NORTHERN RAILWAY

STAFF QUARTER - TYPE II

(General Arrangement Drawings, Working Drawings and Structural Drawings)

SHEET DESCRIPTION:-

S.N.	DESCRIPTION	SHEET NO.
1.	Index & General Notes	01 OF 30
2.	Perspective View	02 OF 30
3.	Site - general layout plan	03 OF 30
4.	Ground Floor - general layout plan	04 OF 30
5.	First & Second Floor - general layout plan	05 OF 30
6.	Terrace Floor - general layout plan	06 OF 30
7.	Elevation - front	07 OF 30
8.	Elevation - rear	08 OF 30
9.	Elevation & Spot Section - side elevation & spot section 4	09 OF 30
10.	Section - AA	10 OF 30
11.	Section - BB	11 OF 30
12.	Section - CC	12 OF 30
13.	Section - section 1, section 2 & detail A	13 OF 30
14.	Electrical Layout Plan - ground floor	14 OF 30
15.	Electrical Layout Plan - first & second floor	15 OF 30
16.	Plumbing Layout Plan - ground floor	16 OF 30
17.	Plumbing Layout Plan - first & second floor	17 OF 30
18.	Plumbing Layout Plan - terrace floor	18 OF 30
19.	Sanitary Layout Plan - ground floor	19 OF 30
20.	Sanitary Layout Plan - first & second floor	20 OF 30
21.	Schedule of openings - doors & windows	21 OF 30
22.	Schedule of openings - doors, windows & ventilators	22 OF 30
23.	Typical Details - kitchen & wardrobe	23 OF 30
24.	Typical Details - toilet & water closet	24 OF 30
25.	Typical Details - boundary wall & rain water pipe	25 OF 30
26.	Details of foundation and column	26 OF 30
27.	Typical details of column, beam & slab	27 OF 30
28.	Details of plinth beam, stair slab & mumty beam & slab	28 OF 30
29.	Details of floor beams and slab reinforcement	29 OF 30
30.	Details of Terrace beam and slab reinforcement	30 OF 30

NOTES:-

A. GENERAL

1. All dimensions are in millimeters & levels are in meters unless otherwise mentioned.
2. Written dimensions are to be followed.
3. Do not scale these drawings.
4. These drawings are to be read with all information.
5. All dimensions to be verified on the site by main contractor before the commencement of work whatsoever.
6. 230 mm thick filler wall of Aerated Cement concrete (ACC)/ Cellular Concrete Block (CIC)/ Brick/ Fly-ash Brick work shall be in 1:6 Cement Sand mortar.
7. 115 mm thick filler wall of Aerated Cement concrete (ACC)/ Cellular Concrete Block (CIC)/ Brick/ Fly-ash Brick work shall be in 1:4 Cement Sand mortar.
8. Minimum height of the plinth above the likely ground/expected in future shall be 600mm.
9. Plinth beams & Lintel beams are to be provided to all walls as per detail with a coat of bitumen applied on top.
10. Bottom of lintel beam shall be kept at 2100mm from floor finish level.
11. Provide direct water supply to each unit & over head tank water supply separately to each unit.
12. Soil pipes and waste pipes to be connected to sewerage system.
13. Floor of kitchen, WC & bathroom should be kept 10mm lower than general floor level.
14. Community facilities provided as the proposed population/norms.
15. External windows to be provided with 16mm dia bars at 100mm c/c distance horizontally or grills to be provided.
16. French windows shall be provided as per climatic conditions.
17. Double glass windows shall be provided as per requirements with the approval of competent authority.
18. All common areas shall have lighting arrangement along with light fixtures.
19. As far as possible concealed wiring shall be used in all electrical works.

B. ELECTRICAL

1. 5/15 Amp power plug wiring should not be combined with light point and circuit wiring
2. In-coming of switch board and power point wiring should not be combined with light points.
3. Run off main (circuit wiring) from distribution board can be combined within one conduit for more than two circuit.
4. Connected load per circuit should not exceed 800 Watts or 10 points.
5. All the conduits should be of approved manes and 2mm thick.
6. after de-shuttering GI Fish wire shall be provided in all the conduits.
7. Neutral wire joining shall be used for "B" Type connector in junction boxes.
8. Wiring should be done as per loop in loop out system.
9. 25mm and 19mm Dia PVC conduits shall be used for lighting/power points respectively.
10. Two way switch control on light/ fan point in room as suits the site condition.
11. Minimum 300mm clearance should be maintained in between electrical and signal line.
12. 2 core PVC shield or cloth shielded wire (0.5 sq.mm) shall be connected from ceiling rose to fitting.
13. Clearance of ceiling rose to fixing of fitting in wall/ceiling shall be 75mm.
14. All switch boards shall be flushed with wall.
15. Size of ceiling fan 1200mm sweep.
16. This drawing shall be read in conjunction with other relevant drawings.

FINISHED SCHEDULE

S.No.	LOCATION	FLOORING	SKIRTING
1	Living/drawing room, dining & family lounge	vitrified tile flooring of size not less than 400mm x 400 mm	same finishing as flooring, height 100mm
2	Bedroom	scratch resistant vitrified tile flooring of size not less than 400mm x 400 mm joints finished with matching grout	same finishing as flooring, height 100mm
3	Kitchen	anti skid vitrified tile of size not less than 300mm x 300 mm with water absorption less than 0.08 % laid seamless with joints finished with matching grout	ceramic glaze tile of size not less than 200 x 300 as per design
4	Kitchen counter	granite stone with nosing	
5	Common circulation area	mirror polished kota stone as approved by architect	
6	Staircase	pre polished kota stone in single length of tread and risers	
7	Toilets/bath/wc	glazed ceramic anti skid tiles of size not less than 300 x 300 mm including grouting the of joints	ceramic glaze tile of size not less than 200x300 as per design
8	Finishing - internal	all walls & ceiling to be treated with 2mm thick POP(one time only) and painted with low VOC Acrylic washable Distemper/Synthetic enamel paint including all wood works and steel works	
9	Finishing - external	Quartz reinforced Texture Acrylic Paint finish/Premium Acrylic smooth water proof exterior finish/washed mosaic plaster in premium cement synthetic enamel paint including all wood work & steel work	

V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
Sheet Index & General Notes

SCALE ENTER 1:NTS@A3 | SHEET NO. 01 OF 30

N.R.H.Q.E. PLAN NO. HQ/12/12/2017

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

Do not Scale this drawing.
This drawing is to be read with all related information.
All Dimensions to be verified on site by Main Contractor before the commencement of any quarter drawing or work whatsoever.

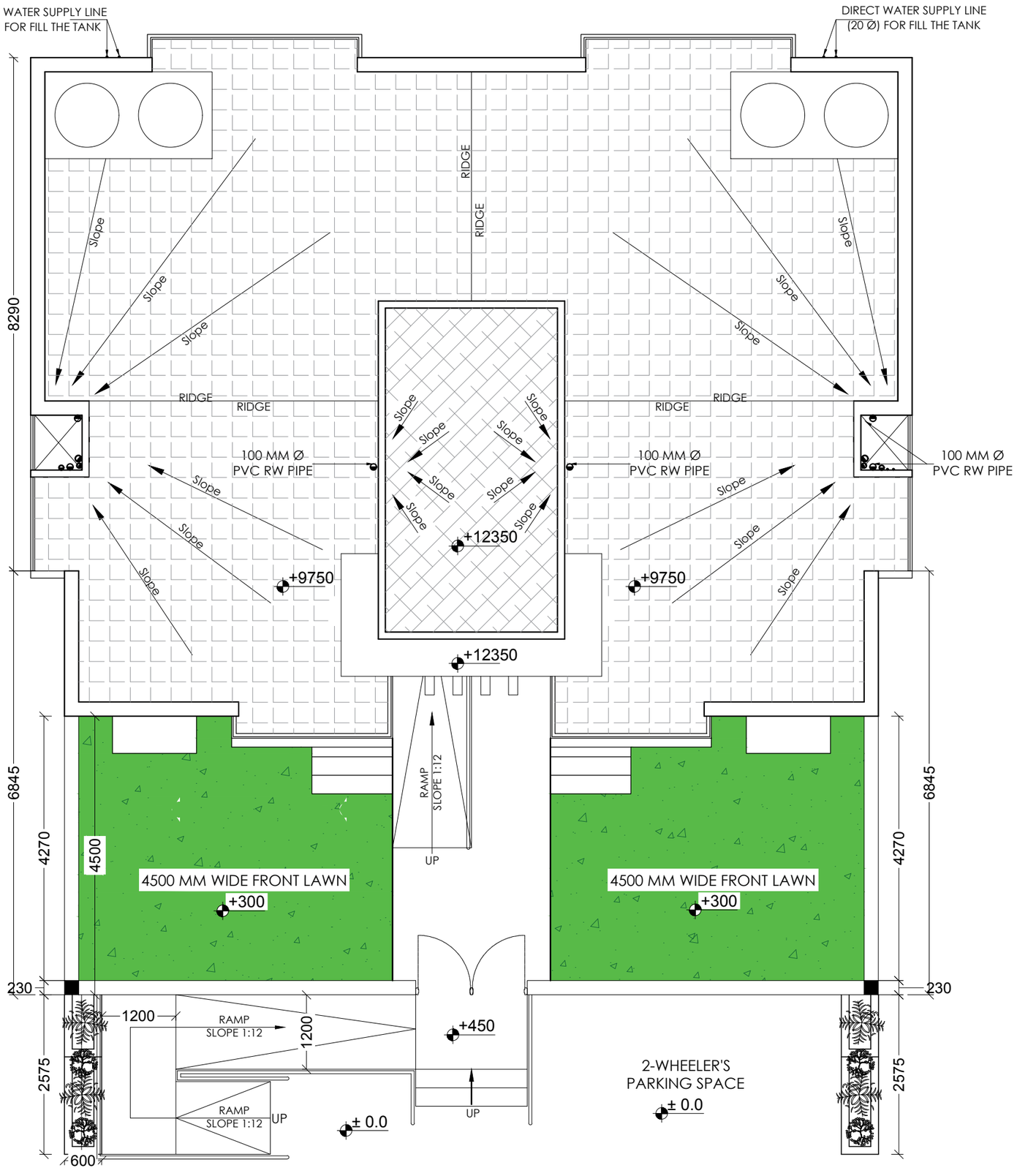
V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
3D View
front

SCALE 1:NTS@A3	SHEET NO. 02 OF 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	



N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
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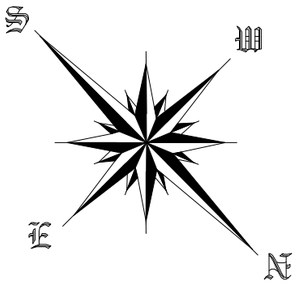

V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
Site
general layout plan

SCALE 1:70@A3	SHEET NO. 03 OF 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

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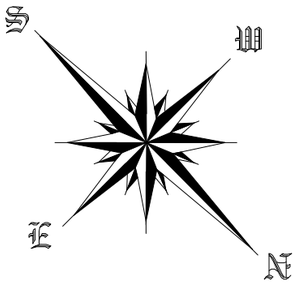

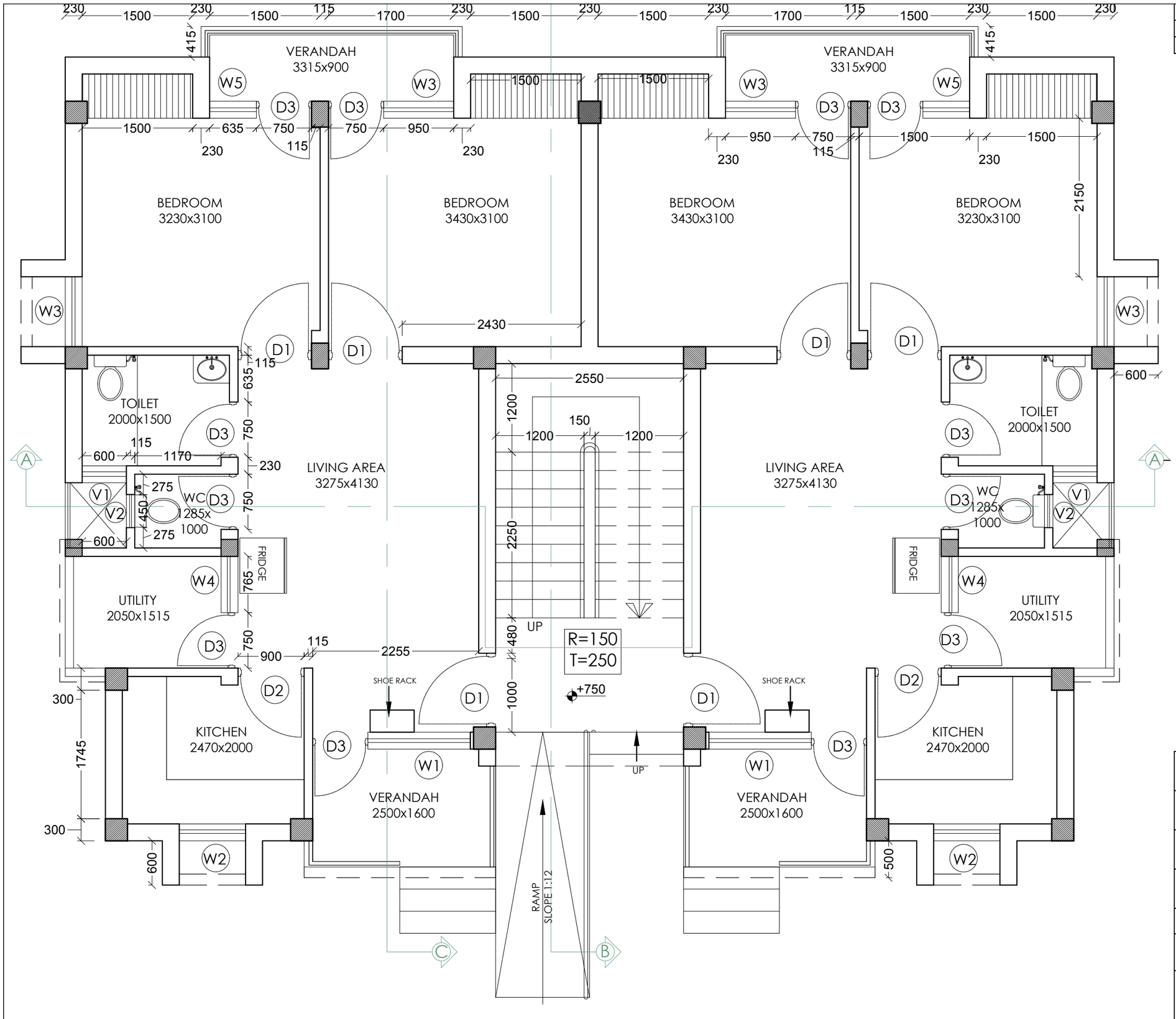

V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
Ground Floor general layout plan

SCALE 1:50@A3	SHEET NO. 04 OF 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

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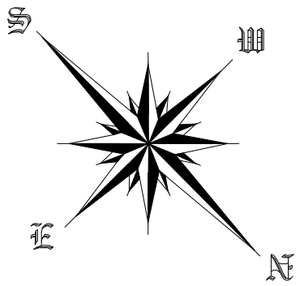

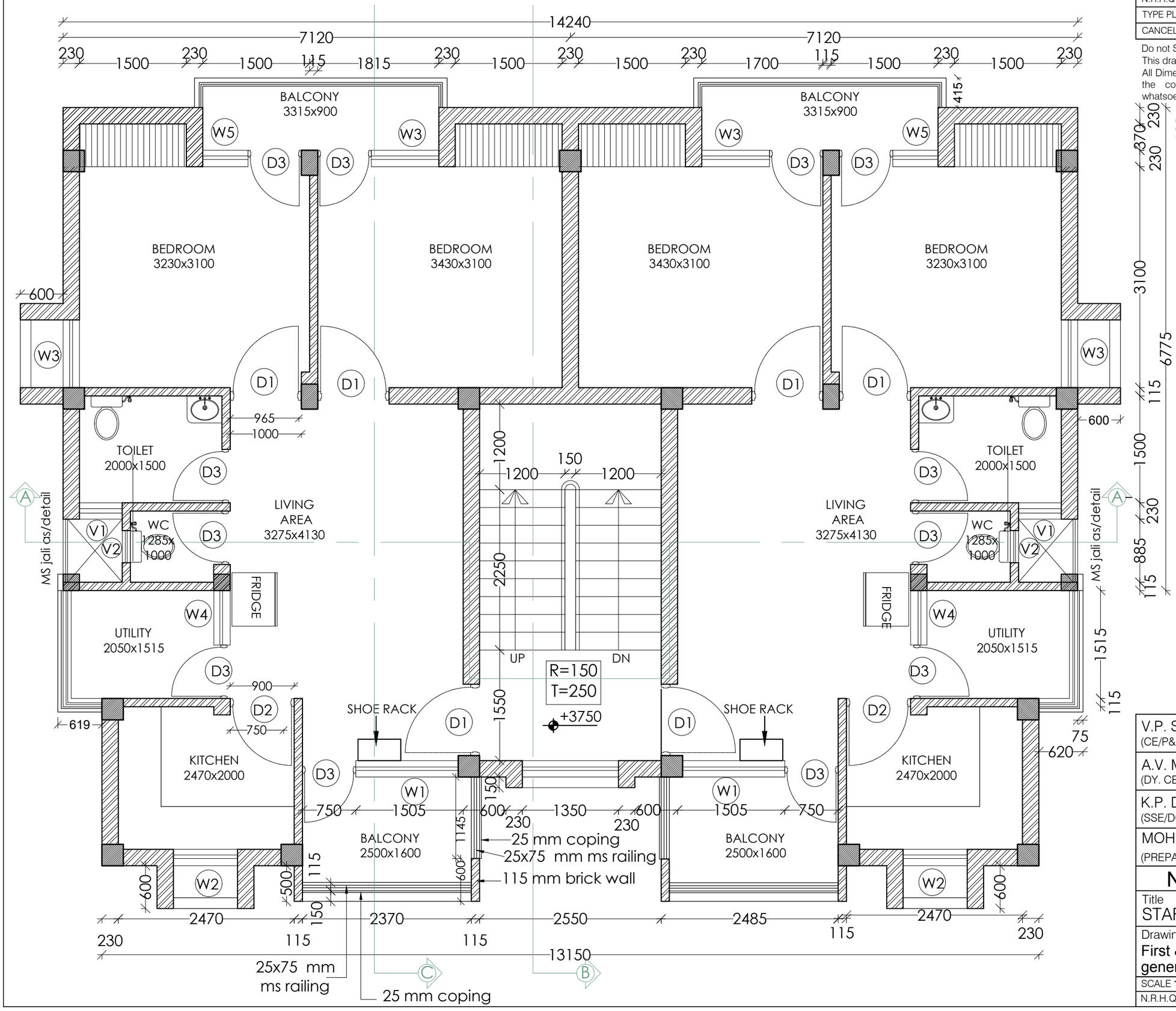

V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
First & Second Floor
general layout plan

