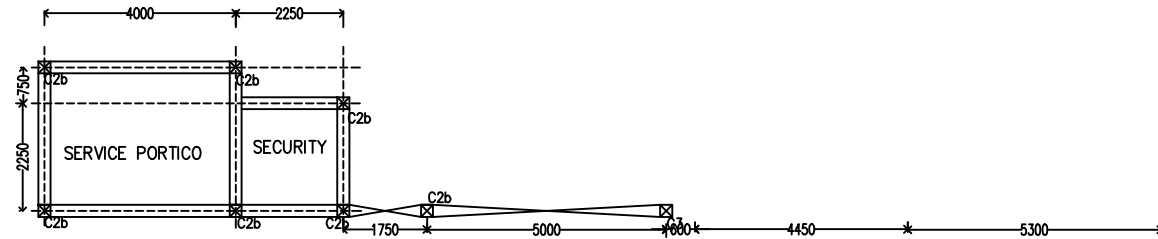
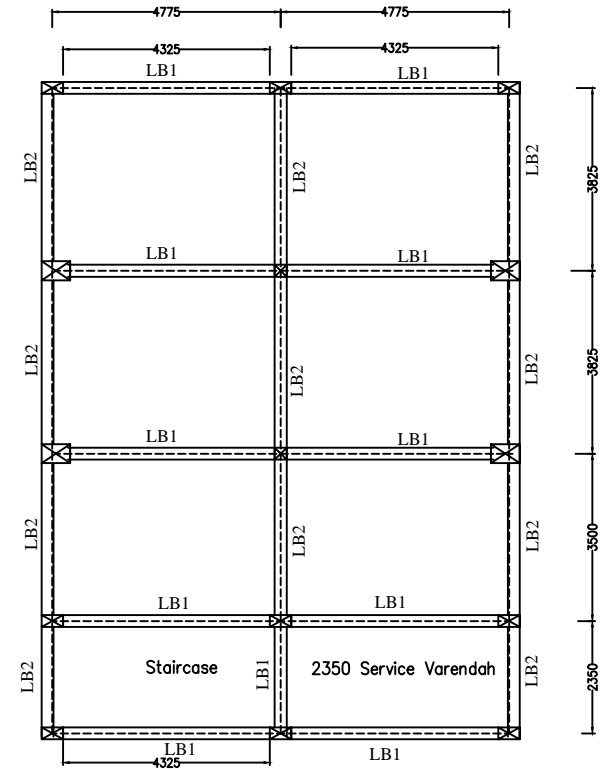
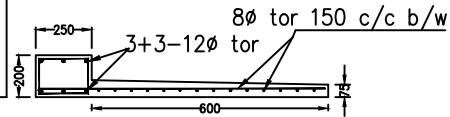


| | | | |
|--|--------------------------|----------|-------|
| PROJECT | | PROPOSED | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. | | | |
| IN FLOOD ZONE | | | |
| DRAWING TITLE | | | |
| GROUND FLOOR ROOF BEAM REINFORCEMENT DETAILS | | | |
| REVISION | DRAWING NO. | DATE | SCALE |
| | ODSSP/CIVIL/16,SHEET 2/4 | | NTS |

| LOWER FLOOR ROOF BEAM DETAIL | | |
|------------------------------|-----------|--|
| BEAM MARKED | Beam Size | Main Reinforcement |
| LB1 | 250x400 | Top - 2-16+3-16 Bottom- 3-16 Stirrups - 8T-2L-150c/c |
| LB2 | 250x400 | Top - 2-16+3-12 Bottom- 2-16 Stirrups - 8T-2L-150c/c |
| LB3 | 250x250 | Top - 3-12 Bottom- 3-12 Stirrups - 8T-2L-150c/c |

CUT LINTEL Reinforcement over door D1.

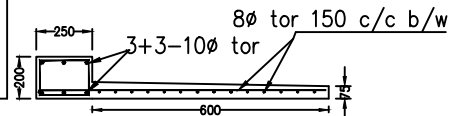
| | Size(BXD) | Main Rf. | Stirrups | Lintel Bottom |
|---|-----------|------------------|----------------------|--|
| L | 250x200 | 3-12+3-12 ϕ | 8 ϕ tor 150 c/c | + 3.150 m Refer Architectural Details |



PLINTH BEAM LAY OUT.

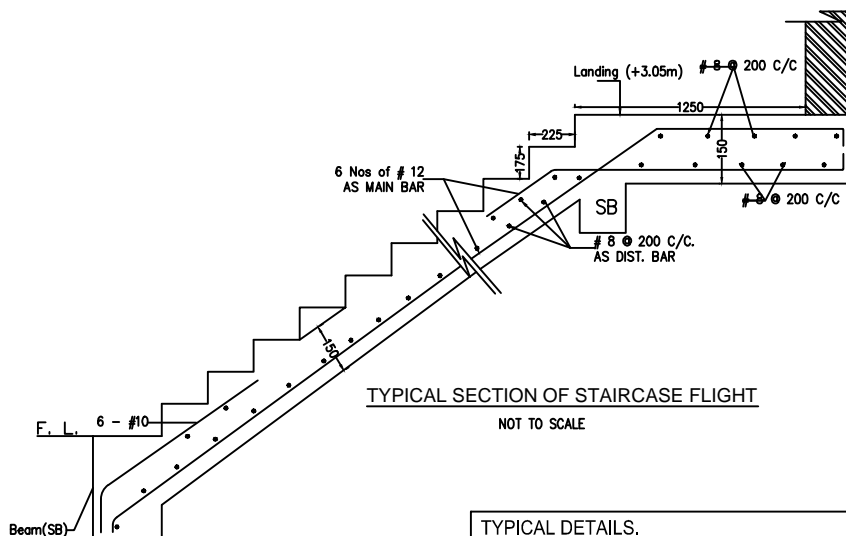
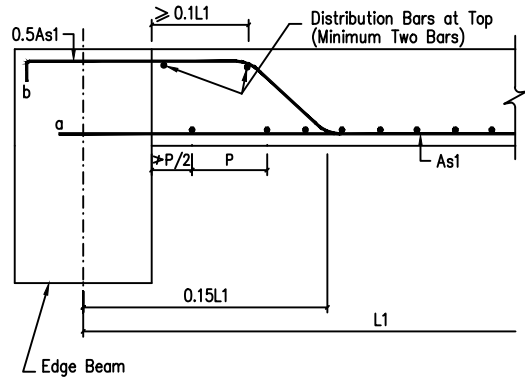
Continuous LINTEL Reinforcement over rest of the walls.

| | Size(BXD) | Main Rf. | Stirrups | Lintel Bottom |
|---|-----------|------------------|----------------------|--|
| L | 250x150 | 3-10+3-10 ϕ | 8 ϕ tor 200 c/c | + 2.850 m Refer Architectural Details |

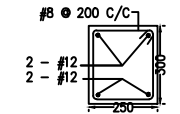


| | | | |
|--|--------------------------|----------|-------|
| PROJECT | | PROPOSED | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. IN FLOOD ZONE | | | |
| DRAWING TITLE LOWER FLOOR ROOF BEAM & LINTEL REINFORCEMENT DETAILS. | | | |
| REVISION | DRAWING NO. | DATE | SCALE |
| | ODSSP/CIVIL/16, SHEET3/4 | | NTS |

TYPICAL ROOF REINFORCEMENT DETAILS

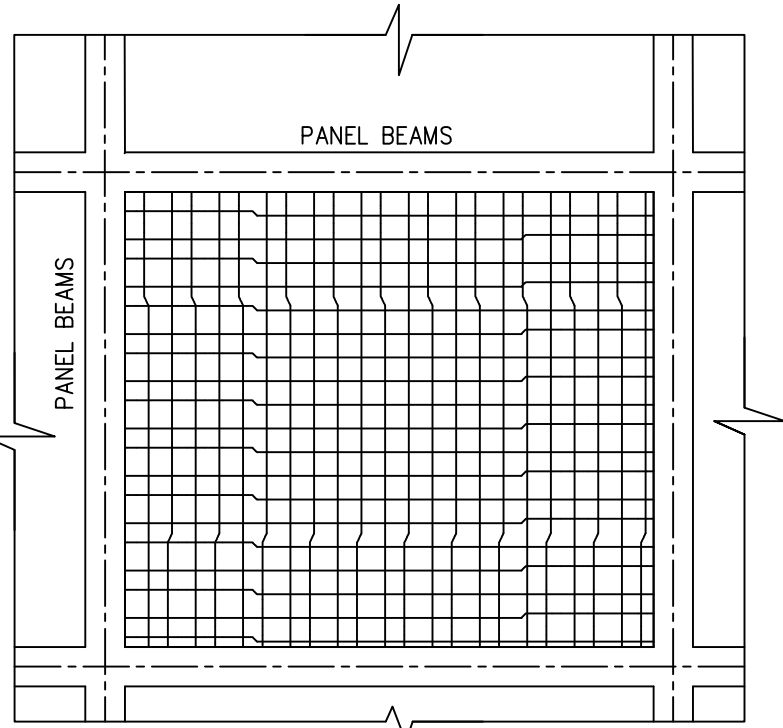


SHEET - 5/5
 TYPE-A, NO FLOODING
 SBC : 15/sq.m. (Minm.)