SCALE 1:50@A3 | SHEET NO. 05 OF 30

N.R.H.Q.E. PLAN NO. HQ/12/12/2017

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

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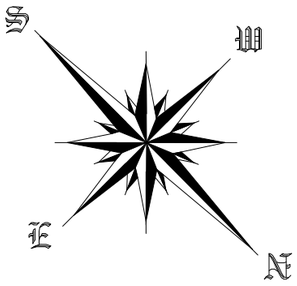
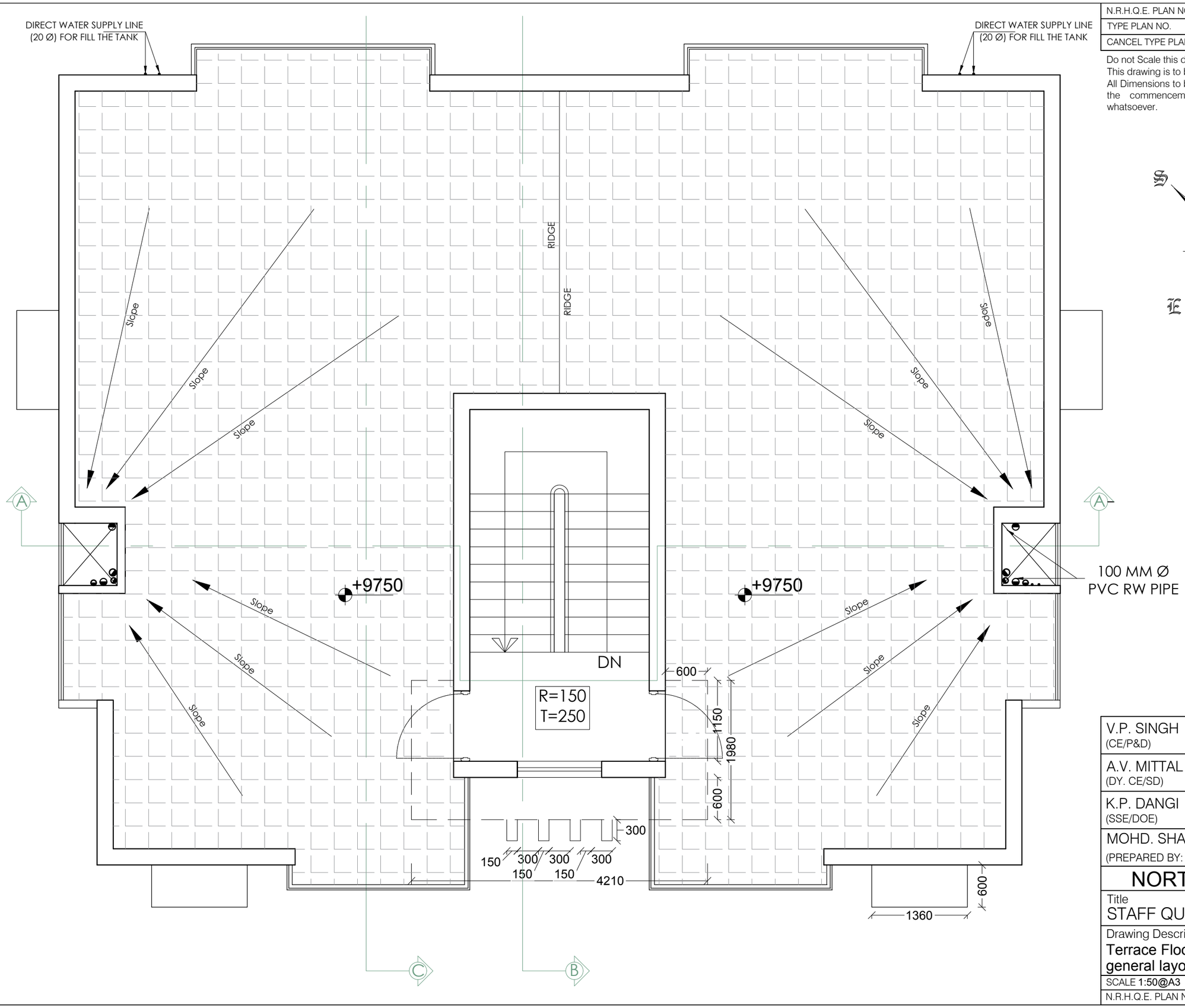




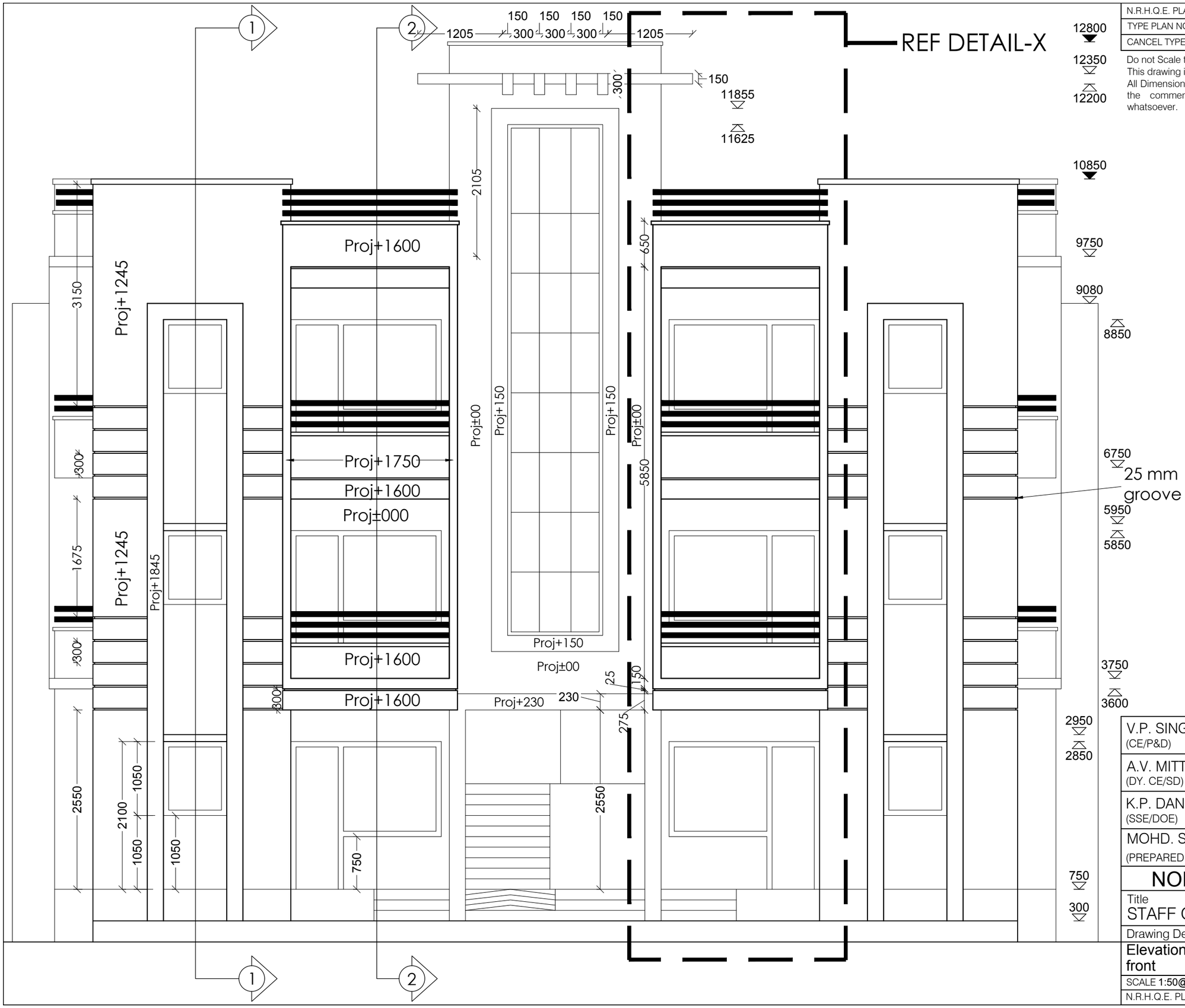
V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
Terrace Floor
general layout plan

SCALE 1:50@A3	SHEET NO. 06 OF 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	



N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
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V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

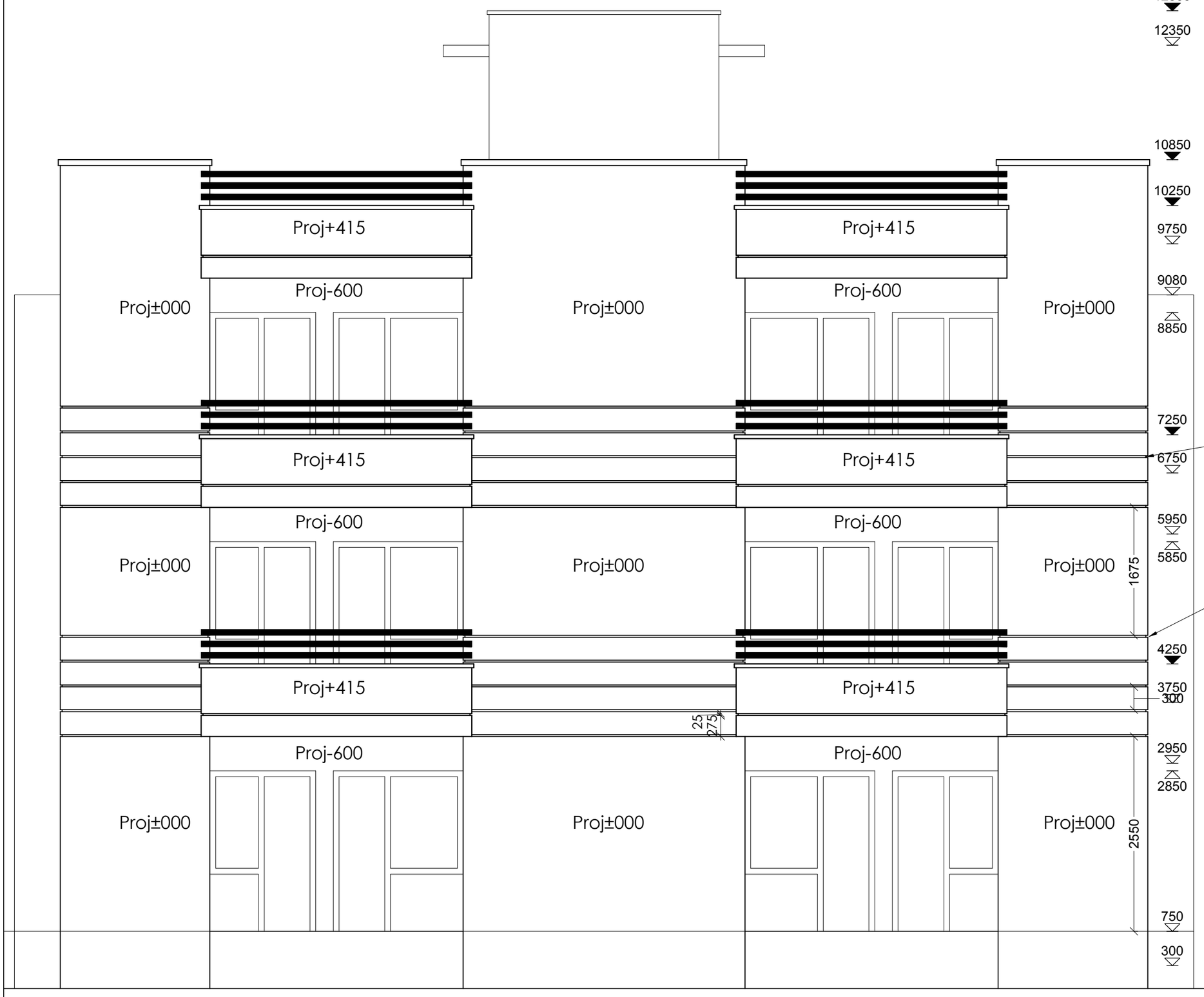
NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
Elevation
front

SCALE 1:50@A3 | SHEET NO. 07 OF 30

N.R.H.Q.E. PLAN NO. HQ/12/12/2017



N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

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V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
Elevation
rear

SCALE 1:50@A3	SHEET NO. 08 OF 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

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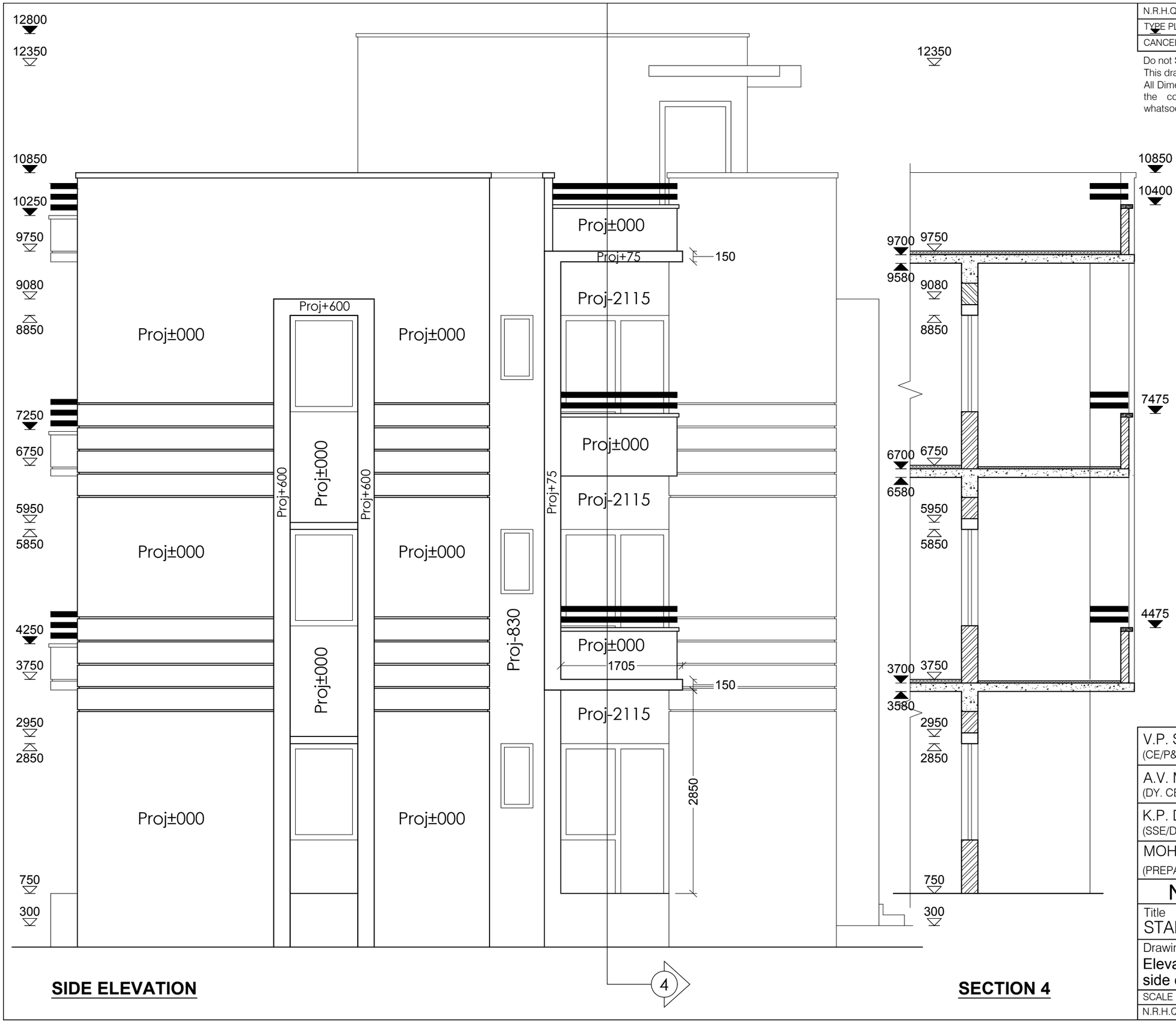


SIDE ELEVATION

SECTION 4

V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

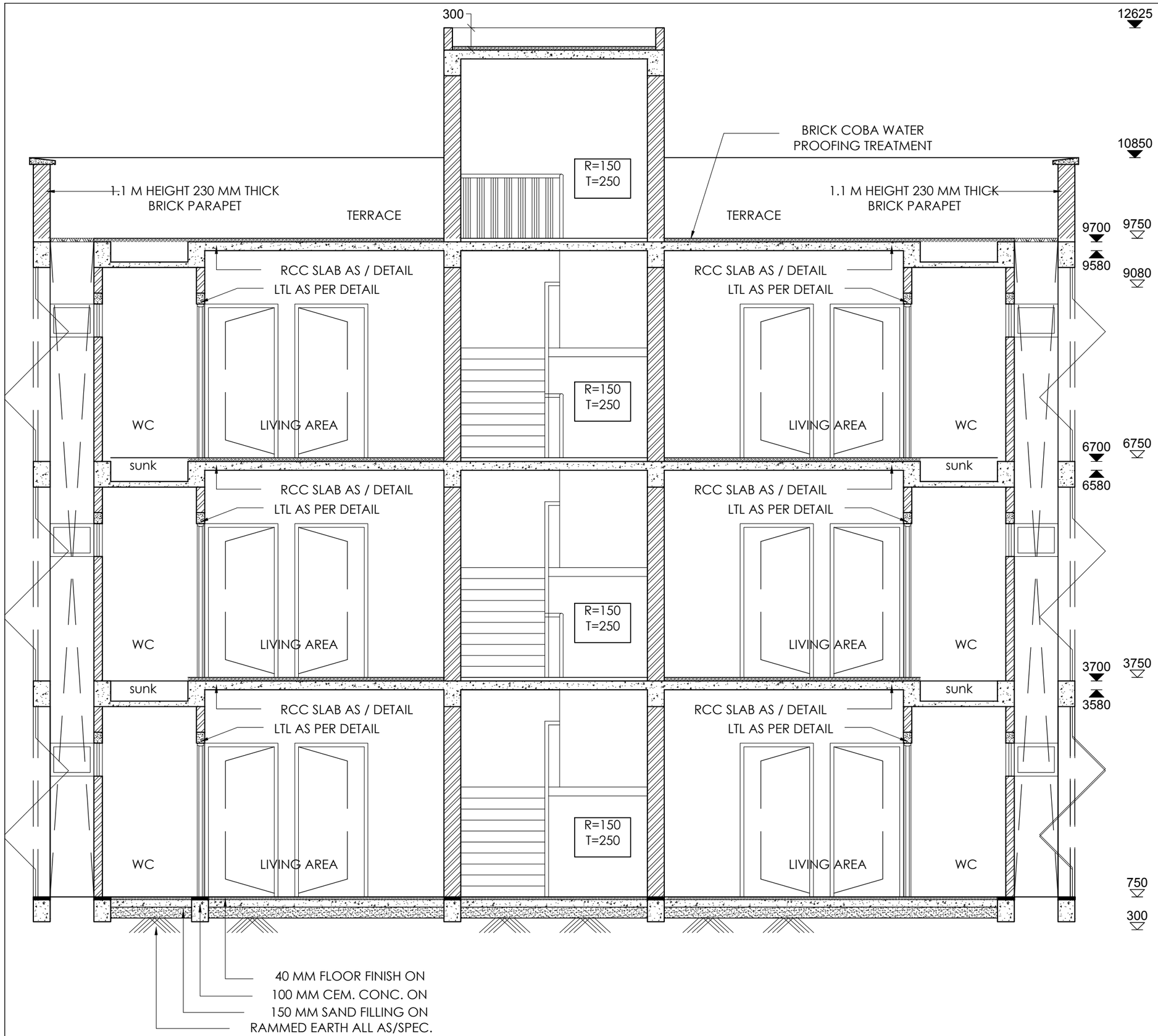
NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
Elevation & Spot Section
side elevation & spot section 4

SCALE 1:50@A3 | SHEET NO. 09 OF 30

N.R.H.Q.E. PLAN NO. HQ/12/12/2017



N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

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V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
Section
AA

SCALE 1:50@A3	SHEET NO. 10 OF 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
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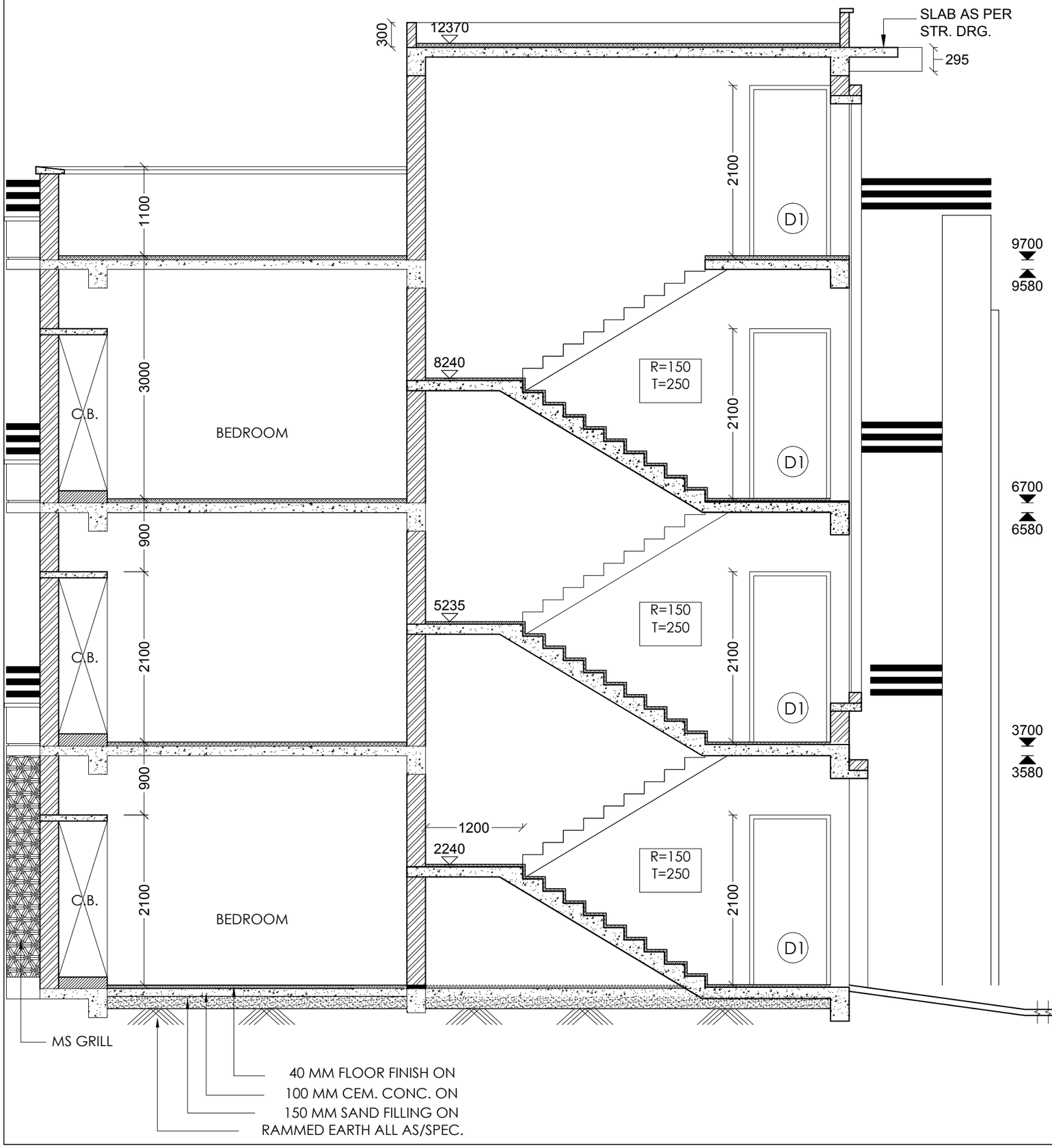

V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
Section
BB

SCALE 1:50@A3	SHEET NO. 11 OF 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

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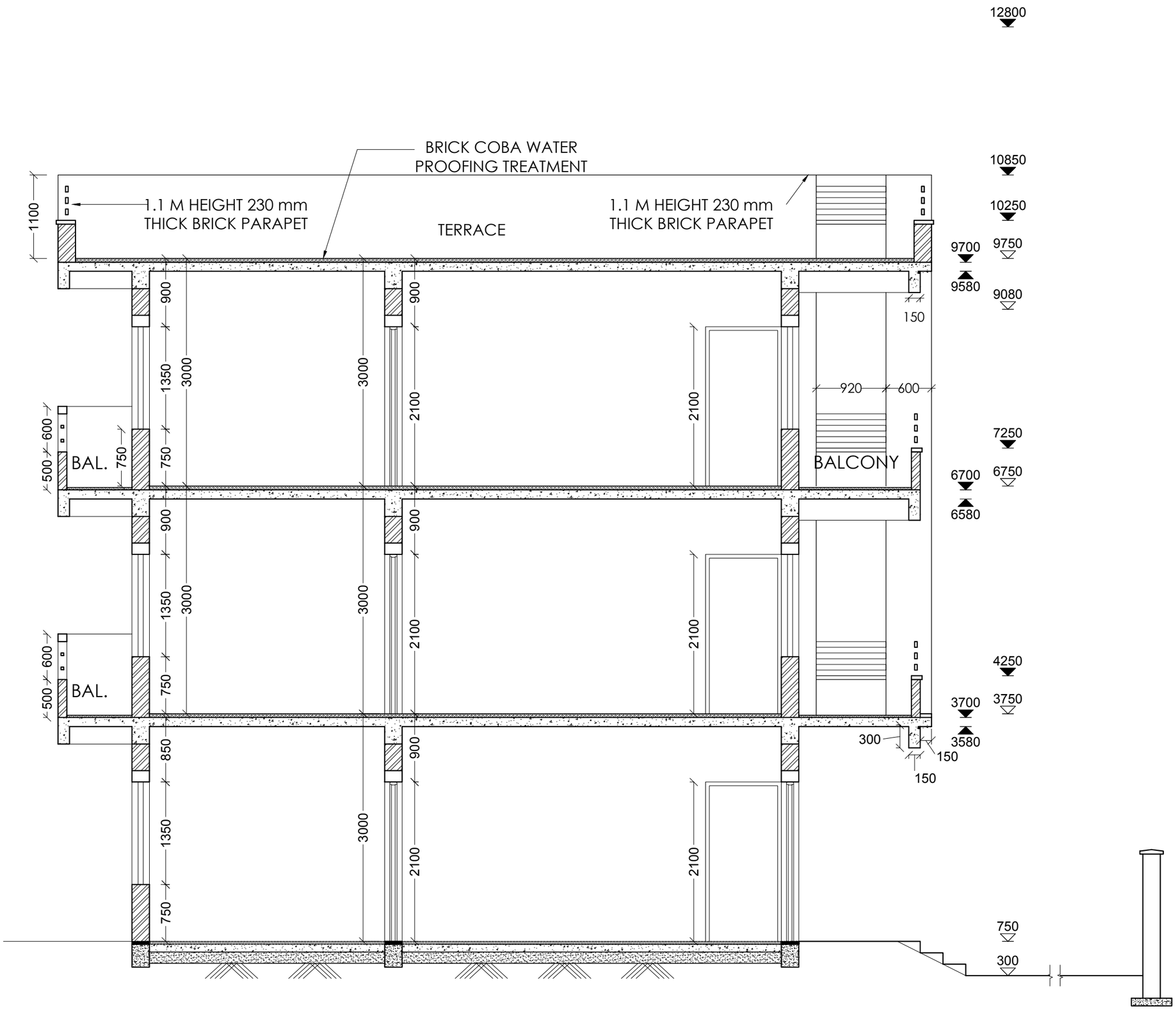

V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
Section
CC

SCALE 1:50@A3	SHEET NO. 12 OF 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

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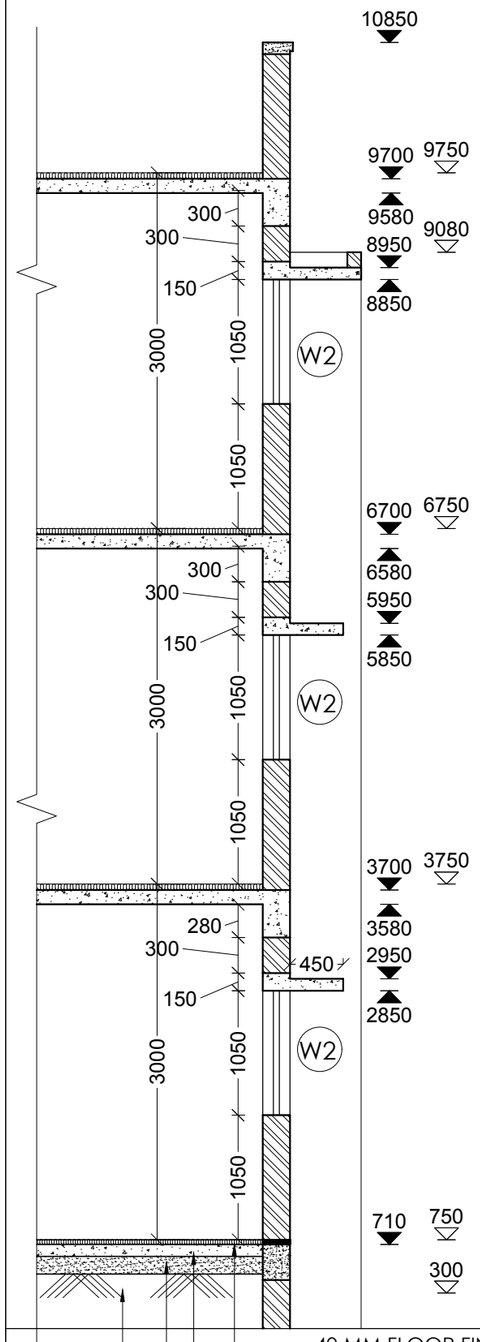
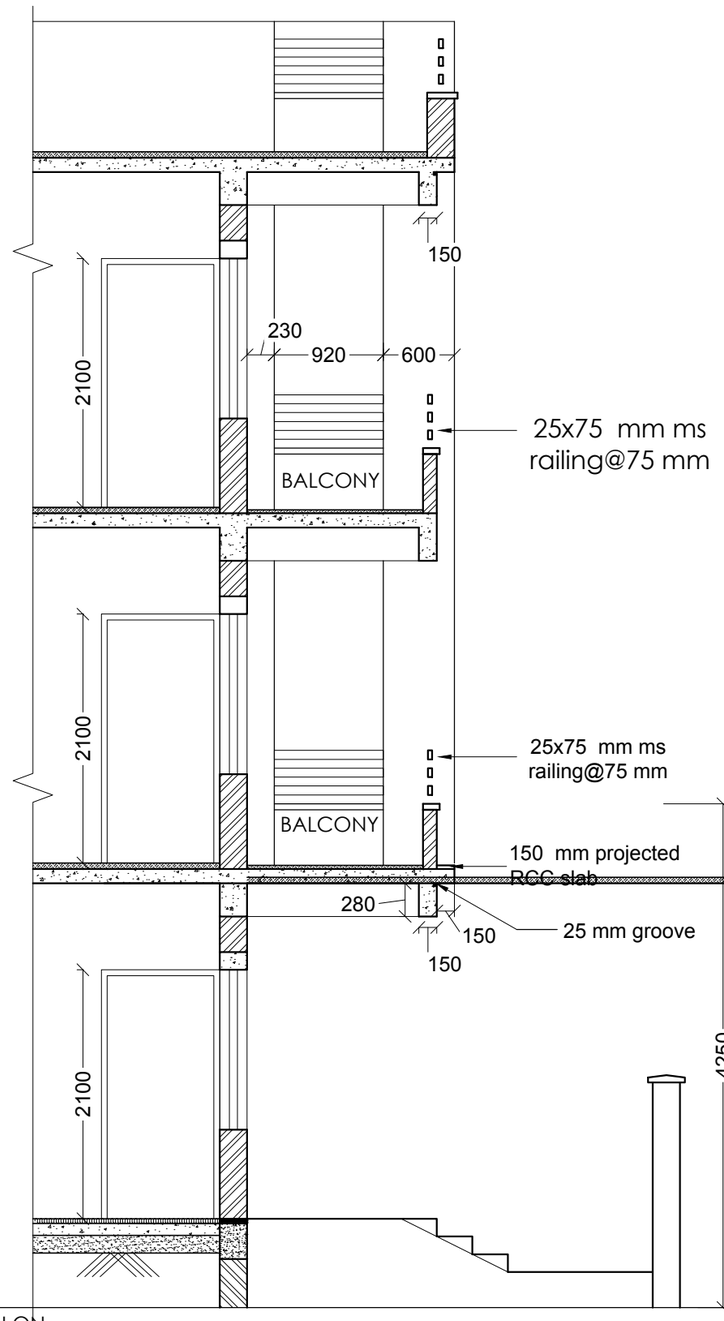
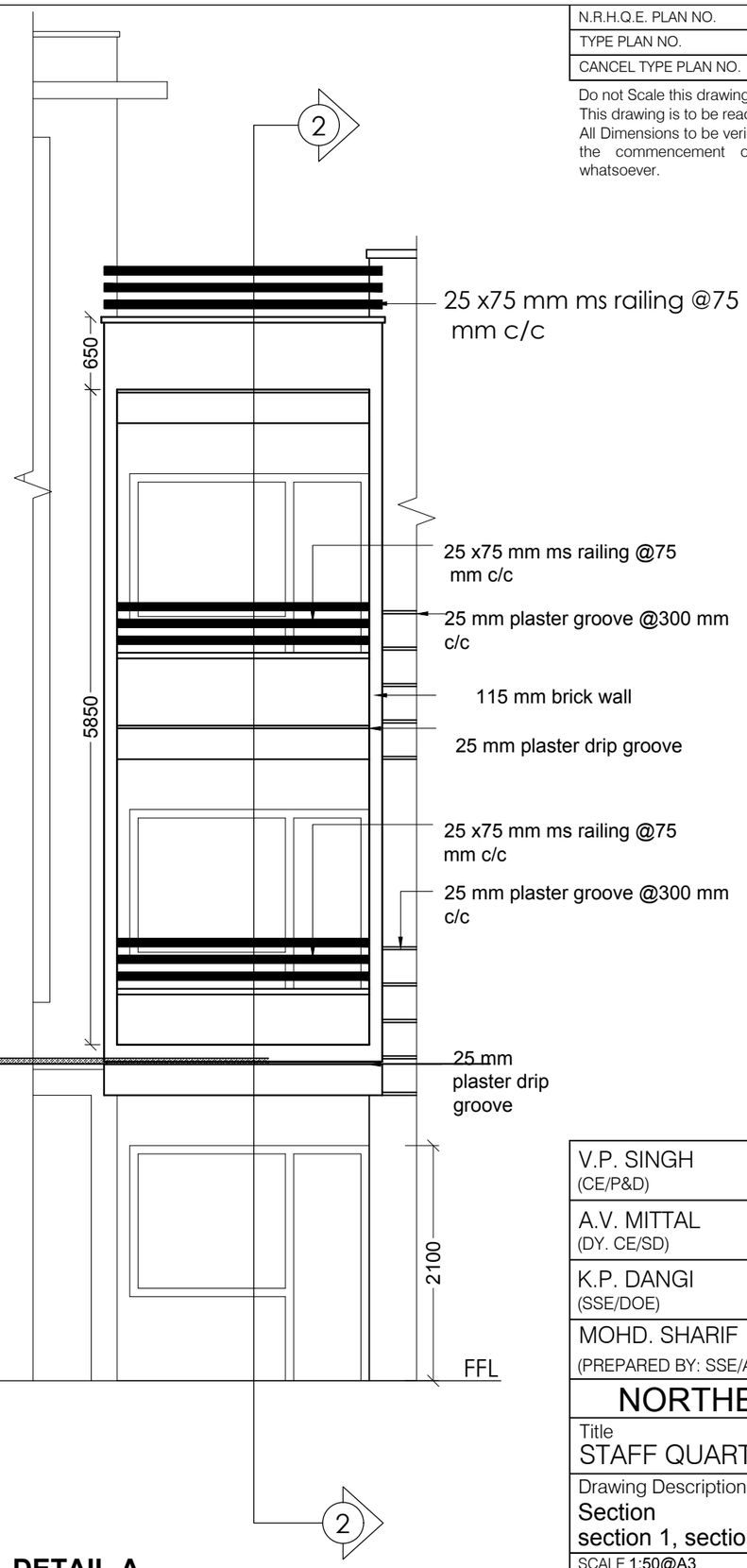