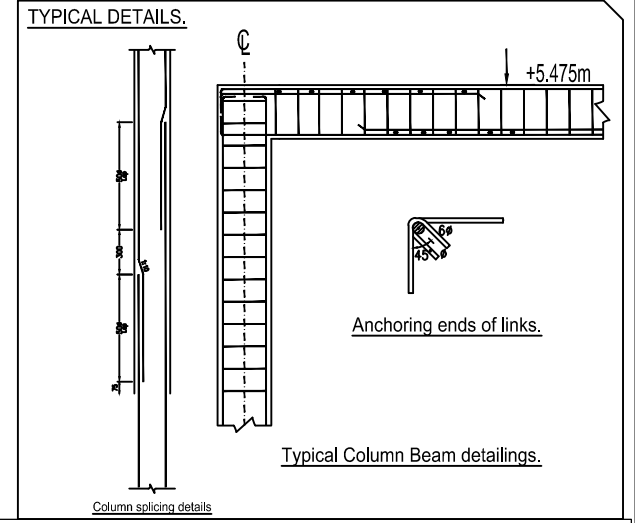
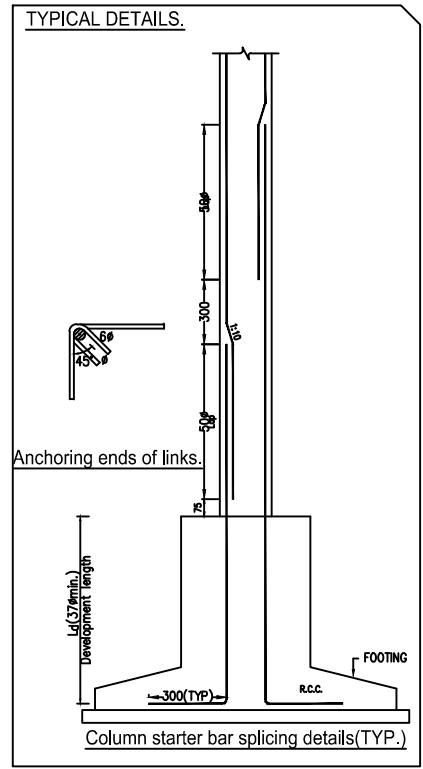
TYPICAL SECTION OF STAIR BEAM(SB)

TYPICAL SECTION OF STAIRCASE FLIGHT
 NOT TO SCALE



Slab Reinforcement.

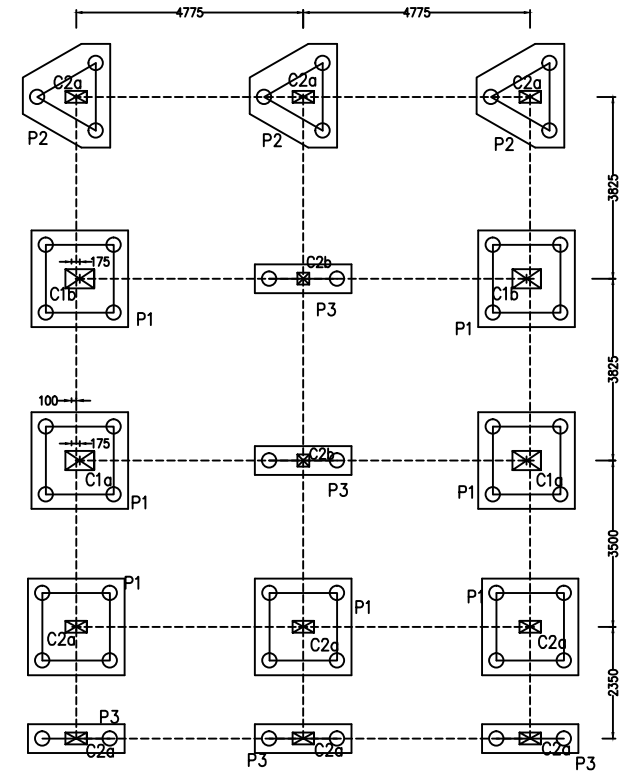
| Panel | Short Span | Long Span | Roof Slab Thk. |
|-------|-------------------------|----------------------|----------------|
| S1 | 10 ϕ tor @ 150 C/C | 8 ϕ tor 200 c/c | 125 |
| S2 | 8 ϕ tor @ 150 C/C | 8 ϕ tor 200 c/c | 125 |
| S3 | 8 ϕ tor @ 150 C/C | 8 ϕ tor 200 c/c | 100 |



| | | | |
|---|---------------------------|----------|-------|
| PROJECT | | PROPOSED | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. IN FLOOD ZONE | | | |
| DRAWING TITLE | | | |
| STAIRCASE AND OTHER MISC. DETAILS. | | | |
| REVISION | DRAWING NO. | DATE | SCALE |
| | ODSSP/CIVIL-16, SHEET 4/4 | | NTS |

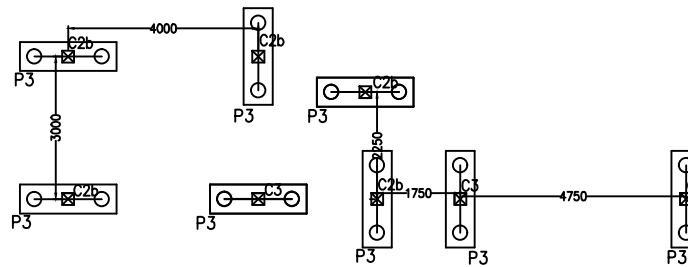
Column Reinforcement

| | Size | Main Rf. | Links. |
|-----|---------|----------------------|-------------------------------------|
| C1a | 400x600 | 12-25 ϕ tor | 8 ϕ tor 200 c/c (6- Legged) |
| C1b | 400x600 | 8-25 ϕ tor | 8 ϕ tor 200 c/c 4- Legged) |
| C2a | 250x450 | 4-20+4-16 ϕ tor | 8 ϕ tor 200 c/c 4- Legged) |
| C2b | 250x250 | 4-16 ϕ tor | 8 ϕ tor 200 c/c (2- Legged) |



GENERAL NOTES.

1. All dimensions are in mm and m.
2. All levels are in m.
3. All grade of RCC are of M-20.
4. All grade of steel are of Fe-500.
5. Pile head will be 75mm inside pile cap.
6. Clear cover to main reinforcement at bottom will be 75mm.
7. Clear cover to main reinforcement at top and side will be 50mm.
8. All cover to column reinforcement 40mm.
9. Lap length 55 ϕ , Not more than 50% bars are to be lapped at one level.
10. All service detailings should conform to SP:34.

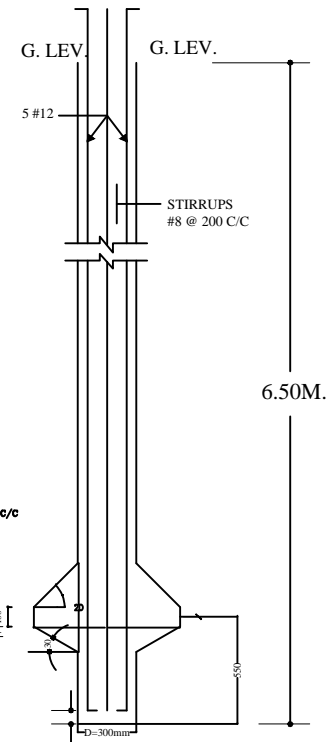
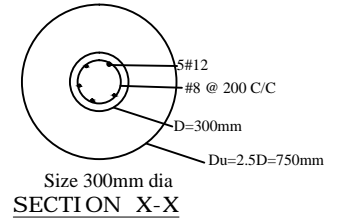
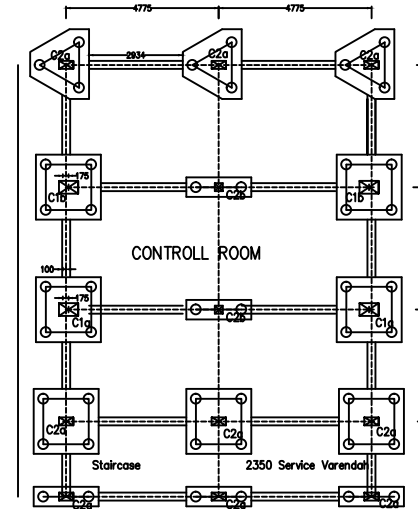
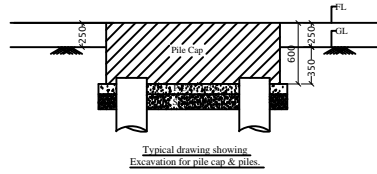
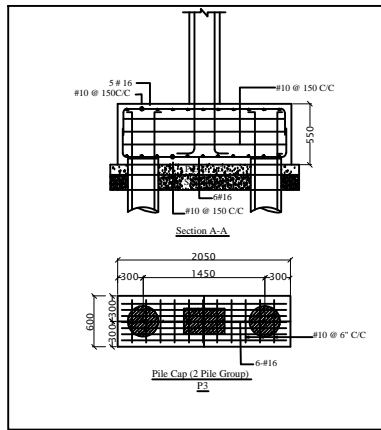


COLUMN & FOUNDATION LAY OUT.