SECTION - 1

40 MM FLOOR FINISH ON
100 MM CEM. CONC. ON
150 MM SAND FILLING ON
RAMMED EARTH ALL AS/SPEC.



SECTION - 2



DETAIL-A

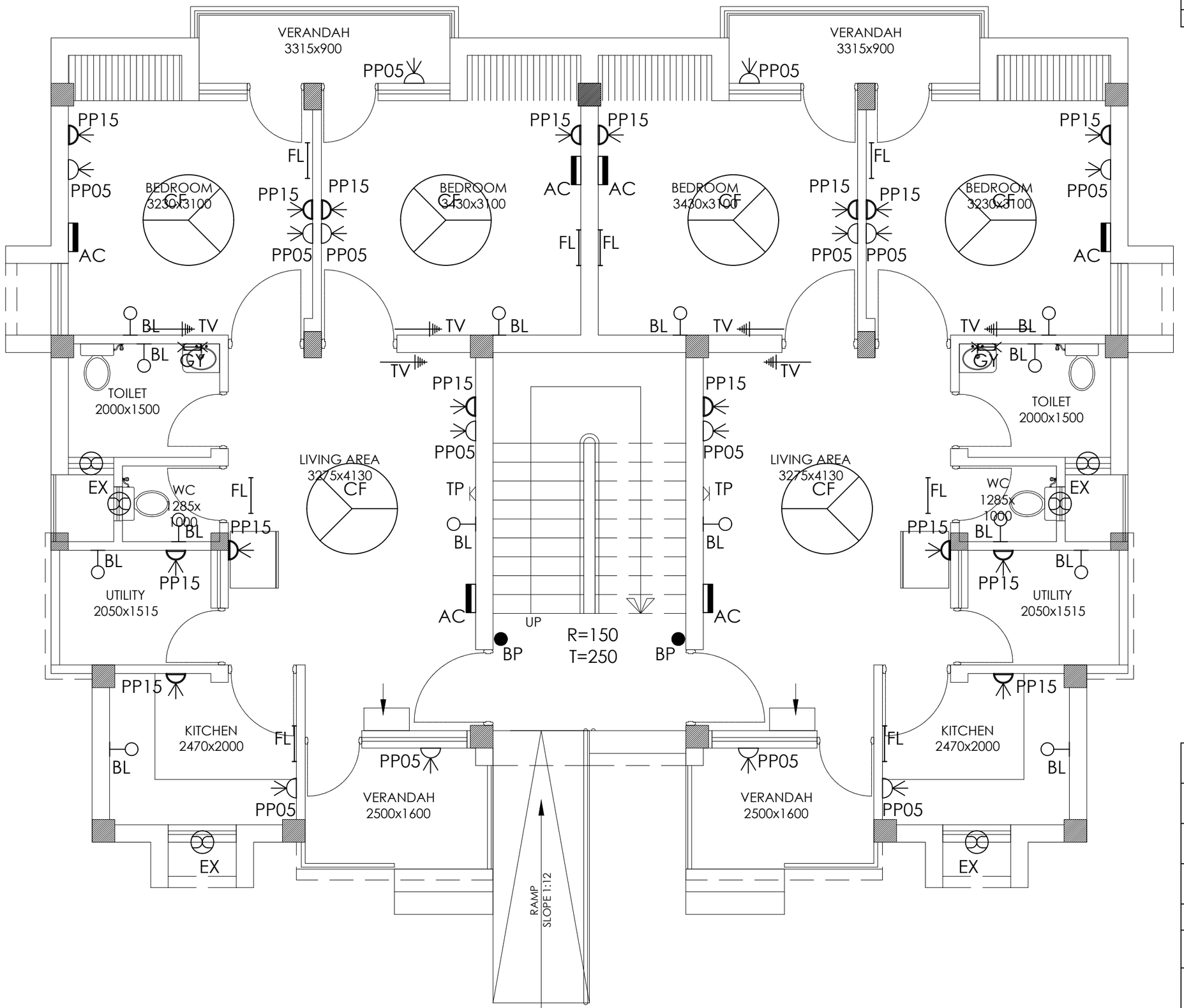
V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
Section
section 1, section 2 & detail A

SCALE 1:50@A3	SHEET NO. 13 OF 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	



N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

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LEGEND	
SYMBOL	DESCRIPTION
	SWITCH BOARD
	LIGHT PLUG 6A
	LIGHT PLUG 16A
	T.V. ANTENNA
	BRACKET LIGHT
	BELL PUSH
	CALL BELL
	BATTEN HOLDER
	CEILING FAN(1200 MM SWEEP)
	EXHAUST(300 MM SWEEP)
	DISTRIBUTION BOARD
	BULK HEAD
TV	TV ANTENNA JUNCTION BOX
MB	METER BOARD
MCB	MCB BOX FOR AC
	TWO WAY SWITCH
	CHANDELIER
	PARKING LIGHT SWITCH

V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

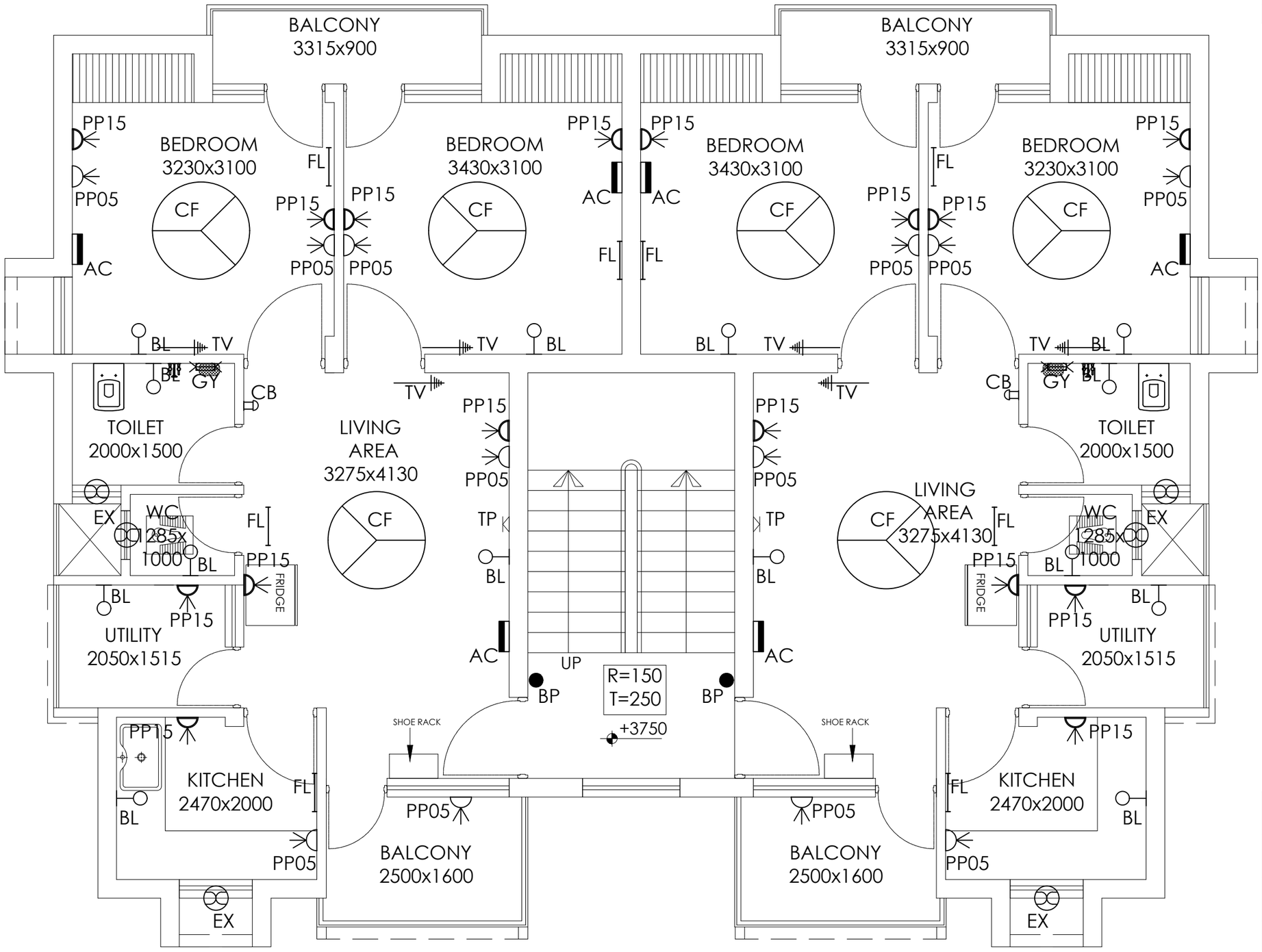
NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
Electrical Layout Plan - I
ground floor

SCALE 1:50@A3 | SHEET NO. 14 of 30

N.R.H.Q.E. PLAN NO. HQ/12/12/2017



N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

Do not Scale this drawing.
This drawing is to be read with all related information.
All Dimensions to be verified on site by Main Contractor before the commencement of any quarter drawing or work whatsoever.

LEGEND	
SYMBOL	DESCRIPTION
	SWITCH BOARD
	LIGHT PLUG 6A
	LIGHT PLUG 16A
	T.V. ANTENNA
	BRACKET LIGHT
	BELL PUSH
	CALL BELL
	BATTEN HOLDER
	CEILING FAN(1200 MM SWEEP)
	EXHAUST(300 MM SWEEP)
	DISTRIBUTION BOARD
	BULK HEAD
TV	TV ANTENNA JUNCTION BOX
MB	METER BOARD
M CB	MCB BOX FOR AC
	TWO WAY SWITCH
	CHANDELIER
	PARKING LIGHT SWITCH

V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
Electrical Layout Plan - II
first & second floor

SCALE 1:50@A3 | SHEET NO. 15 of 30

N.R.H.Q.E. PLAN NO. HQ/12/12/2017

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

Do not Scale this drawing.
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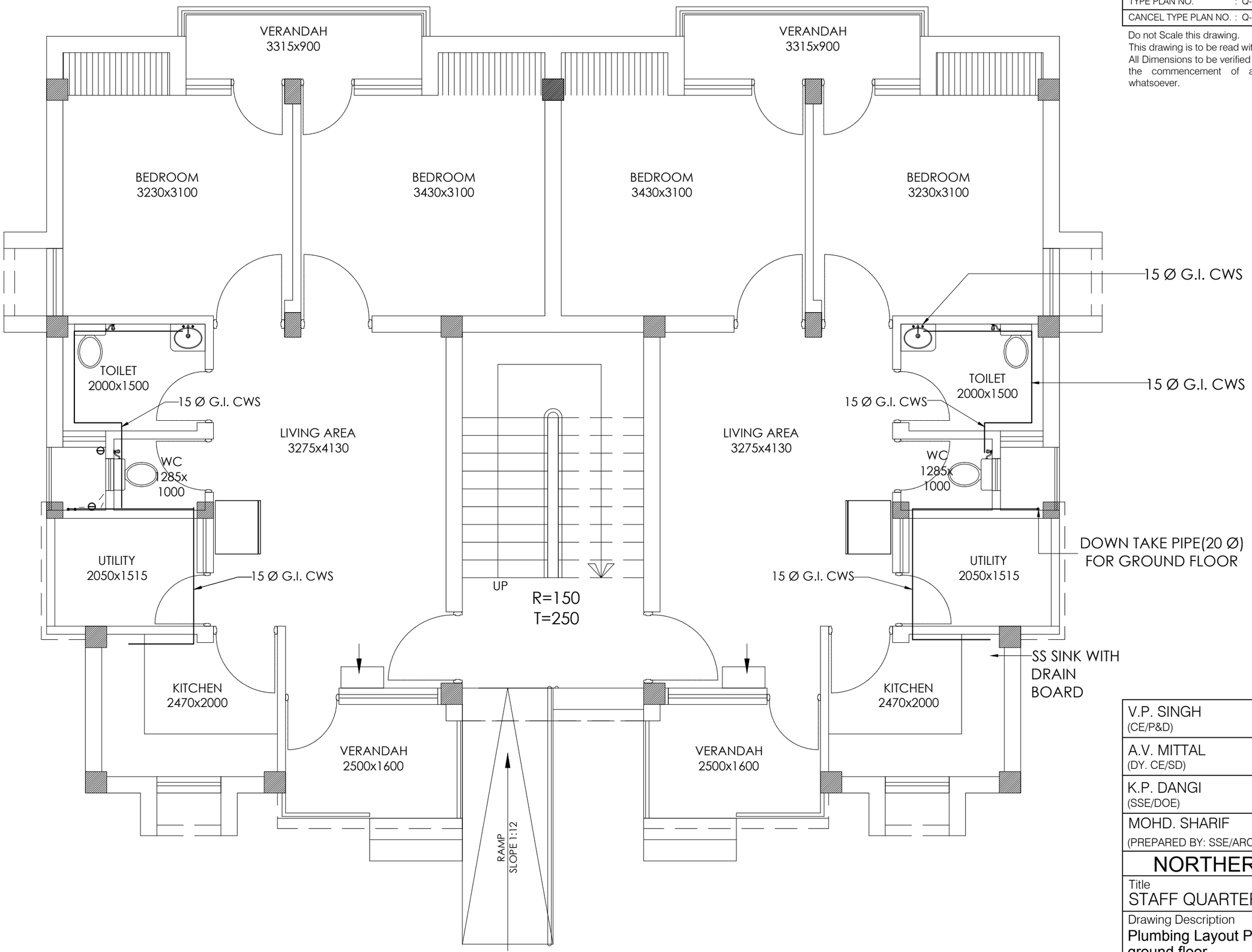
All Dimensions to be verified on site by Main Contractor before the commencement of any quarter drawing or work whatsoever.



V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
Plumbing Layout Plan - I
ground floor

SCALE 1:50@A3	SHEET NO. 16 of 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

Do not Scale this drawing.
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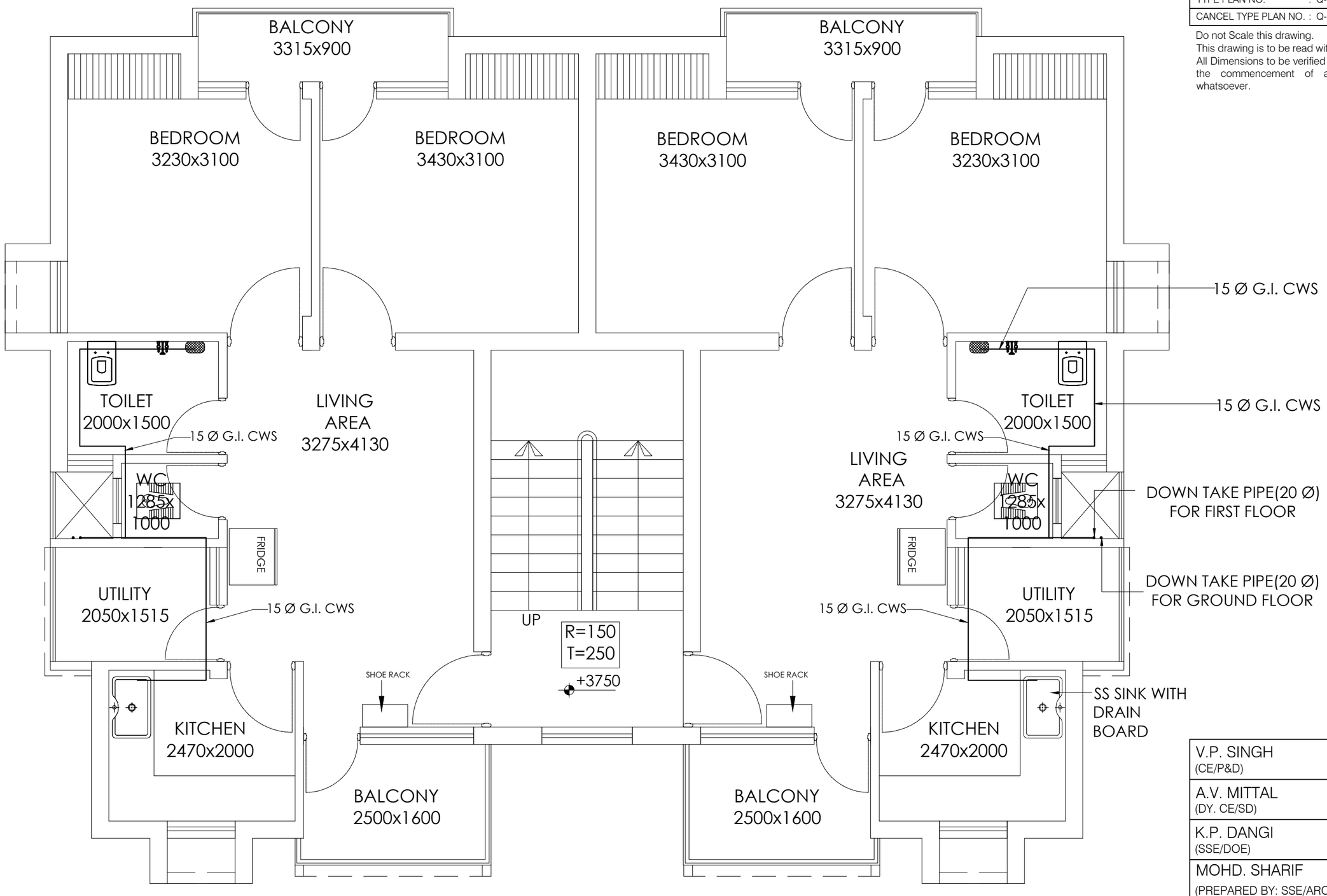
All Dimensions to be verified on site by Main Contractor before the commencement of any quarter drawing or work whatsoever.



V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

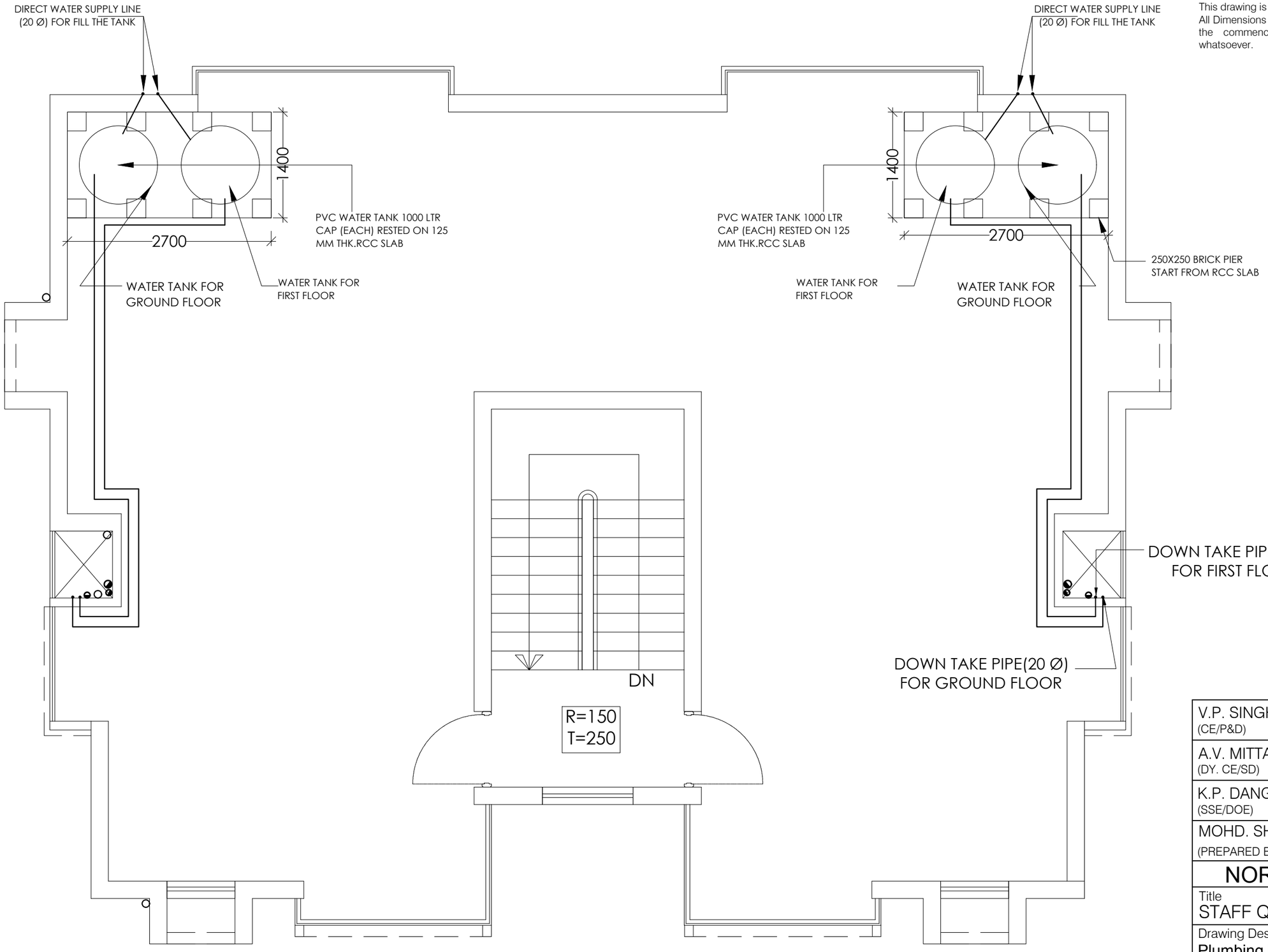
Title
STAFF QUARTER TYPE - II

Drawing Description
Plumbing Layout Plan - II
first & second floor

SCALE 1:50@A3	SHEET NO. 17 of 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

Do not Scale this drawing.
This drawing is to be read with all related information.
All Dimensions to be verified on site by Main Contractor before the commencement of any quarter drawing or work whatsoever.



V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

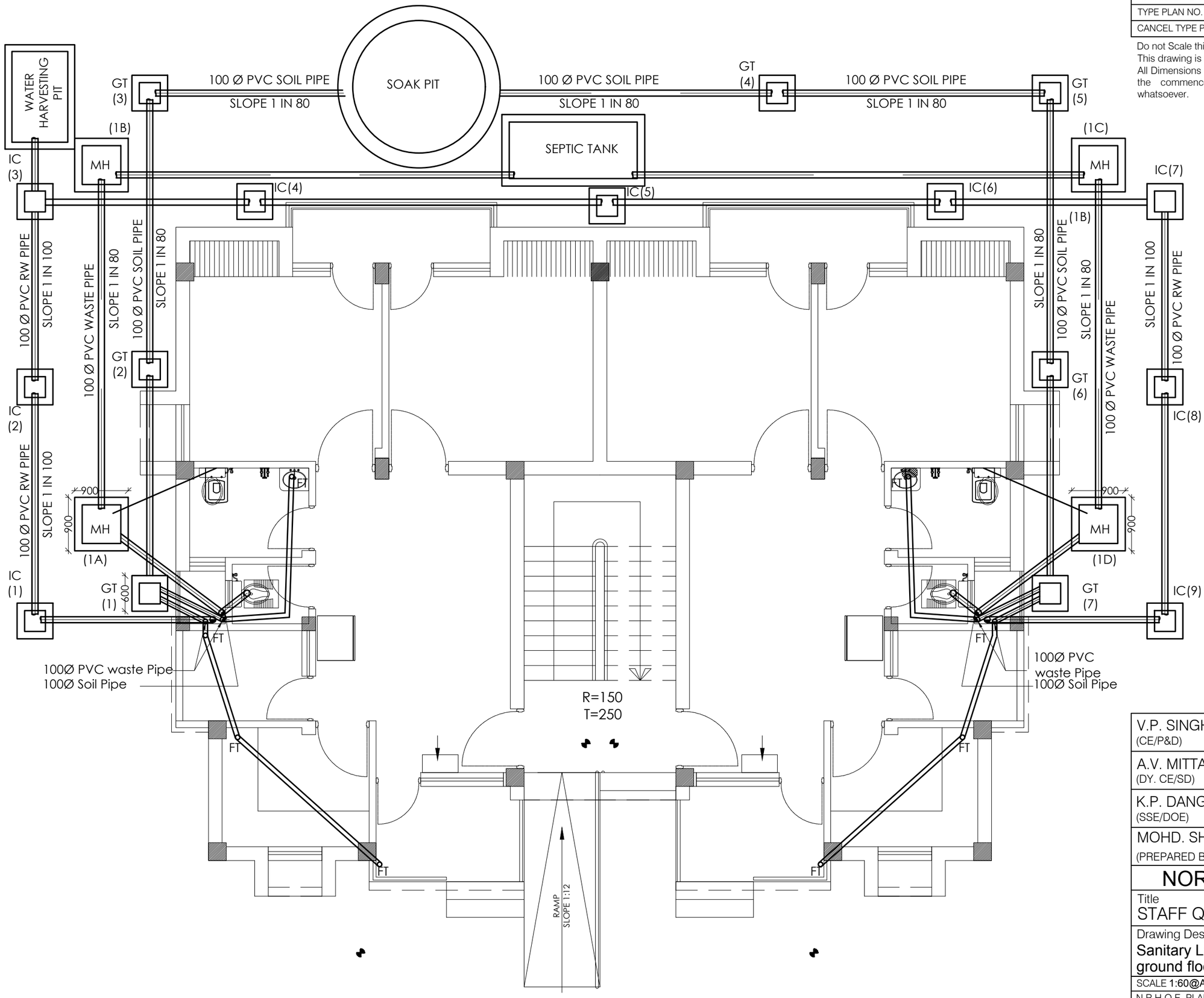
Title
STAFF QUARTER TYPE - II

Drawing Description
Plumbing Layout Plan - III
terrace floor

SCALE 1:50@A3	SHEET NO. 18 of 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

Do not Scale this drawing.
This drawing is to be read with all related information.
All Dimensions to be verified on site by Main Contractor before the commencement of any quarter drawing or work whatsoever.



V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

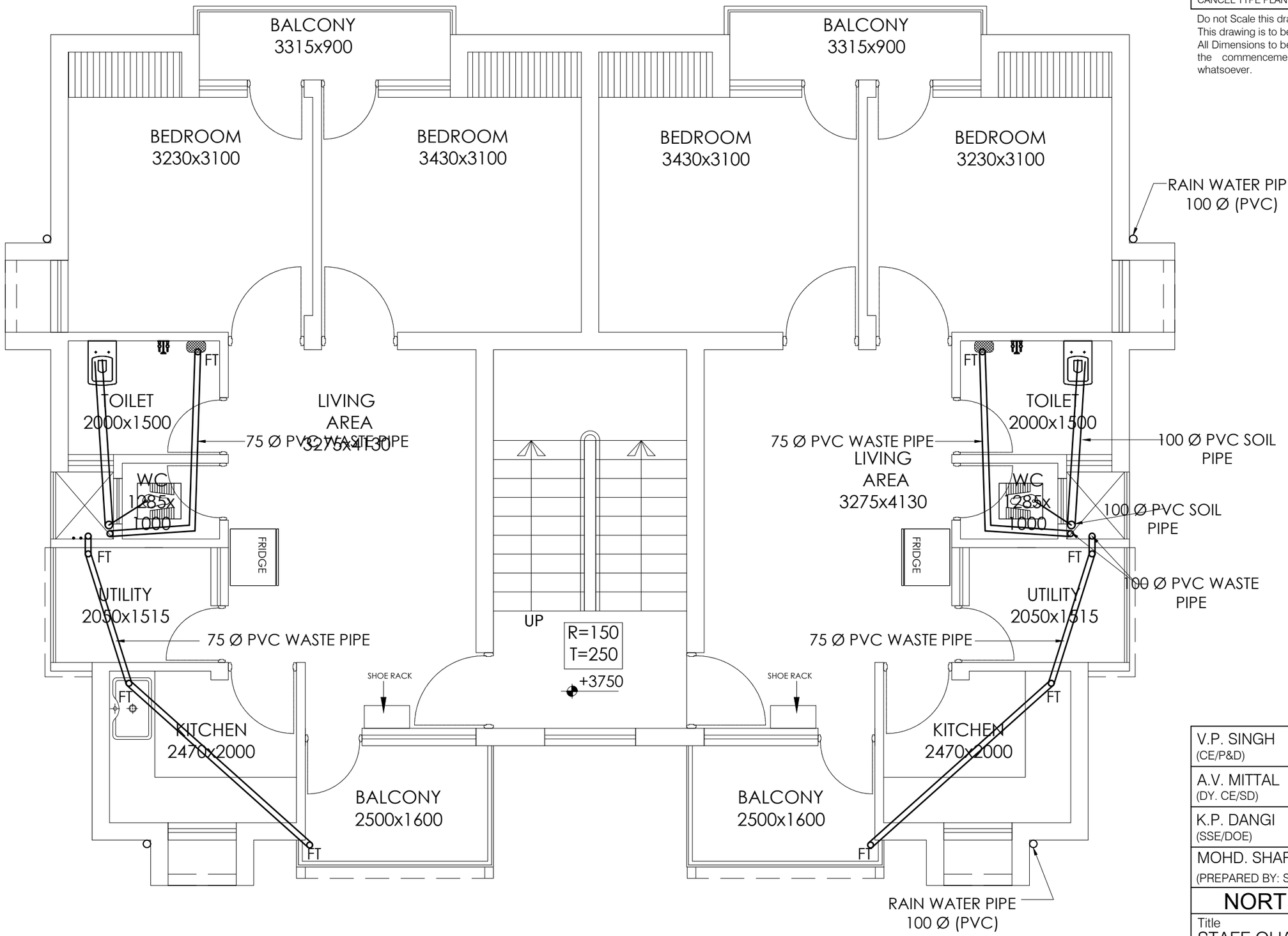
Title
STAFF QUARTER TYPE - II

Drawing Description
Sanitary Layout Plan - I
ground floor

SCALE 1:60@A3	SHEET NO. 19 of 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

Do not Scale this drawing.
This drawing is to be read with all related information.
All Dimensions to be verified on site by Main Contractor before the commencement of any quarter drawing or work whatsoever.



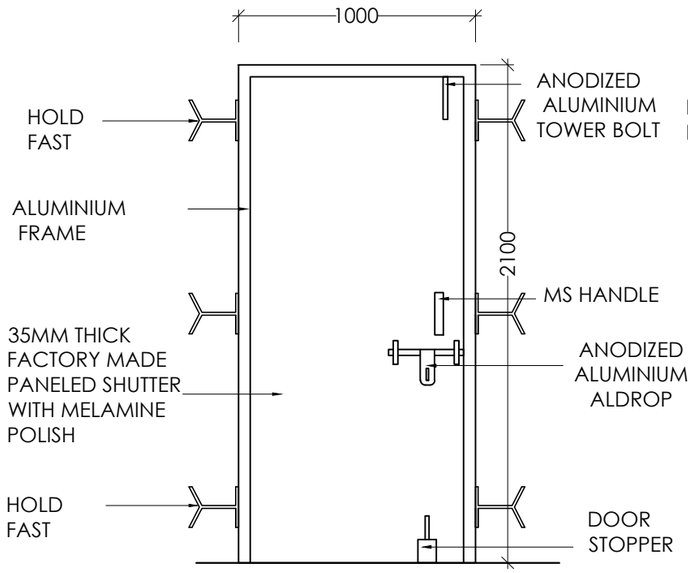
V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

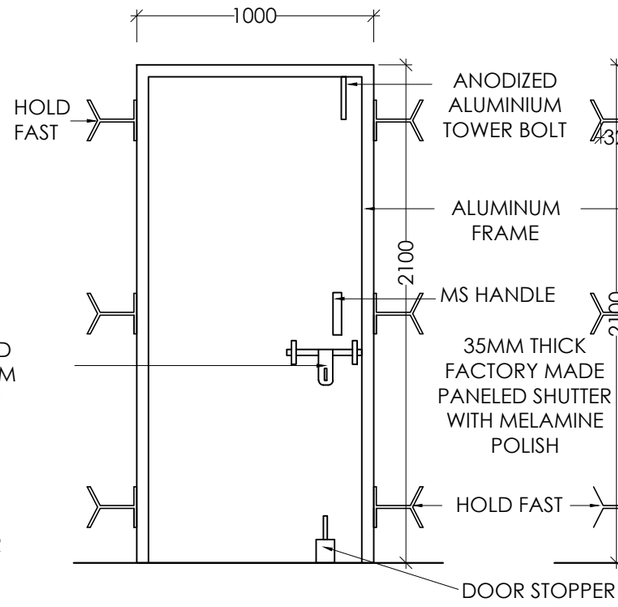
Title
STAFF QUARTER TYPE - II

Drawing Description
Sanitary Layout Plan - II
first & second floor

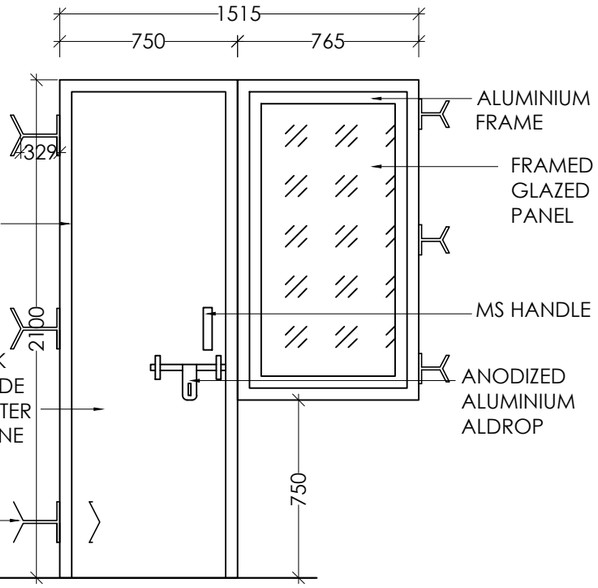
SCALE 1:50@A3	SHEET NO. 20 of 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	



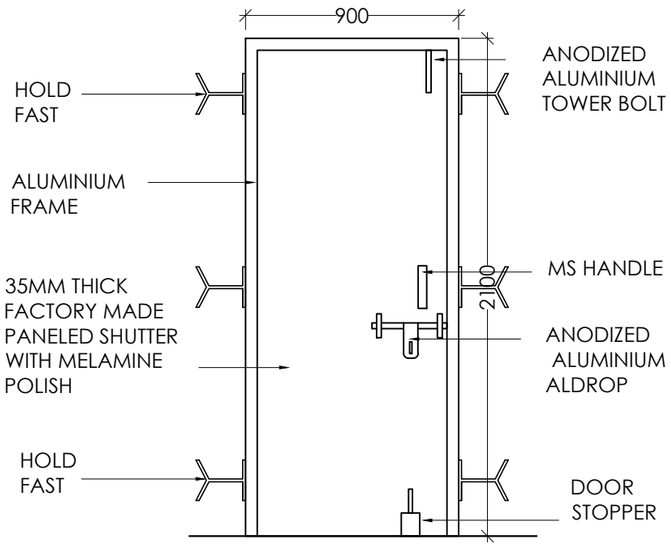
D1'(1000X2100)
AT MAIN (EXTERNAL) ENTRANCE
POWER COATED/ANODIZED
ALUMINIUM EXTRUDED



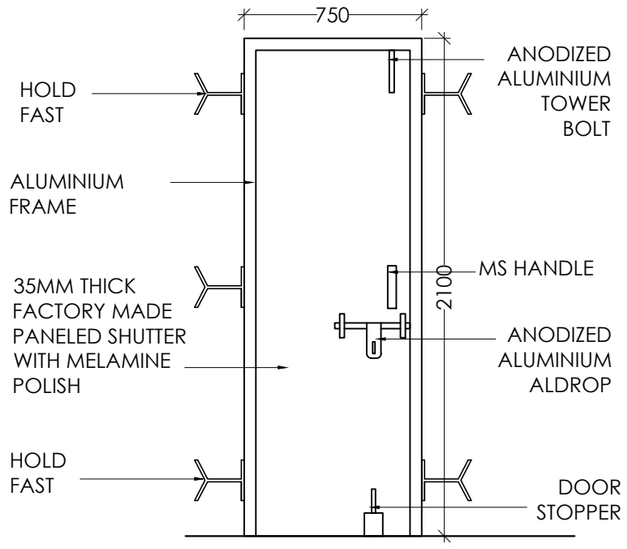
D1(1000X2100)
AT BED ROOM ENTRANCE



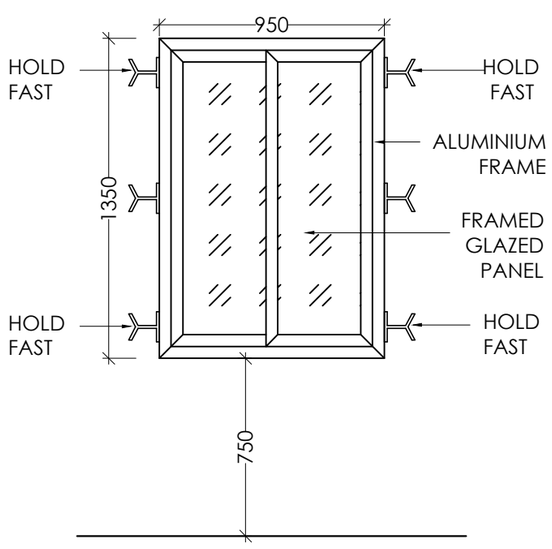
D/W(750X2100)
AT UTILITY ENTRANCE



D2(900X2100)
AT KITCHEN ENTRANCE



D3(750X2100)
AT TOILET ENTRANCE



W3(900X1350)
BEDROOM WINDOW

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

Do not Scale this drawing.
This drawing is to be read with all related information.
All Dimensions to be verified on site by Main Contractor before the commencement of any quarter drawing or work whatsoever.

Notes:
1. Outer Doors & Windows frame should be for double panels (outer for glass & inner for mosquito net).
2. Inner Doors & Windows frame should be for single panel.
3. For fixing arrangements refer Indian Railways Unified Standard Specifications (Works & materials) 2010 chapter no. 8.