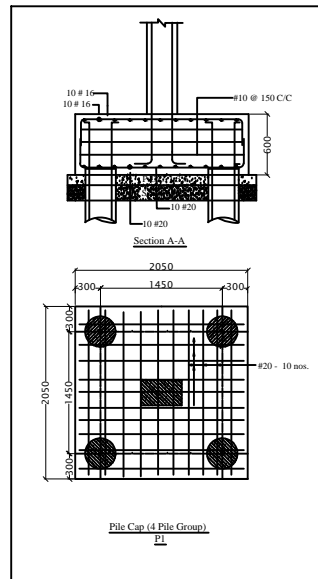
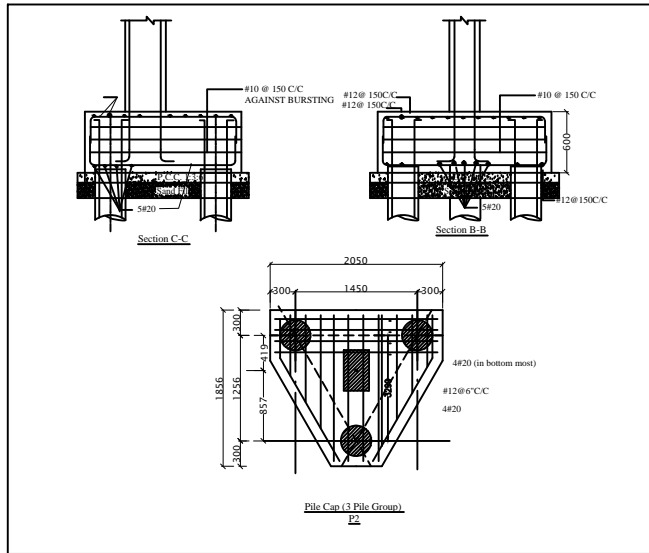
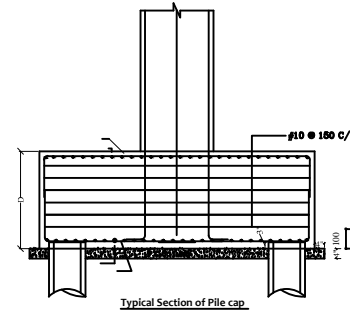
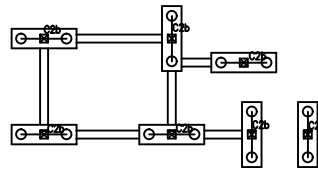
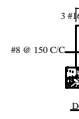
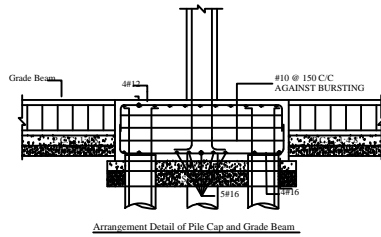
| PILE CAP | DEPTH (D) | REINFORCEMENT IN PILE CAP | | | | SIDE REINFORCEMENT |
|--------------------|-----------|---------------------------|---------------|-------------------------------------|--------------|--------------------------|
| | | BOTTOM REINFORCEMENT | | TOP REINFORCEMENT | | |
| | | X-DIR(a)(Longdir.) | Y-DIR (b) | X-DIR (c) | Y-DIR (d) | |
| P1 (4 Pile Gr.) | 600mm | 20# 10nos. | 20# 10nos. | 16# 10nos. | 16# 10nos. | 10# 150 C/C IN ALL FACES |
| P2 (3 Pile Gr.) | 600mm | 20# 5nos. | 20# 5nos. | 12# 150 C/C AT TOP & BOTTOM PORTION | 10# 150 C/C | 10# 150 C/C IN ALL FACES |
| P3 (2 Pile Gr.) | 550mm | 16# 6nos. | 10# @150 C/C. | 16# 5nos. | 10# @150 C/C | 10# 150 C/C IN ALL FACES |

| | | | |
|--|---------------------------|----------|-------|
| PROJECT | | PROPOSED | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. | | | |
| TYPE-B(2) WITH PILE FOUNDATION IN FLOOD ZONE | | | |
| DRAWING TITLE | | | |
| COLUMN & FOUNDATION REINFORCEMENT DETAILS. | | | |
| REVISION | DRAWING NO. | DATE | SCALE |
| | ODSSP/CIVIL/17, SHEET-1/2 | | NTS |

TYPICAL REINFORCEMENT ARRANGEMENT OF PILE CAPS

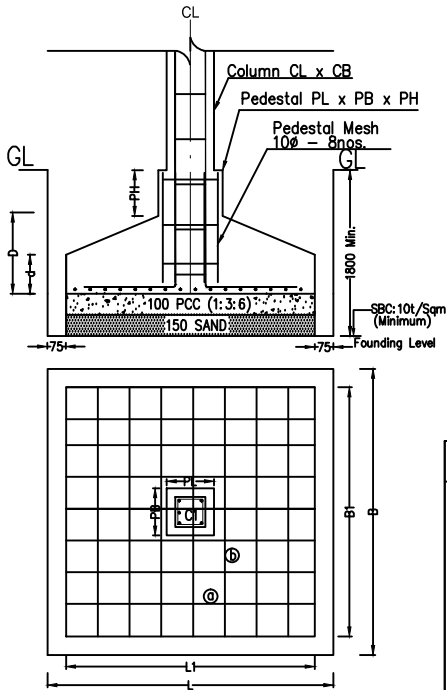


Details of Single Under Reamed Pile
Size 300mm dia



| | | | |
|--|--|------|-------|
| PROJECT | PROPOSED | | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. | | | |
| TYPE-B(2) WITH PILE FOUNDATION IN FLOOD ZONE | | | |
| DRAWING TITLE | PILE, PILE CAP & GRADE BEAM REINFORCEMENT DETAILS. | | |
| REVISION | DRAWING NO. | DATE | SCALE |
| | ODSSP/CIVIL/17, SHEET 2/2 | | NTS |

Footing Reinforcement

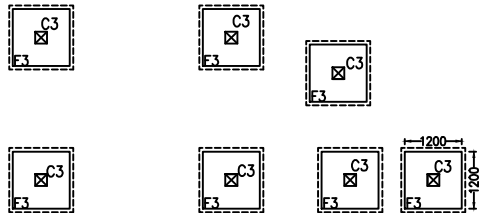


Column Reinforcement

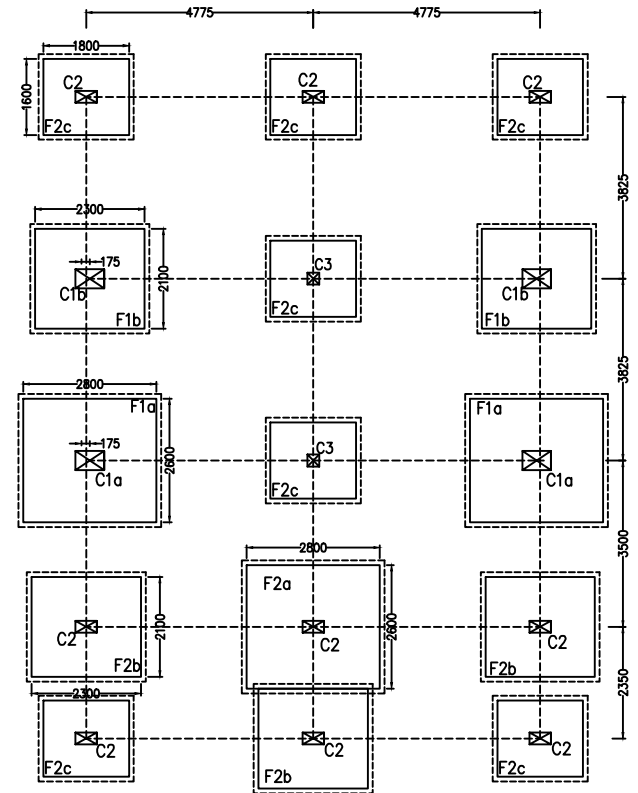
| | Size | Main Rf. | Links. |
|-----|---------|----------------------|----------------------------------|
| C1a | 400x600 | 12-25 ϕ tor | 8 ϕ tor 200 c/c (6- Legged) |
| C1b | 400x600 | 8-25 ϕ tor | 8 ϕ tor 200 c/c (4- Legged) |
| C2 | 250x450 | 4-20+4-16 ϕ tor | 8 ϕ tor 200 c/c (4- Legged) |
| C3 | 250x250 | 4-16 ϕ tor | 8 ϕ tor 200 c/c (2- Legged) |

GENERAL NOTES.

1. All dimensions are in mm and m.
2. All levels are in m.
3. All grades of RCC are of M20.
4. All grades of Steel are of Fe500.
5. Roof slab thickness 125mm/100mm (Refer drg.)
6. All cover to column reinforcement 40mm, beam 25mm and slab 20mm.
7. Lap length 55 ϕ , Not more than 50% bars are to be lapped at one level.
8. All service detailings conforming to SP:34.
9. Minm. safe bearing capacity of soil at 1.8m below GL is 10 t/sqm.



| FOOTING | COL | CL | CB | PL | PB | PH | L1 | B1 | D | d | a | b |
|---------|-----|-----|-----|-----|-----|-----|------|------|-----|-----|-------------------------|-------------------------|
| F1a | C1a | 400 | 600 | 600 | 800 | 400 | 2600 | 2800 | 700 | 450 | 12 ϕ Tor @ 150 c/c | 12 ϕ Tor @ 150 c/c |
| F1b | C1b | 400 | 600 | 600 | 800 | 400 | 2100 | 2300 | 650 | 400 | 12 ϕ Tor @ 175 c/c | 12 ϕ Tor @ 175 c/c |
| F2a | C2 | 250 | 450 | 450 | 650 | 400 | 2600 | 2800 | 700 | 450 | 12 ϕ Tor @ 150 c/c | 12 ϕ Tor @ 150 c/c |
| F2b | C2 | 250 | 450 | 450 | 575 | 400 | 2100 | 2300 | 650 | 400 | 12 ϕ Tor @ 175 c/c | 12 ϕ Tor @ 175 c/c |
| F2c | C2 | 250 | 450 | 450 | 450 | 300 | 1600 | 1800 | 400 | 250 | 12 ϕ Tor @ 200 c/c | 12 ϕ Tor @ 200 c/c |
| F3 | C3 | 250 | 250 | 450 | 450 | 300 | 1250 | 1250 | 400 | 250 | 12 ϕ Tor @ 200 c/c | 12 ϕ Tor @ 200 c/c |



COLUMN & FOUNDATION LAY OUT.