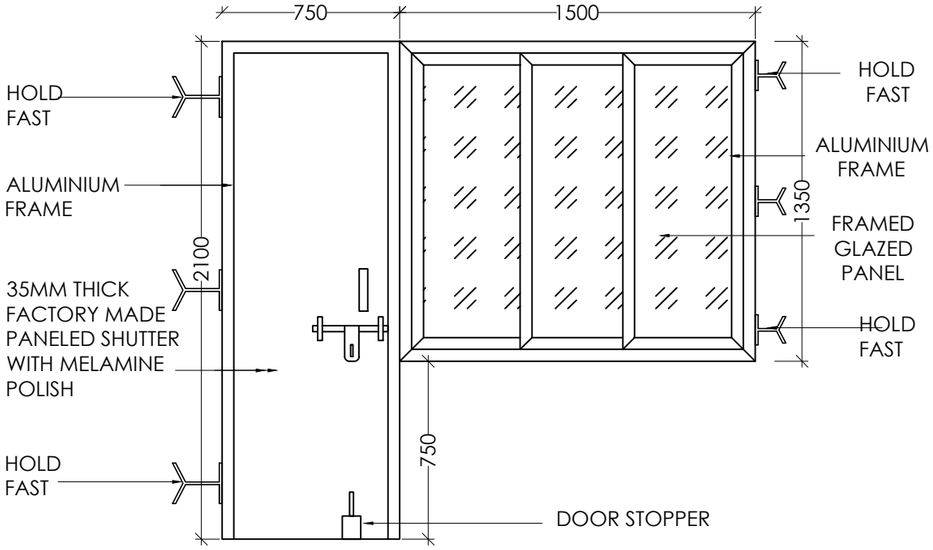
V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

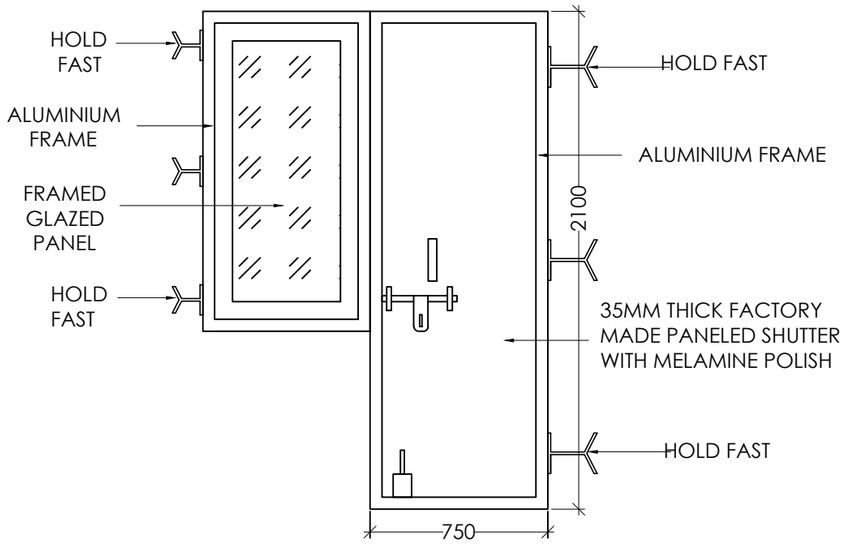
Title
STAFF QUARTER TYPE - II

Drawing Description
Opening Schedule - I
doors & windows typical details

SCALE 1:50@A3	SHEET NO. 21 of 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	



D/W(750X2100)
AT BALCONY ENTRANCE



D/W(750X2100)
AT BEDROOM ENTRANCE

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

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Notes:
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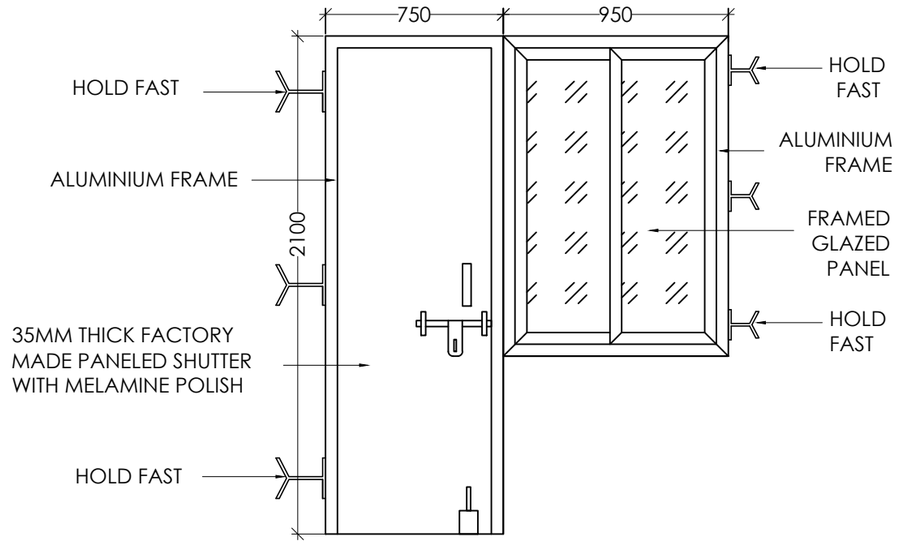
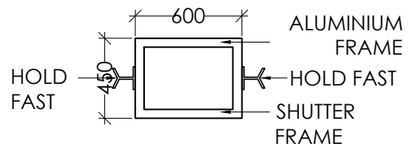
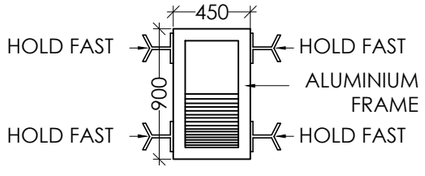
2. Inner Doors & Windows frame should be for single panel.
3. For fixing arrangements refer Indian Railways Unified Standard Specifications (Works & materials) 2010 chapter no. 8.



D/W(750X2100)
AT BEDROOM ENTRANCE



V1(600X450)
TOILET



V2(450X900)
TOILET

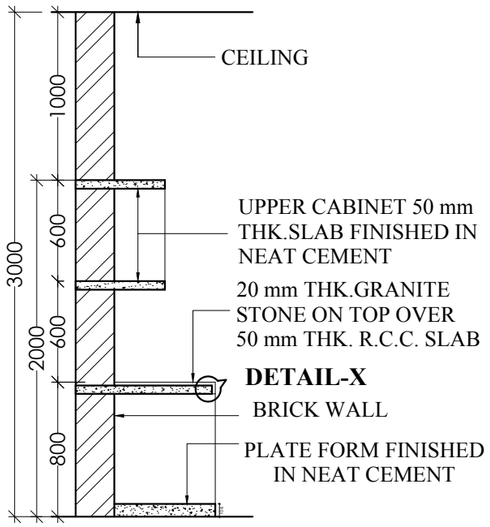
V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

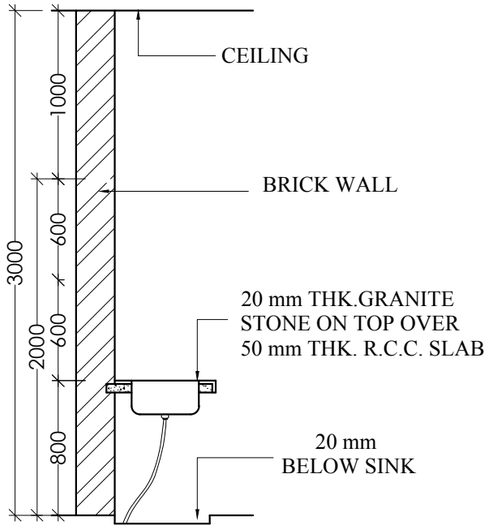
Title
STAFF QUARTER TYPE - II

Drawing Description
Opening Schedule - II
doors, windows & ventilators typical details

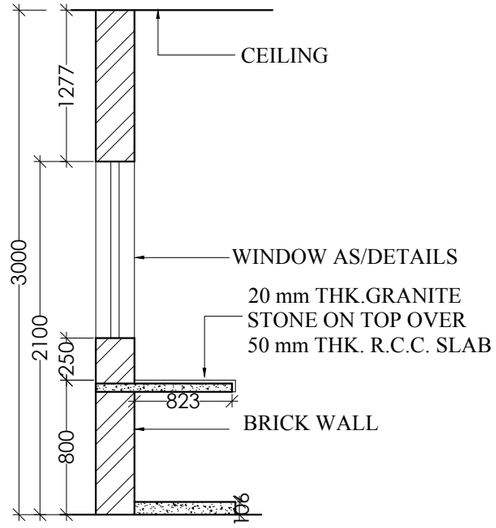
SCALE 1:50@A3	SHEET NO. 22 of 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	



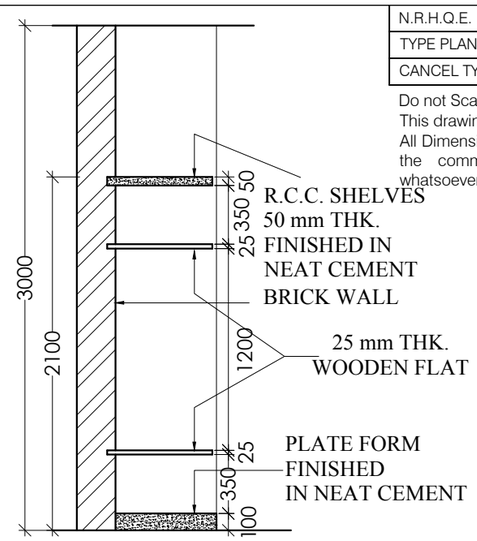
DETAILS AT AA'



DETAILS AT BB'



DETAILS AT CC'



DETAILS AT DD'

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

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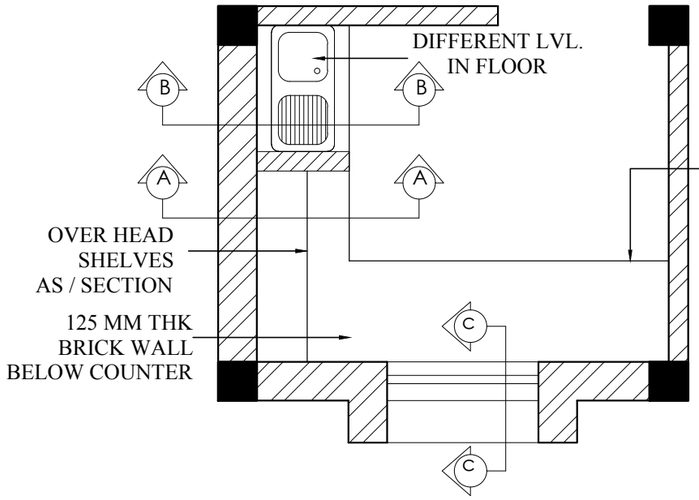
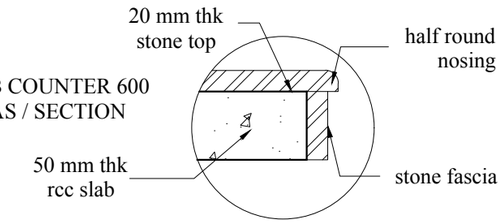
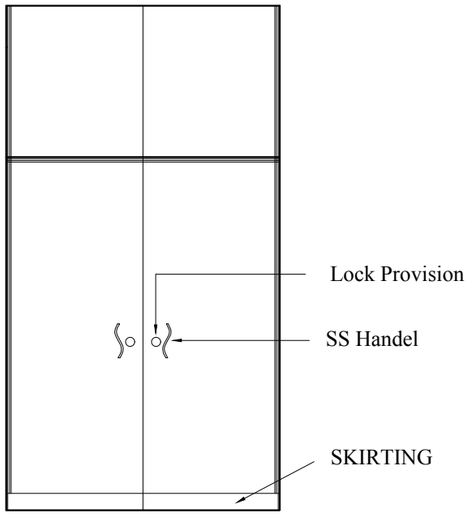


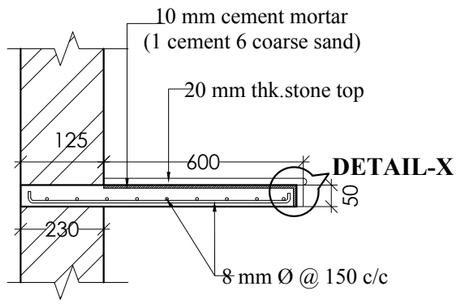
KITCHEN PLAN SHOWING COUNTER DETAIL 2470X2000



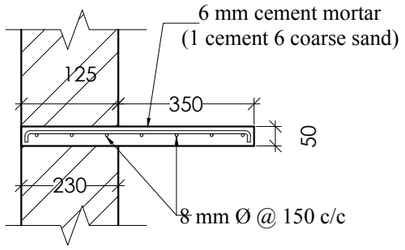
DETAIL-X



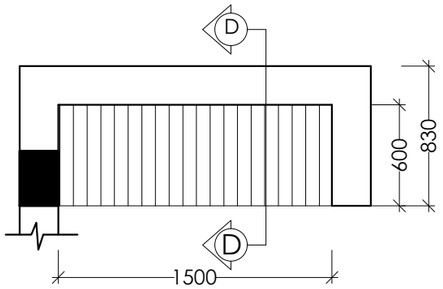
WARDROBE ELEVATION



DETAIL OF KITCHEN SLAB.
(for kitchen counter slab only)



DETAIL OF KITCHEN SLAB.
(for kitchen counter slab only)



WARDROBE DETAILS

V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

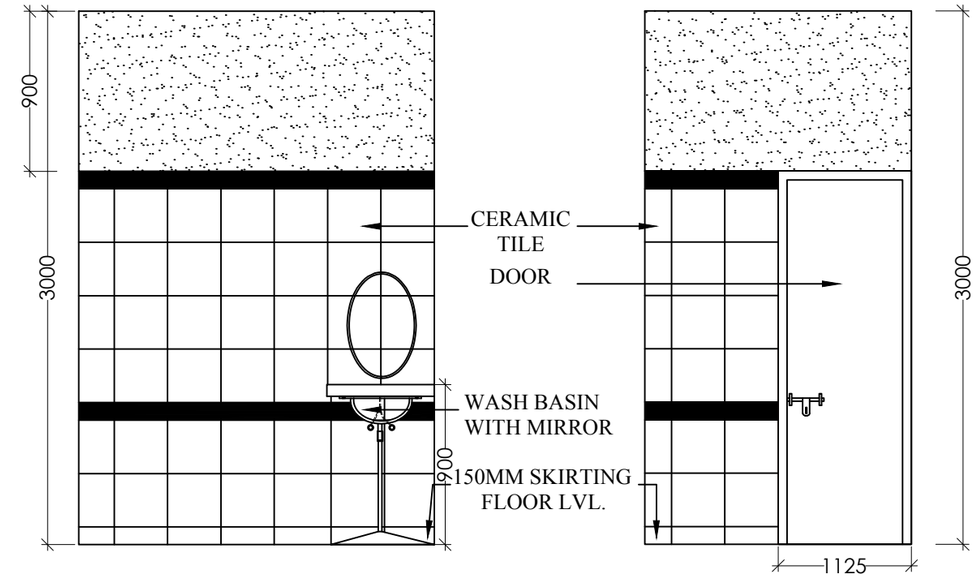
NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

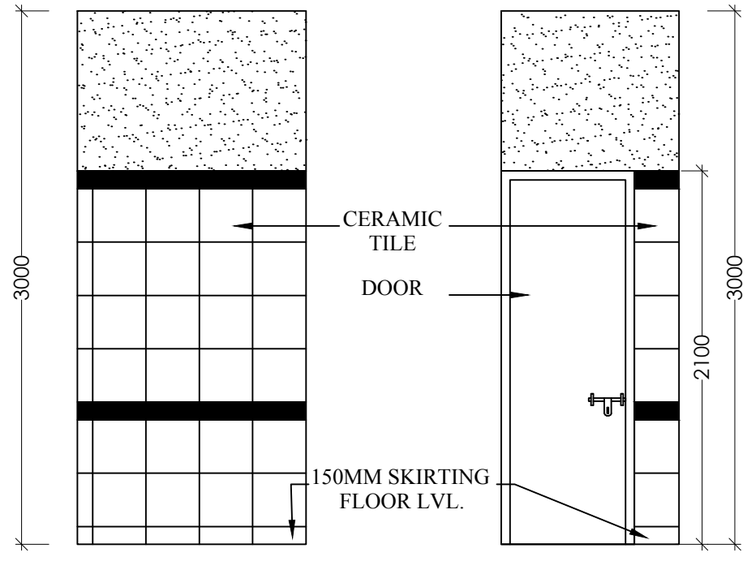
Drawing Description
Kitchen & Wardrobe
typical details

SCALE 1:50@A3 | SHEET NO. 23 of 30

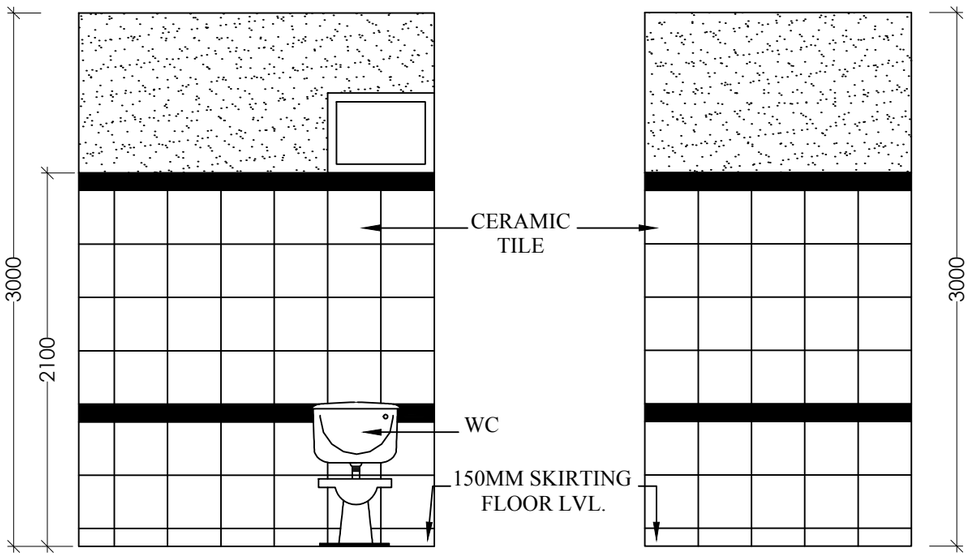
N.R.H.Q.E. PLAN NO. HQ/12/12/2017



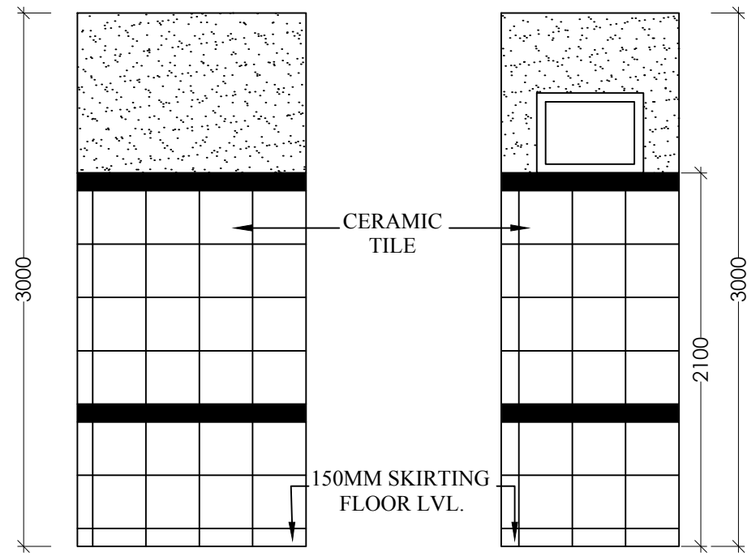
DETAILS-1 **DETAILS-2**



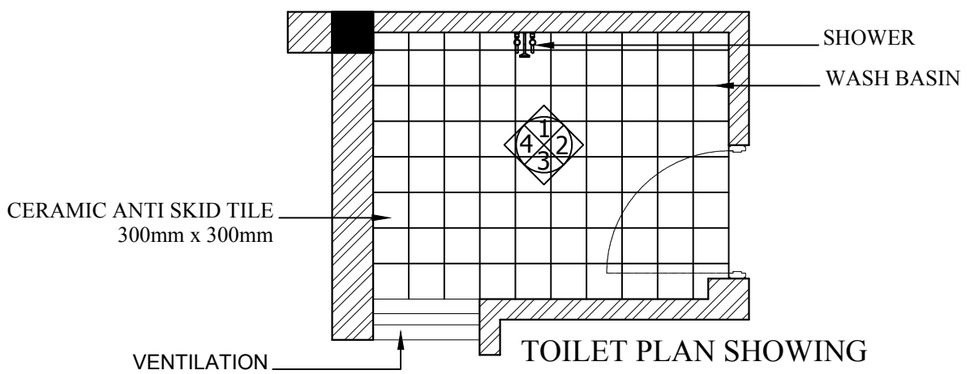
DETAILS-1 **DETAILS-2**



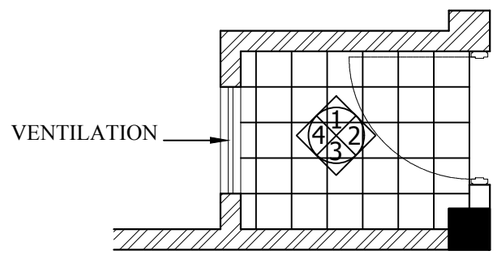
DETAILS-3 **DETAILS-4**



DETAILS-3 **DETAILS-4**



TOILET PLAN SHOWING
DETAILS (2000X1500)



W/C PLAN SHOWING
DETAILS (1285X1000)

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

Do not Scale this drawing.
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All Dimensions to be verified on site by Main Contractor before the commencement of any quarter drawing or work whatsoever.

V.P. SINGH (CE/P&D)	sd- (13.12.2017)
A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

Drawing Description
Toilet & Water Closet
typical details

SCALE 1:50@A3 | SHEET NO. 24 of 30

N.R.H.Q.E. PLAN NO. HQ/12/12/2017

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

Do not Scale this drawing.
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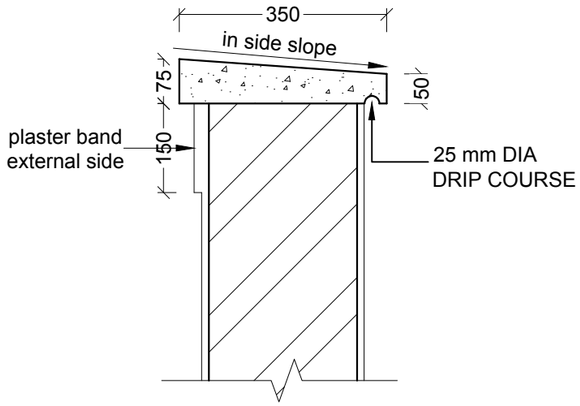
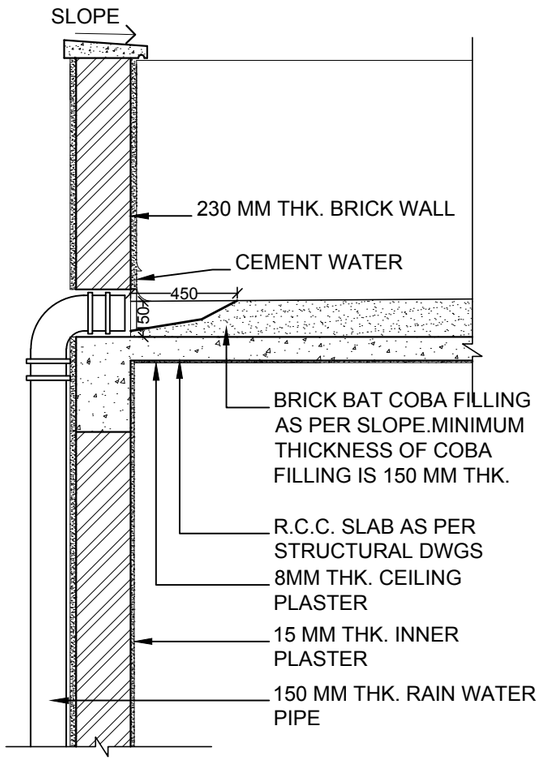
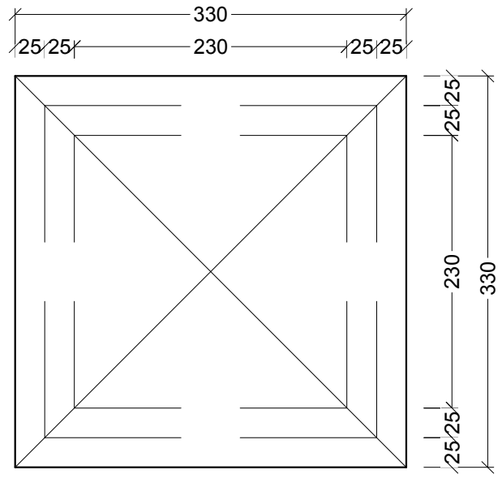


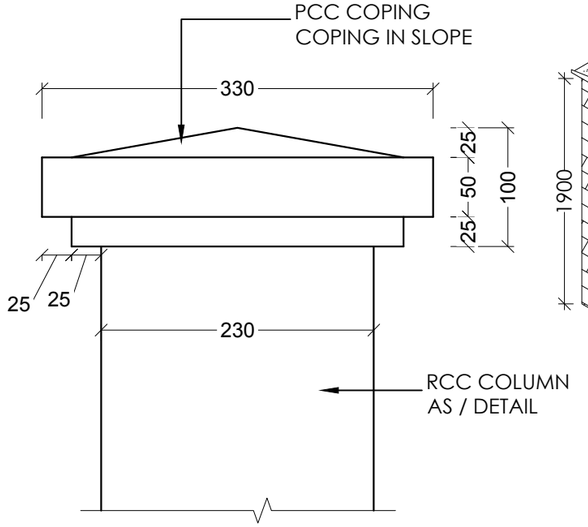
TYPICAL PARAPET TOP DETAIL
(Scale: 1:10)



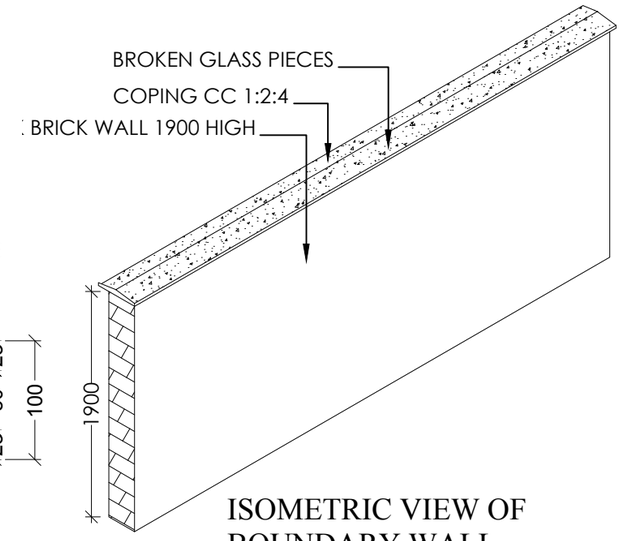
TYPICAL DETAIL OF RWP
(SCALE 1:25)



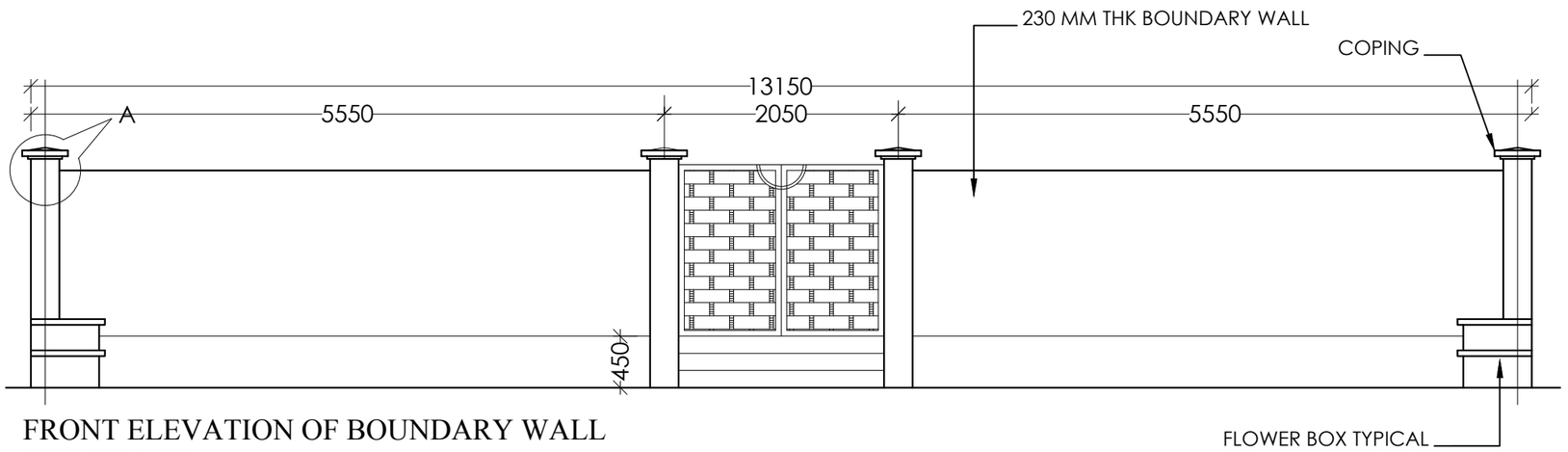
PLAN DETAIL AT 'A'
(SCALE 1:5)



ELEVATION DETAIL AT 'A'
(SCALE 1:5)



ISOMETRIC VIEW OF
BOUNDARY WALL
(SCALE 1:50)



FRONT ELEVATION OF BOUNDARY WALL
(SCALE 1:50)

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K.P. DANGI (SSE/DOE)	sd- (13.12.2017)
MOHD. SHARIF (PREPARED BY: SSE/ARCH.)	sd- (13.12.2017)

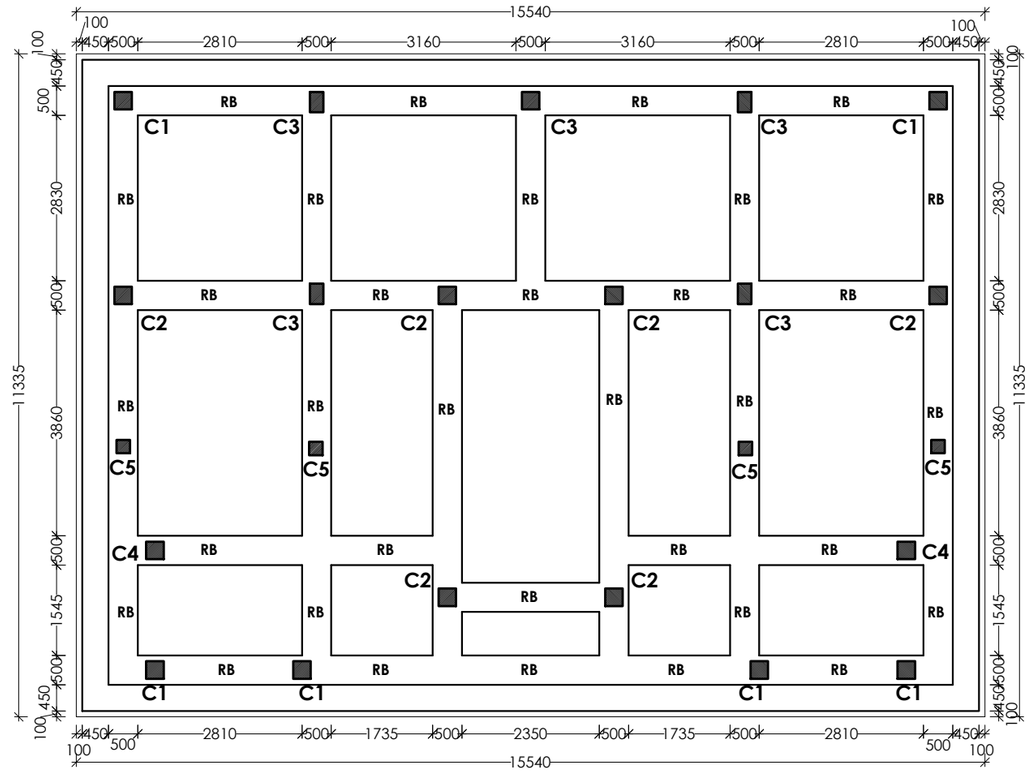
NORTHERN RAILWAY

Title
STAFF QUARTER TYPE - II

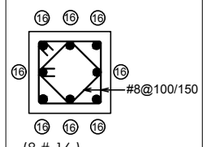
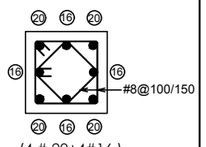
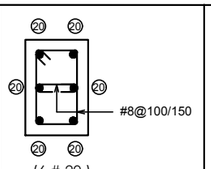
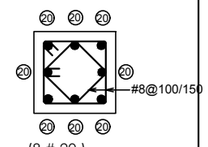
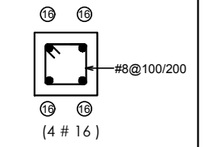
Drawing Description
Boundary Wall & Rain Water Pipe (RWP) typical details

SCALE 1:varies@A3 | SHEET NO. 25 of 30

N.R.H.Q.E. PLAN NO. HQ/12/12/2017

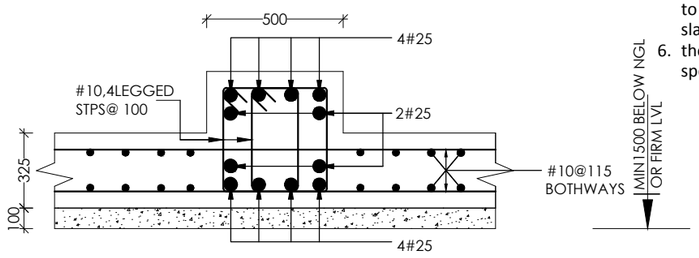


FOOTING PLAN

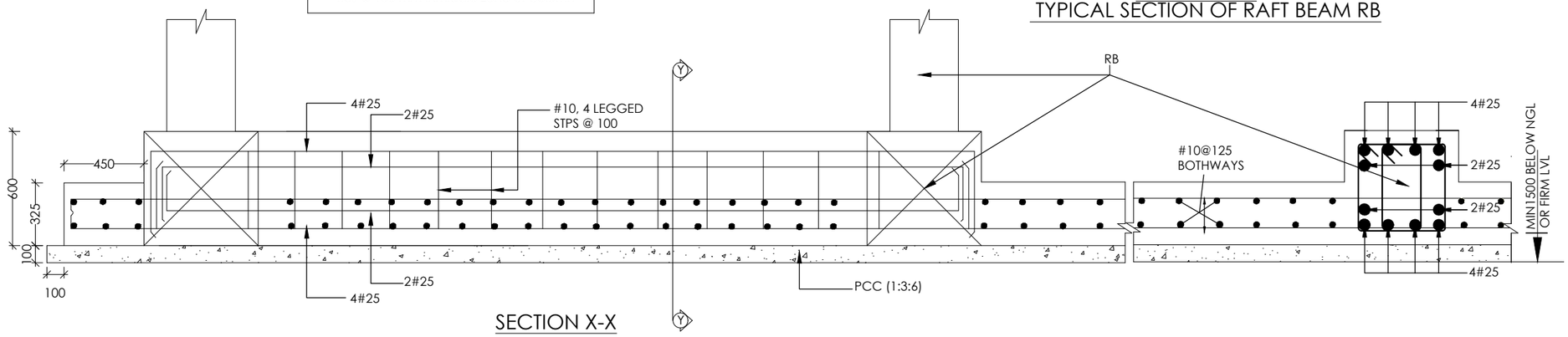
 (8 # 16) (TILL TERRACE)	 (4 # 20+4#16) (TILL TERRACE)	 (6 # 20) (TILL TERRACE)	 (8 # 20) (TILL TERRACE)	 (4 # 16) (TILL TERRACE)
[COLUMN C1(300x300)]	[COLUMN C2(300x300)]	[COLUMN C3(230x350)]	[COLUMN C4(300x300)]	[COLUMN C5(230x230)]

Ties @ 100 mm in end zone of column .