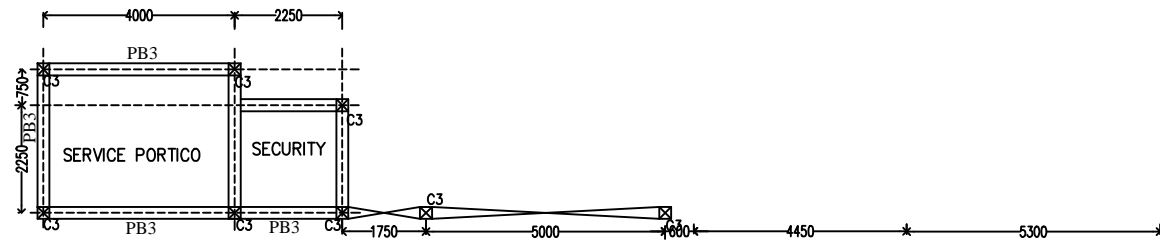
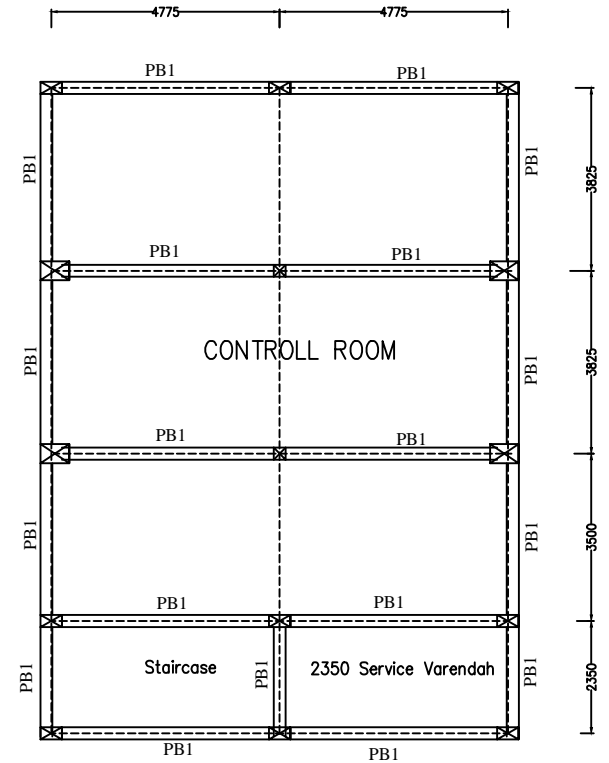
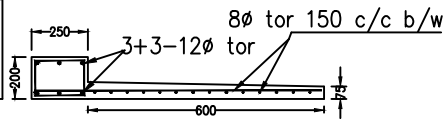


| | | | |
|--|--------------------------|----------|-------|
| PROJECT | | PROPOSED | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. | | | |
| TYPE-B(1) WITH OPEN FOUNDATION IN FLOOD ZONE | | | |
| DRAWING TITLE | | | |
| COLUMN & FOUNDATION REINFORCEMENT DETAILS. | | | |
| REVISION | DRAWING NO. | DATE | SCALE |
| | ODSSP/CIVIL/18, SHEET1/2 | | NTS |

| PLINTH BEAM DETAIL | | |
|--------------------|-----------|--|
| BEAM MARKED | Beam Size | Main Reinforcement |
| PB1 | 250x350 | Top - 2-16+1-16 Bottom- 2-16 Stirrups - 8T-2L-150c/c |
| PB2 | 250x350 | Top - 2-12+1-16 Bottom- 3-12 Stirrups - 8T-2L-150c/c |
| PB3 | 250x250 | Top - 3-12 Bottom- 3-12 Stirrups - 8T-2L-150c/c |

CUT LINTEL Reinforcement over door D1.

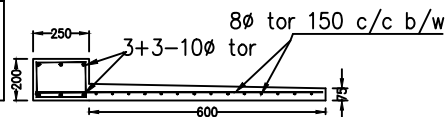
| | Size(BXD) | Main Rf. | Stirrups | Lintel Bottom |
|---|-----------|---------------------------|---------------------------|--|
| L | 250x200 | 3-12+3-12 \emptyset tor | 8 \emptyset tor 150 c/c | + 3.150 m Refer Architectural Details |



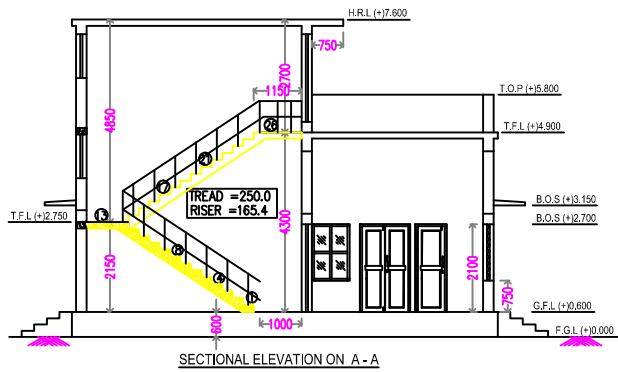
PLINTH BEAM LAY OUT.

Continuous LINTEL Reinforcement over rest of the walls.

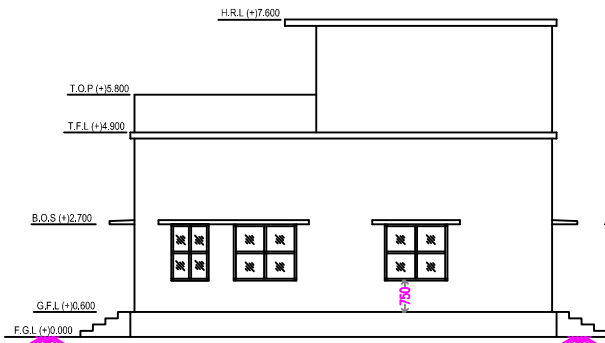
| | Size(BXD) | Main Rf. | Stirrups | Lintel Bottom |
|---|-----------|---------------------------|---------------------------|--|
| L | 250x150 | 3-10+3-10 \emptyset tor | 8 \emptyset tor 200 c/c | + 2.850 m Refer Architectural Details |



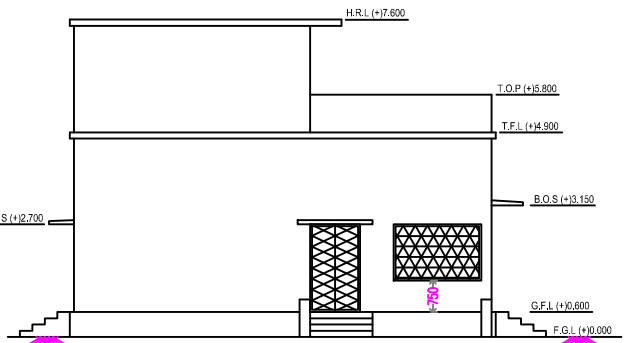
| | | | |
|---|---------------------------|----------|-------|
| PROJECT | | PROPOSED | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. | | | |
| TYPE-B(1)WITH OPEN FOUNDATION IN FLOOD ZONE | | | |
| DRAWING TITLE | | | |
| PLINTH BEAM & LINTEL REINFORCEMENT DETAILS. | | | |
| REVISION | DRAWING NO. | DATE | SCALE |
| | ODDSP/CIVIL/18, SHEET 2/2 | | NTS |



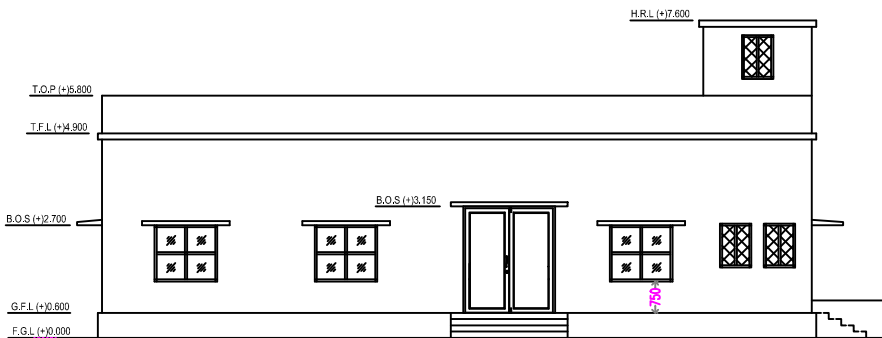
SECTIONAL ELEVATION ON A-A



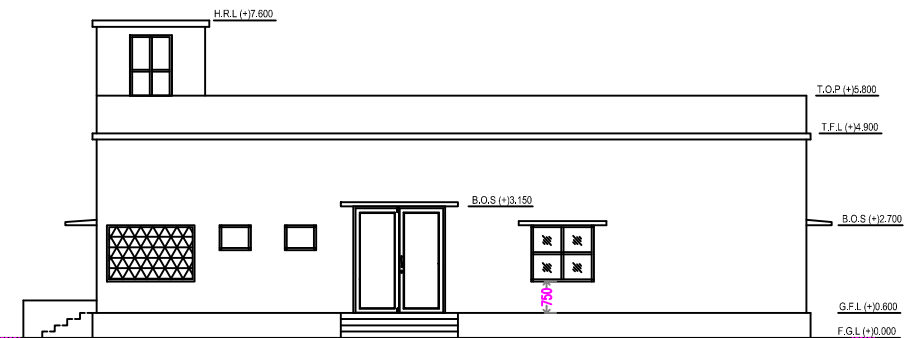
REAR SIDE ELEVATION



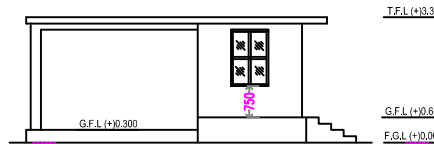
FRONT SIDE ELEVATION



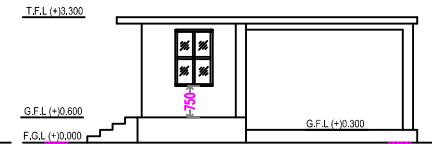
LEFT SIDE ELEVATION



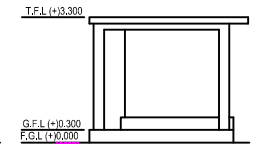
RIGHT SIDE ELEVATION



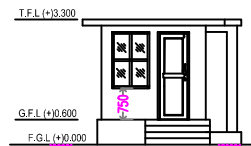
FRONT SIDE ELEVATION



REAR SIDE ELEVATION



LEFT SIDE ELEVATION



RIGHT SIDE ELEVATION

FINISH SCHEDULE

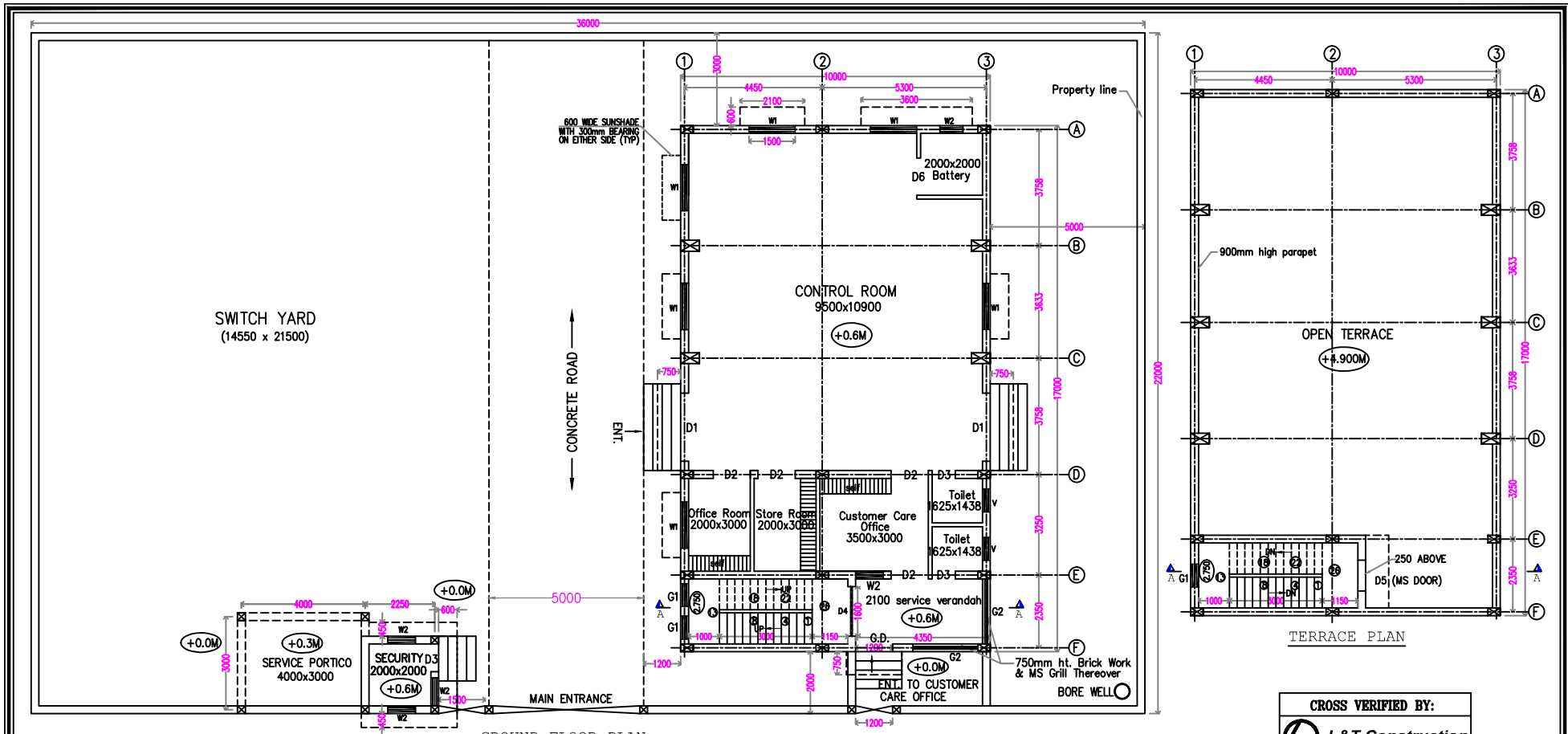
DESCRIPTION


| SL.NO | AREA DESCRIPTION | DESCRIPTION | | | | | |
|-------|----------------------|--|--------------------------|---|--------------------------------|--------------------------------|---------------------------------------|
| | | FLOORING | SKYING (150MM HIGH) | DADO | WALLS (INTERNAL) | CEILING | |
| 1 | CONTROL ROOM | 8 TO 10MM THICK GRANOUM TILES WITH 10MM THICK POLYMER MODIFIED CEMENT BASED WATER RESISTANT ADHESIVE BED & 20MM THICK CERAMIC TILES WITH 20MM THICK CEMENT MORTAR 1:1 DESIGNED FOR SUPPORT TILES WITH 25MM CEMENT PLASTER WITH HEAT CEMENT FINISHING | PLAIN HONEY COMBED TILES | DESIGNER'S NON SUPPLY TILE 12MM THICK CEMENT PLASTER MIX 1:4 WITH HEAT CEMENT FINISHING | 20X20X100 GLAZED/CERAMIC TILES | CEMENT PLASTER 10MM THK CM 1:6 | 2 COATS ACRYLIC DISTEMPER WITH PRIMER |
| 2 | BATTERY ROOM | | | | | | |
| 3 | CUSTOMER CARE OFFICE | | | | | | |
| 4 | STORE/OFFICE ROOM | | | | | | |
| 5 | SERVICE VERANDAH | | | | | | |
| 6 | TOILET | | | | | | |
| 7 | STAIRCASE & RAMP | | | | | | |
| 8 | SERVICE PORTICO | | | | | | |
| 9 | SECURITY | | | | | | |

EXTERNAL FACE OF WALL:-
10MM THICK CEMENT PLASTER CM 1:6 WITH TWO COAT OF WEATHER COAT PAINT WITH PRIMER.

ROOF TREATMENT:-
40MM THICK GRADING CONCRETE WITH CEMENT CONCRETE (1:2:4) USING 12MM AND DOWN GRADED B.L.G. CHIPS WITH WATER PROOFING CEMENT COMPOUND FINISHED SMOOTH OVER RCC SLAB.

| | | |
|--|--|--------------|
| PROJECT | PROPOSED | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. IN NO FLOOD ZONE | | |
| DRAWING TITLE ALL SIDES ELEVATIONS | | |
| REVISION | DRAWING NO. ODSSP/CIVIL/19, SHEET 1/5 | SCALE NTS |



CROSS VERIFIED BY:
 **L&T Construction**
 Power Transmission & Distribution
 EDRC - SS

| Schedule of Doors and Windows. | | |
|--------------------------------|-----------|---|
| MARK | Size | Specifications |
| G.D | 1200x2100 | MS Grill door |
| D1 | 2200x2550 | Wooden door |
| D2 | 1200x2100 | Wooden door |
| D3 | 750x2100 | FRP door |
| D4 | 1600x2100 | MS Grill door |
| D5 | 1000x2100 | MS door |
| D6 | 1200x2100 | MS door |
| W1 | 1500x1350 | Glazed Sliding Window Made of pre painted steel |
| W2 | 900x1350 | Glazed Sliding Window Made of pre painted steel |
| V | 600x600 | Ventilator made of pre painted steel |
| G1 | 750x1050 | MS grill |
| G2 | 2100x1350 | MS grill |

| Levels. | |
|-----------------------------------|--------------------|
| Formation Ground Level | ±0.000m |
| Ground Floor Level | (+).0.600m |
| Landing Level in G.F. | (+).3.037m |
| Window Sill Level | (+).1.35m |
| Lintel Bottom Level (G.F.) | (+).2.70/(+).3.15m |
| Top of Service Partico & Security | (+).3.00m |
| Top of Roof Control Room Building | (+).4.900m |

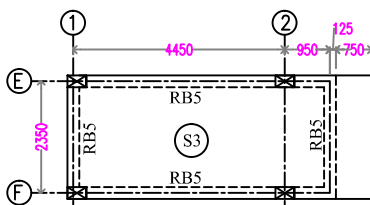
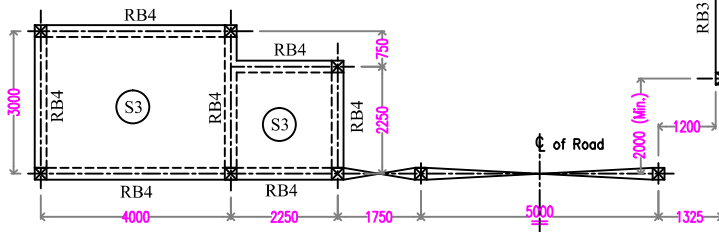
LEGEND:-
 F.G.L : FINISHED GROUND LEVEL
 G.F.L : GROUND FLOOR LEVEL
 T.F.L : TERRACE FLOOR LEVEL
 H.R.L : HEAD ROOM ROOF LEVEL
 B.O.S : BOTTOM OF SUNSHADE
 T.O.P : TOP OF PARAPET WALL

NOTES:-
 1. ALL DIMENSION ARE IN 'MM' LEVELS ARE IN 'M'.
 2. FINISHED GROUND LEVEL (F.G.L) CORRESPOND TO EL +0.000 M.
 3. FOR ALL EXTERNAL & INTERNAL FINISH ITEM REFER FINISH SCHEDULE.
 4. ALL EXTERNAL & INTERNAL WALL ARE 250 & 175 MM THICK BRICK WORK WITH 1:6 C.M.
 5. ALL WOODEN IRON DOOR SHALL BE PAINTING WITH TWO COATS OF ENAMEL PAINT.
 6. FOR ELEVATION DETAILS REFER SHEET-02.

| | | |
|--|---|--------------|
| PROJECT | PROPOSED | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. IN NO FLOOD ZONE | | |
| DRAWING TITLE GROUND FLOOR PLAN & TERRACE PLAN | | |
| REVISION | DRAWING NO. ODSSP/CIVIL/19,SHEET 2/5 | SCALE NTS |

ROOF BEAM REINFORCEMENT DETAILS.

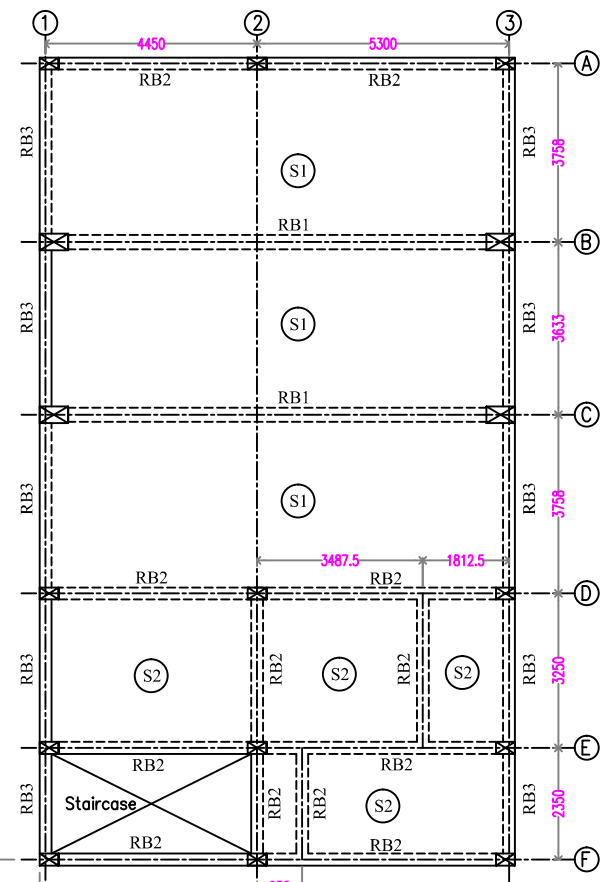
| BEAM TOP LEVEL | BEAM MKD. | END SPAN | MID SPAN |
|------------------------|----------------|----------|----------|
| (T.O.C Lvl.) +4.90m | RB1 300X750 | | |
| (T.O.C Lvl.) +4.90m | RB2 250X450 | | |
| | RB3 250X400 | | |
| (T.O.C Lvl.) +3.30m | RB4 250X300 | | |
| (T.O.C Lvl.) +7.60m | RB5 250X350 | | |



LAYOUT PLAN OF HEAD ROOM ROOF BEAM

Slab Reinforcement.

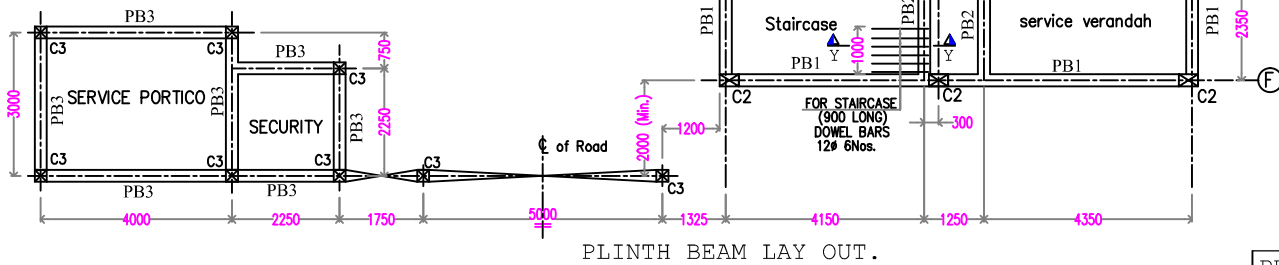
| Panel | Short Span | Long Span | Roof Slab Thk. |
|-------|---------------|------------|----------------|
| S1 | 10# @ 150 C/C | 8# 150 c/c | 125 |
| S2 | 8# @ 150 C/C | 8# 150 c/c | 125 |
| S3 | 8# @ 150 C/C | 8# 200 c/c | 100 |



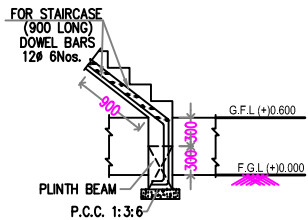
ROOF BEAM LAYOUT

| | | |
|---|---------------------------|-------|
| PROJECT | PROPOSED | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. | | |
| IN NO FLOOD ZONE | | |
| DRAWING TITLE | | |
| ROOF BEAM & SLAB REINFORCEMENT DETAILS. | | |
| REVISION | DRAWING NO. | SCALE |
| | ODSSP/CIVIL/19, SHEET 3/5 | NTS |

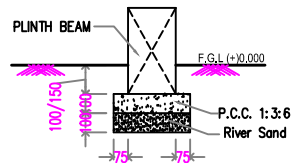
| PLINTH BEAM DETAIL | | |
|--------------------------|-----------|--|
| BEAM MARKED | Beam Size | Main Reinforcement |
| PB1 (T.O.P Lvl.+0.30) | 250x450 | Top - 2-16+2-16 Bottom- 3-12 Stirrups - 8T-2L-150c/c |
| PB2 (T.O.P Lvl.+0.30) | 250x450 | Top - 2-16+2-12 Bottom- 3-12 Stirrups - 8T-2L-150c/c |
| PB3 (T.O.P Lvl.+0.15) | 250x250 | Top - 3-12 Bottom- 3-12 Stirrups - 8T-2L-150c/c |



PLINTH BEAM LAY OUT.



SECTION Y-Y



TYPICAL SECTION OF PLINTH BEAM

LINTEL Reinforcement over door D1.

| | Size(BXD) | Main Rf. | Stirrups | Lintel Bottom |
|----|-----------|---------------------------|---------------------------|--|
| LB | 250x200 | 3-12+3-12 \emptyset tor | 8 \emptyset tor 150 c/c | + 3.150 m Refer Architectural Details |

Continuous LINTEL Reinforcement over 250mm thk. walls.

| | Size(BXD) | Main Rf. | Stirrups | Lintel Bottom |
|----|-----------|---------------------------|---------------------------|---|
| LB | 250x150 | 3-10+3-10 \emptyset tor | 8 \emptyset tor 200 c/c | + 2.70 m Refer Architectural Details |

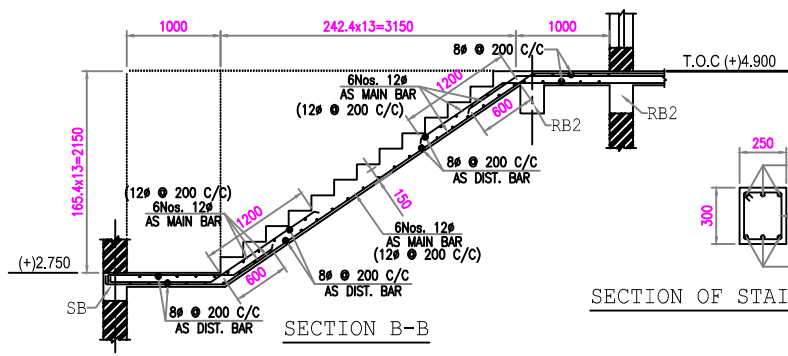
Continuous LINTEL Reinforcement over 125mm thk. walls.

| | Size(BXD) | Main Rf. | Stirrups | Lintel Bottom |
|----|-----------|-------------------------|---------------------------|---|
| LB | 125x150 | 2-8+2-8 \emptyset tor | 8 \emptyset tor 200 c/c | + 2.70 m Refer Architectural Details |

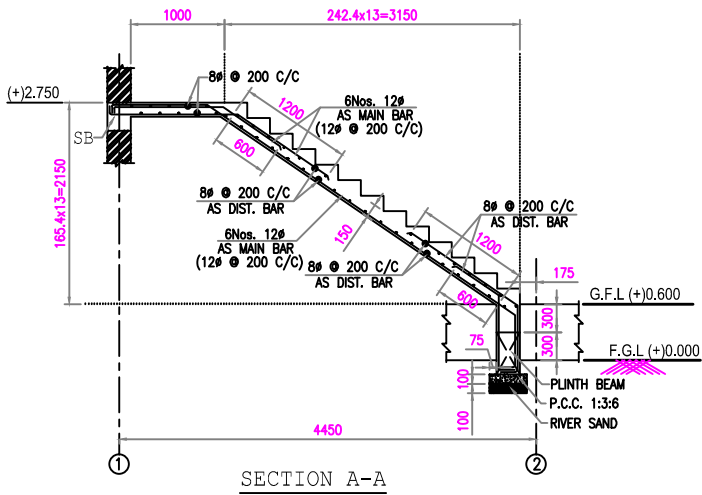
PROJECT PROPOSED
CONTROL ROOM cum SWITCH GEAR BUILDING.
IN NO FLOOD ZONE

DRAWING TITLE
PLINTH BEAM & LINTEL REINFORCEMENT DETAILS.

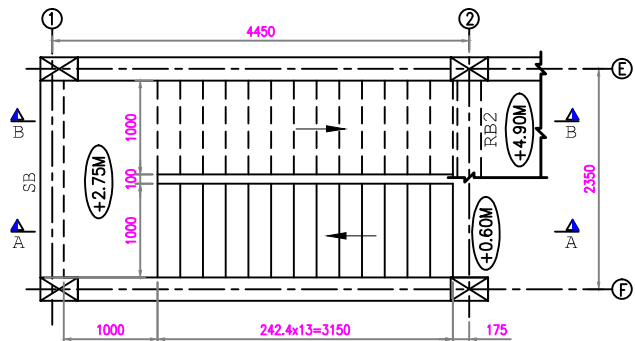
REVISION DRAWING NO.
ODSSP/CIVIL/19, SHEET- 4/5



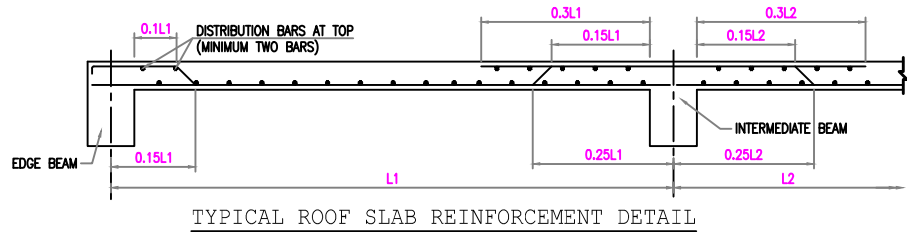
SECTION OF STAIRCASE BEAM-SB



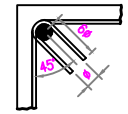
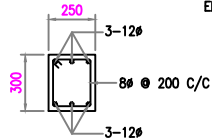
SECTION A-A



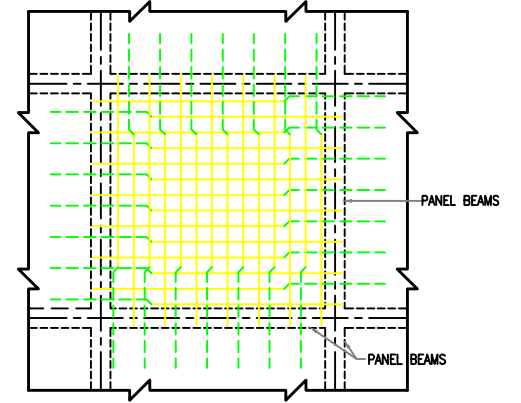
PLAN OF STAIRCASE



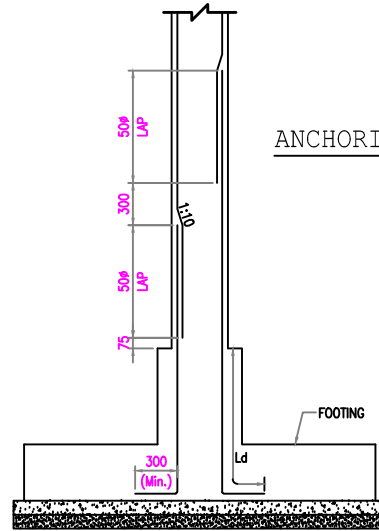
TYPICAL ROOF SLAB REINFORCEMENT DETAIL



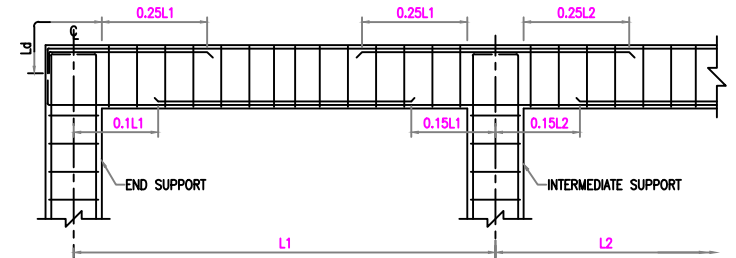
ANCHORING ENDS OF LINKS.



PLAN OF ROOF SLAB REINFORCEMENT DETAIL



COLUMN STARTER BAR SPLICING DETAILS (TYP)

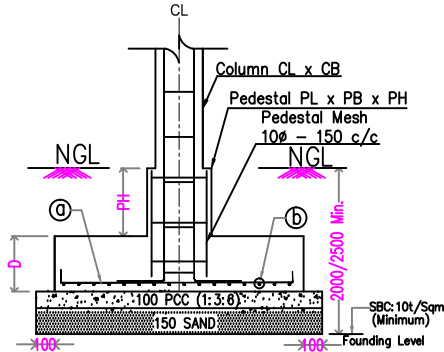


TYPICAL COLUMN & BEAM DETAIL

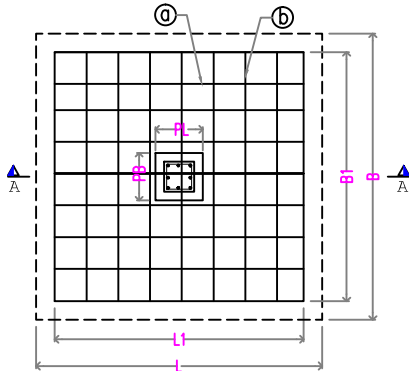
| | | |
|---|-----------------------------------|------------------------------------|
| PROJECT | | PROPOSED |
| CONTROL ROOM cum SWITCH GEAR BUILDING. | | |
| TYPE-A(1) WITH OPEN FOUNDATION IN NO FLOOD ZONE | | |
| DRAWING TITLE | | STAIRCASE AND OTHER MISC. DETAILS. |
| REVISION | DRAWING NO. | SCALE |
| | DRG NO- ODSSP/CIVIL/19, SHEET 5/5 | NTS |

Footing Reinforcement:

| FOOTING | COL | CL | CB | PL | PB | PH | L | B | L1 | B1 | D | a | b |
|---------|-----|-----|-----|-----|-----|-----|------|------|------|------|-----|-------------------------|-------------------------|
| F1 | C1 | 350 | 600 | 550 | 800 | 350 | 2200 | 2500 | 2000 | 2300 | 450 | 12 ϕ Tor @ 150 c/c | 12 ϕ Tor @ 150 c/c |
| F2 | C2 | 250 | 400 | 450 | 600 | 350 | 2300 | 2450 | 2100 | 2250 | 400 | 12 ϕ Tor @ 175 c/c | 12 ϕ Tor @ 175 c/c |
| F3 | C2 | 250 | 400 | 450 | 600 | 350 | 1800 | 1950 | 1600 | 1750 | 350 | 12 ϕ Tor @ 200 c/c | 12 ϕ Tor @ 200 c/c |
| F4 | C3 | 250 | 250 | 450 | 450 | 300 | 1400 | 1400 | 1200 | 1200 | 300 | 12 ϕ Tor @ 200 c/c | 12 ϕ Tor @ 200 c/c |



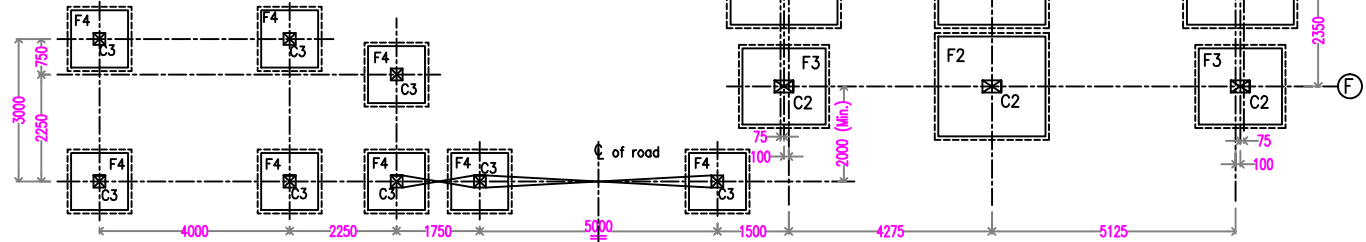
Section A-A



Typical Plan of Footing
NOT TO SCALE

Column Reinforcement:

| Size | Main Rf. | Links. |
|------|----------------------|----------------------|
| C1 | 4-25+4-20 ϕ tor | 8 ϕ tor 150 c/c |
| C2 | 4-16+4-12 ϕ tor | 8 ϕ tor 200 c/c |
| C3 | 4-16 ϕ tor | 8 ϕ tor 200 c/c |



GENERAL NOTES .

1. All dimensions are in mm and m.
2. All levels are in m.
3. All grades of RCC are of M20.
4. All grades of Steel are of Fe500.
5. Roof slab thickness 125mm/100mm (Refer drg.)
6. All cover to column reinforcement 40mm, beam 25mm and slab 20mm.
7. Lap length 50 ϕ , Not more than 50% bars are to be lapped at one level.
8. All service detailings conforming to SP:34.
9. Minm. safe bearing capacity is considered as 10 T/sq.m. at founding level.
10. NGL-Natural Ground Level (Nascent Soil)

PROJECT PROPOSED
CONTROL ROOM cum SWITCH GEAR BUILDING.
IN NO FLOOD ZONE

DRAWING TITLE
COLUMN & FOUNDATION REINFORCEMENT DETAILS.

DRAWING NO.
ODSSP/CIVIL/20/REV-A

SCALE
NTS

Column Reinforcement

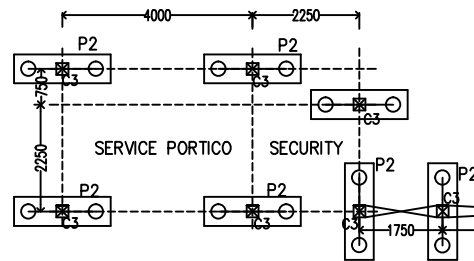
| | Size | Main Rf. | Links. |
|----|---------|----------------------|----------------------|
| C1 | 350x600 | 4-25+4-20 ϕ tor | 8 ϕ tor 150 c/c |
| C2 | 250x250 | 4-16+4-12 ϕ tor | 8 ϕ tor 200 c/c |
| C3 | 250x250 | 4-16 ϕ tor | 8 ϕ tor 200 c/c |

REINFORCEMENT IN PILE CAP

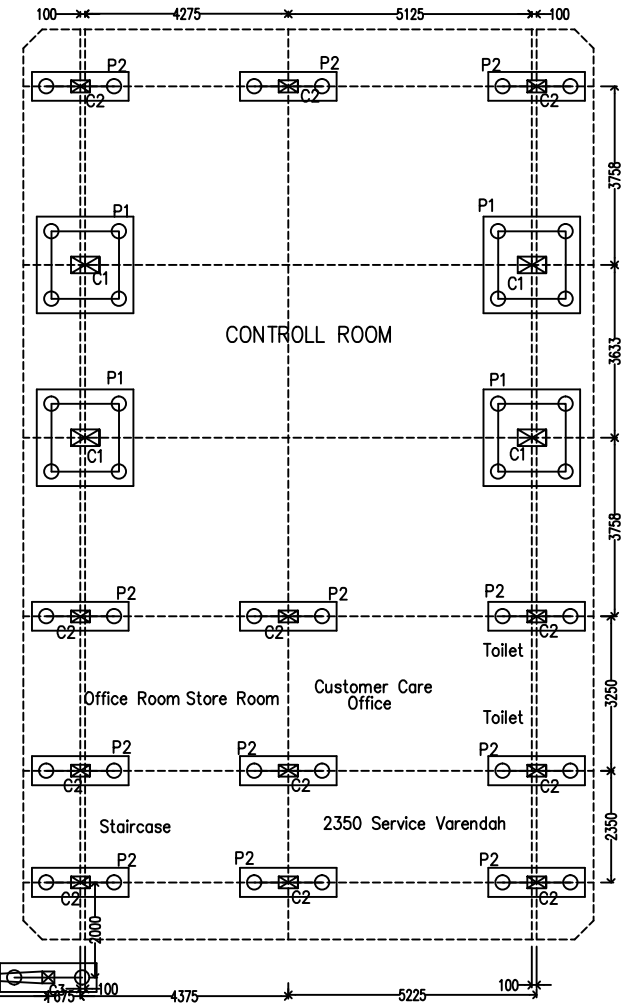
| PILE CAP | SIZE | | DEPTH (D) | BOTTOM REINFORCEMENT | | TOP REINFORCEMENT | | SIDE REINFORCEMENT |
|--------------------|--------|--------|-----------|----------------------|---------------|-------------------|---------------|--------------------------|
| | L | B | | X-DIR(a)(Longdir.) | Y-DIR (b) | X-DIR (c) | Y-DIR (d) | |
| P1 (4 Pile Gr.) | 2050mm | 2050mm | 600mm | 20# 10nos. | 20# 10nos. | 16# 10nos. | 16# 10nos. | 10# 150 C/C IN ALL FACES |
| P2 (2 Pile Gr.) | 2050mm | 600mm | 550mm | 16# 6nos. | 10# @150 C/C. | 16# 5nos. | 10# @150 C/C. | 10# 150 C/C IN ALL FACES |

GENERAL NOTES.

- All dimensions are in mm and m.
- All levels are in m.
- All grade of RCC are of M-20.
- All grade of steel are of Fe-500.
- Pile head will be 75mm inside pile cap.
- Clear cover to main reinforcement at bottom will be 75mm.
- Clear cover to main reinforcement at top and side will be 50mm.
- All cover to column reinforcement 40mm.
- Lap length 55 ϕ , Not more than 50% bars are to be lapped at one level.
- All service detailings should conform to SP:34.

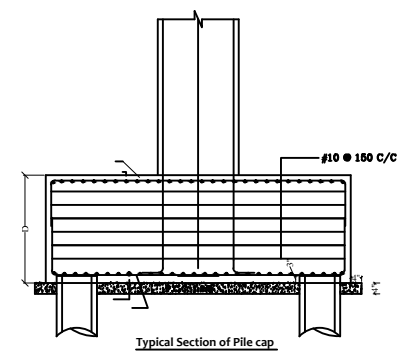
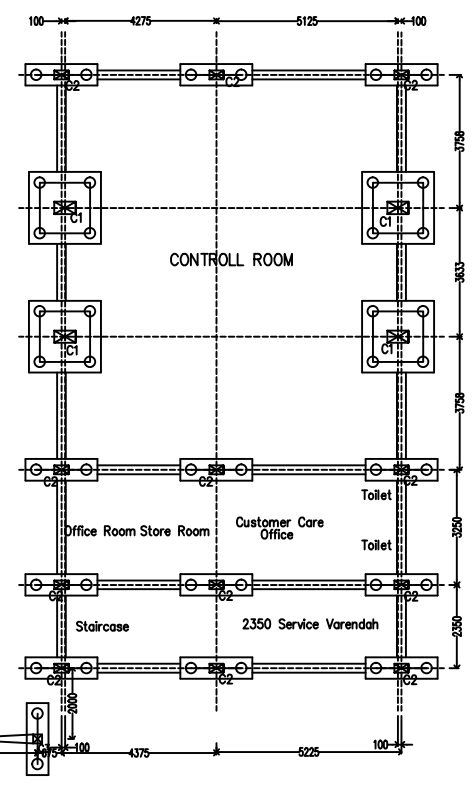
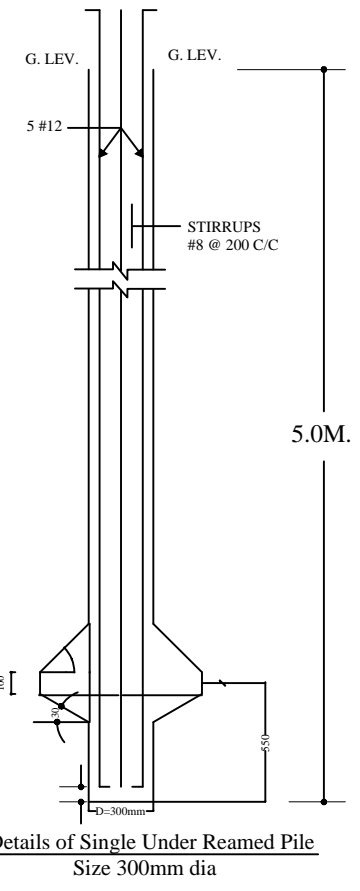
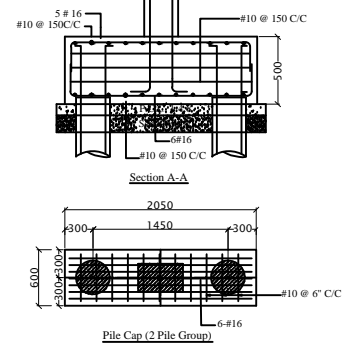
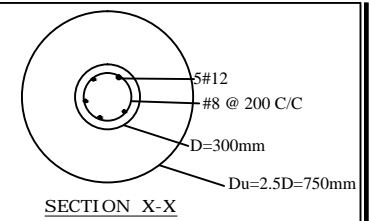
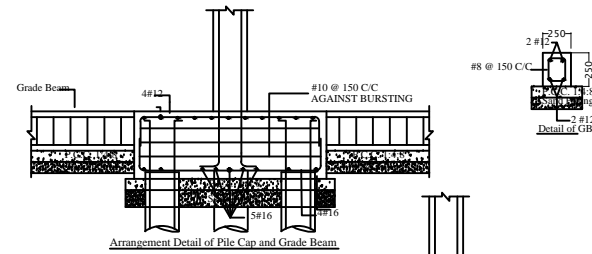
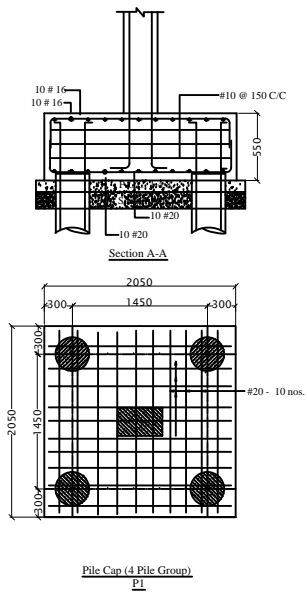


COLUMN & PILE CAP LAY OUT.



| | | | |
|--|--------------------------|----------|-------|
| PROJECT | | PROPOSED | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. | | | |
| IN NO FLOOD ZONE | | | |
| DRAWING TITLE | | | |
| COLUMN & FOUNDATION REINFORCEMENT DETAILS. | | | |
| REVISION | DRAWING NO. | DATE | SCALE |
| | ODSSP/CIVIL/21, SHEET1/2 | | NTS |

TYPICAL REINFORCEMENT ARRANGEMENT OF PILE CAPS



| | | | | |
|--|---------------------------|----------|-------|-----|
| PROJECT | | PROPOSED | | |
| CONTROL ROOM cum SWITCH GEAR BUILDING. | | | | |
| IN NO FLOOD ZONE | | | | |
| DRAWING TITLE | | | | |
| PILE, PILE CAP & GRADE BEAM REINFORCEMENT DETAILS. | | | | |
| REVISION | DRAWING NO. | DATE | SCALE | |
| | ODSSP/CIVIL/21, SHEET 2/2 | | | NTS |