Ties @ 150 mm inmiddle zone of column



SECTION Y-Y
TYPICAL SECTION OF RAFT BEAM RB



SECTION X-X

GENRAL NOTES:

1. All dimensions are in millimeters unless otherwise specified.
2. Only written dimensions are to be followed neither the bars shall be counted nor the dimensions scaled from the drg.
3. All R.C.C. Work shall be in nominal mix concrete M25 as per is: 456-2000 code of practice for plain and reinforced concrete.
4. Concreting shall be done in accordance with the specifications laid down in is: 456:2000.
5. Proper curing of concrete to acquire hardness, strength and other properties essential for satisfactory service shall be ensured.
6. All concrete shall be mechanically mixed and vibrated.
7. Cover to reinforcement shall not be less than that shown on the plan or as specified in is: 456-2000.
8. High yield strength cold twisted deformed bars shall conform to is: 1786-1985.
9. Particular care must be taken to ensure that
   a) no sag occurs in the reinforcing bars during construction
   ii) stirrups are effectively tied with wire to the main reinforcing bars.
   h) Length of splice where bars obtained are of shorter length, shall not be less than 60 times the diameter of such bars.
8. Splice shall not be given at supports or at centre of span. These shall be preferably being located at quarter span points.
9. The number of bars shall be decided from the spacing mentioned on the drawing and not by counting span points.
10. All R.C.C work must be carried out under the personal supervision of an experienced civil engineer.
11. For R.C.C details of lintels and chhajjas over doors and windows not shown in this drawing reference may be made to N.R.H.Q.E. Type plan no. Q-138 & Q-139.
12. Expansion gaps to be filled up with bitumen/expansion board.
13. The structure has been designed for G+ 2 storeys considering seismic zone IV.
14. Assumed safe bearing capacity of soil is 6 t/m2.
15 In case of soil at site is not safe for the assumed soil pressure, the foundation should be suitably altered under advice to the Head Quarters Office.
16 Clear cover of outer layer reinforcement Shall be as follows.
(a) Foundation = 50 mm. (b) Column = 40 mm. (c) Beam = 25 mm. Or Dia of bar whichever is more (d) Slab = 20 mm. (e) Waist slab = 20 mm.

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

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[FOUNDATION] [G+2,SBC=6T/SqM,EQ ZONE-VI]

1. Layout of building shall be given from the arch.drg.
2. The design data for foundation has been taken from soil test report provided by the dept./ client.

[COLUMN]

1. Ties in portion of col. & beam junction shall be same as end zone.
2. Over laps are allowed only at middle zone of the columns.
3. Not more than 50 % of bars shall be lapped at section and overlapped should be staggered.
4. Vertical bars of rcc column at top slab shall be extended upto top of beam & bent into beam by development length.

[BEAM]

1. For location of beams refer slab plan.
2. Where two layers of reinf. bars are to be provided, spacer bar are to be provided at spacing of 1000 mm. max. and the dia of the spacer bar shall be higher of dia of longitudinal bars or 25 mm. max. 3 nos. of bars shall be provided in a layer of 230 wide beam.
3. At the junction of two diff. number of beams the heigher at the support shall be adopted.
4. Over lap in top bars shall be near mid span & in bottom bars shall be near support or at support.
5. The depth of beam/ lintel monolithic with slab as specified in schedule shall be inclusive of slab thickness unless otherwise specified.
6. The first stirrup in beam shall be placed at 50 mm. away from the face of support (column,beam,wall)

[SLAB]

1. for slab reinforcement refer table-1,2&4 (detail of slab reinforcement).
2. slab spanning either side of beams/walls,alternate bottom bars shall be curtailed at l / 7 of span and extra top bars shall be extended till l/3 of span either side.
3. slab terminating on beams/walls ,alternate bottom bars shall be cranked at at l/7 and extended till end of beams/walls.
4. extra bar of same dia of slab bars shall be provided at top face in between two crancked bars as shown in typ. section of slab
5. the cross reinf. / temp. reinf. below top reinf of slab .i.e.#8@300c/c is to be provided just below the main top steel as shown in typ. sec.of slab.
6. the first main bar of slab shall be placed at 80 mm. or half the spacing specified whichever is less from the face of support.

A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
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BIBHA CHANDRA (DESIGNED BY SSE/DOE)	sd- (13.12.2017)
RAKESH KUMAR (PREPARED BY/JE/D&D.)	sd- (13.12.2017)

NORTHERN RAILWAY

Drawing Description
STAFF QUARTER TYPE - II

Drawing Description
Details Of Foundation, Foundation, Beam & Column

SCALE : NTS @A3	SHEET NO. 26 OF 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

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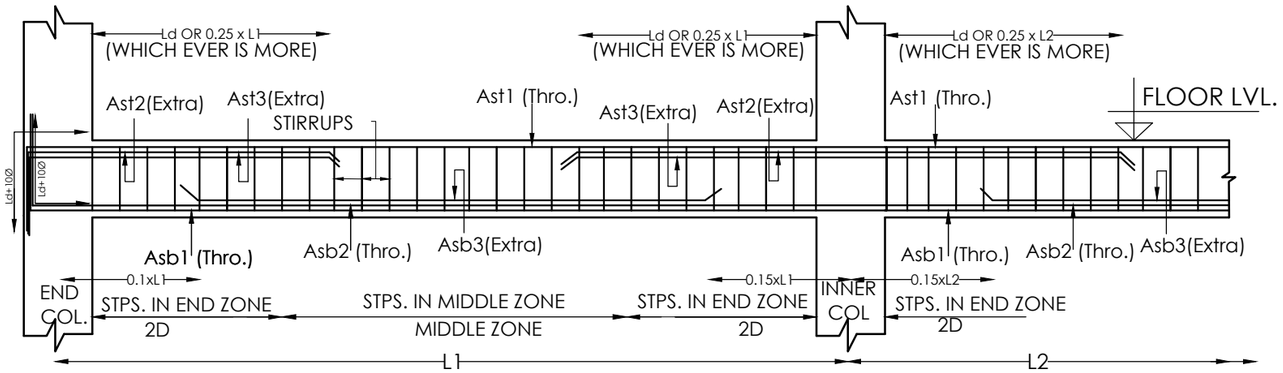
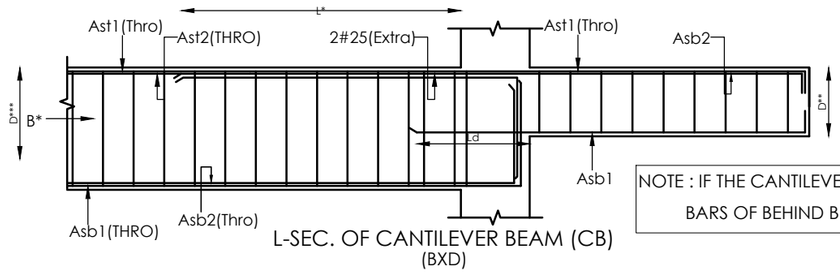


TYP.REINF. DETAILS IN THE SLAB BEAMS SPANNING BETWEEN SUPPORT TO SUPPORT

FOR DETAILS REFER TABLE [2] BELOW

NOTE : AT THE JUNCTION OF TWO DIFF. NUMBER OF BEAMS THE HEIGHER REINFORCEMENT AT THE SUPPORT SHALL BE ADDOPTED.

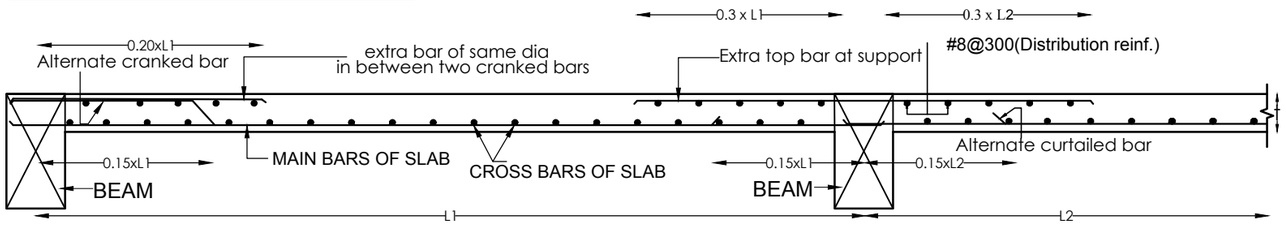
DETAILS OF CANTILEVER BEAMS



L-SEC. OF CANTILEVER BEAM (CB)
(BXD)

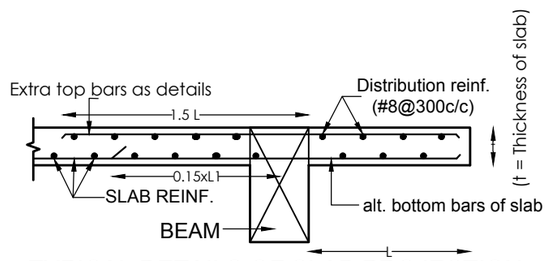
NOTE : IF THE CANTILEVER BEAM IS OF SAME DEPTH,TOP AND BOTTOM BARS OF BEHIND BEAM WILL BE EXTENDED IN CANTILEVER BEAM

TYPICAL SECTIONAL DETAILS OF SLAB



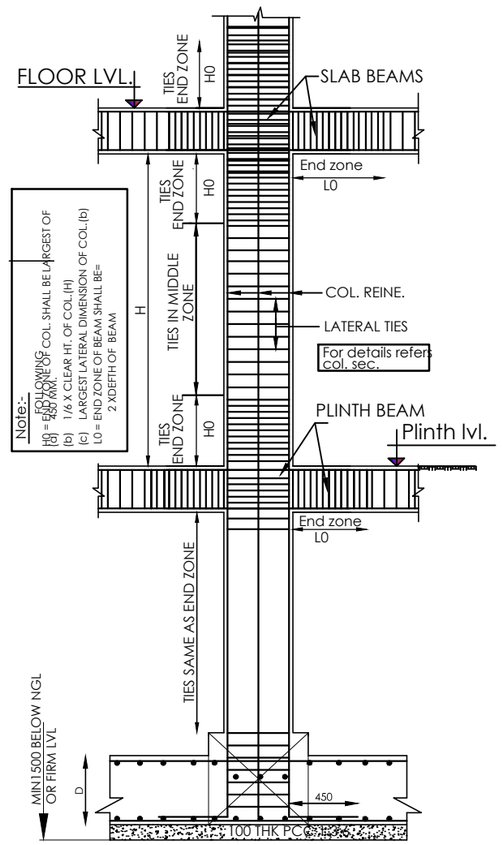
TYPICAL SECTION OF SLAB ALONG SHORTER SPAN OF SLAB

NOTE:-
AT THE JUNCTION OF TWO DIFF. NUMBER OF SLABS THE HEIGHER REINFORCEMENT AT THE SUPPORT (EXTRA TOP) SHALL BE ADDOPTED



TYPICAL DETAILS OF SLAB PROJECTION

NOTE - IF BALCONY/SLAB PROJECTIONS [L]



TYPICAL COLUMN SECTION

A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (CHECKED BY SSE/DOE)	sd- (13.12.2017)
BIBHA CHANDRA (DESIGNED BY SSE/DOE)	sd- (13.12.2017)
RAKESH KUMAR (PREPARED BY/JE/D&D.)	sd- (13.12.2017)

NORTHERN RAILWAY

Drawing Description
STAFF QUARTER TYPE - II

Drawing Description
Typical Details Of Beam, Column and Slab

SCALE : NTS @A3 | SHEET NO. 27 OF 30

N.R.H.Q.E. PLAN NO. HQ/12/12/2017

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

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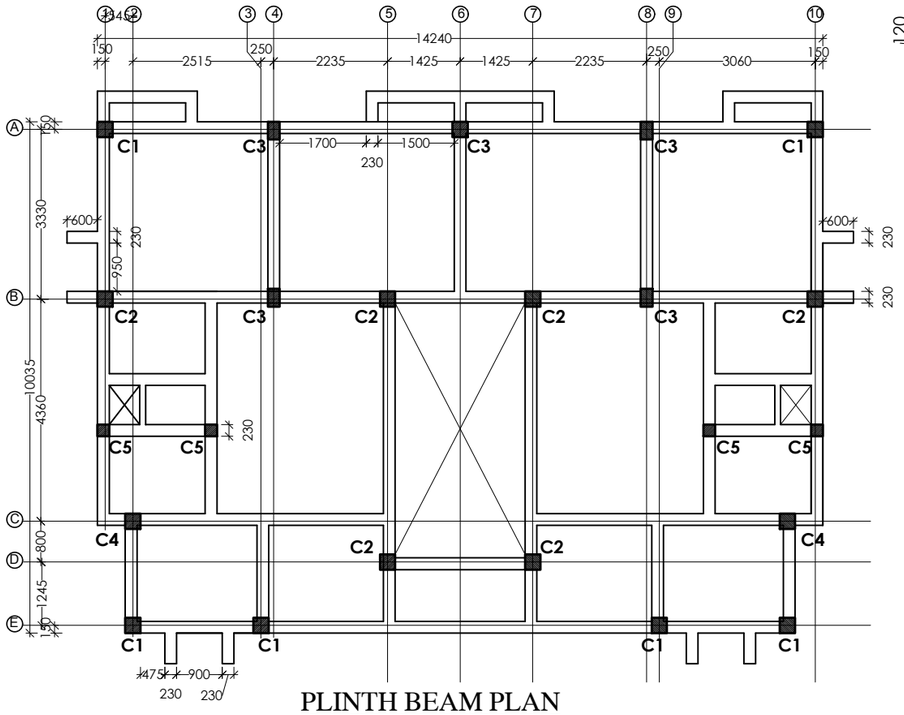
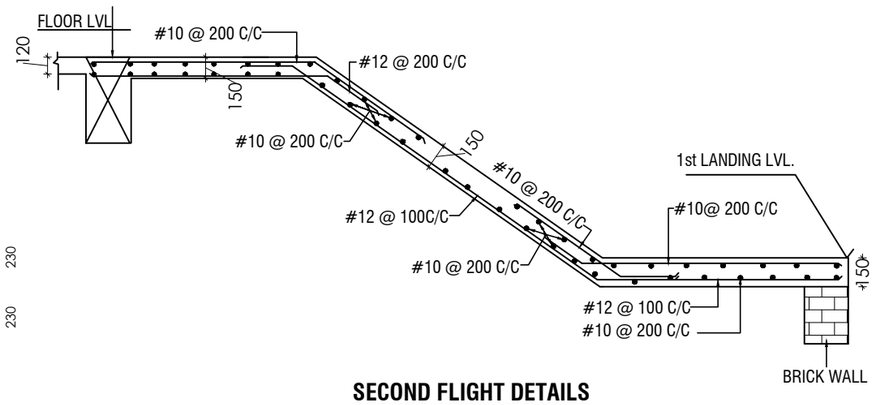
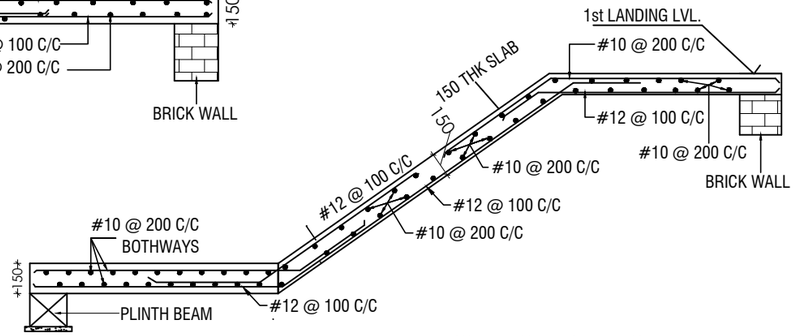


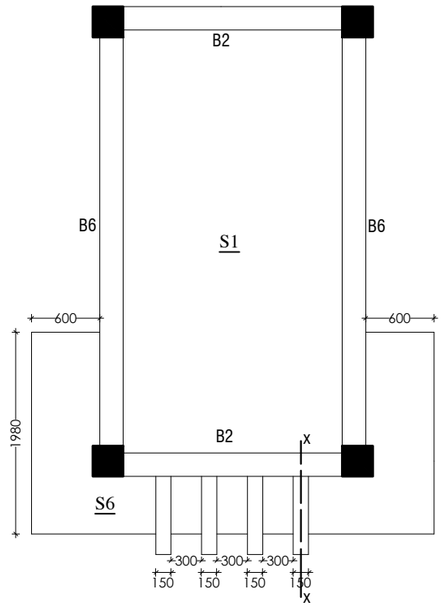
PLINTH BEAM PLAN



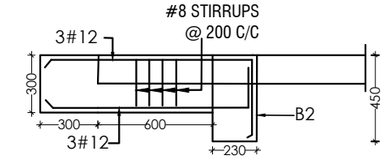
SECOND FLIGHT DETAILS



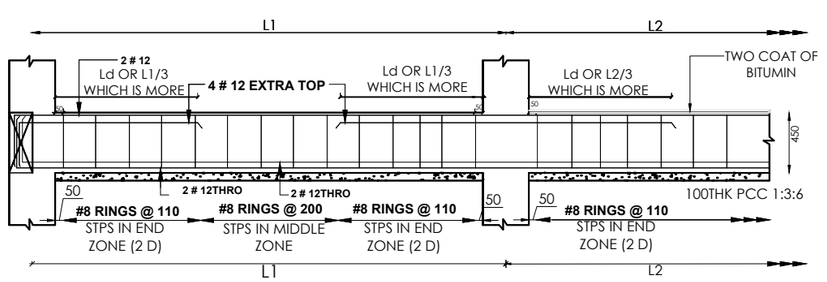
FIRST FLIGHT DETAILS



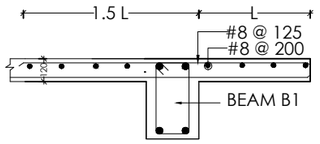
MUMTY BEAM PLAN



REINF. DETAILS OF PARGOLA AT SECTION X-X



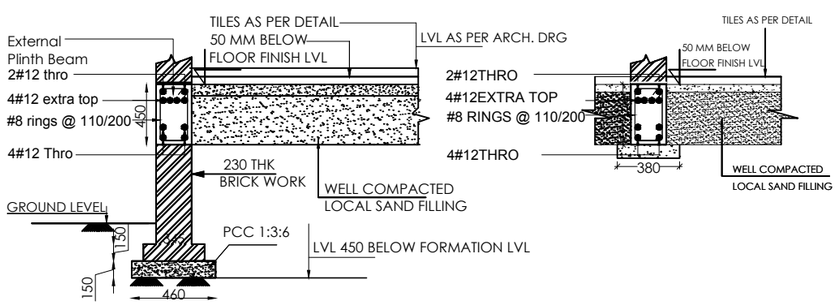
PLINTH BEAM TYP LONGITUDINAL SECTION (230X450)



TYP SECTION OF SLAB S6(120 THK)

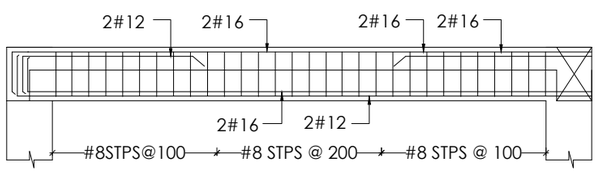
TABLE-1

TYPICAL MUMTY SLAB REINF. DETAILS					
SR. NO. / SLAB NO.	Thickness (t MM)	REINFORCEMENT			
		MAIN BARS	CROSS BARS	EXTRA TOP	
		Along shorter span	Along longer span	Along shorter span	Along longer span
1 S1	120	#8 @ 150	#8 @ 200	#8 @ 150	#8 @ 200



EXTERNAL PLINTH BEAM TYP SECTION (230X350)

INTERTNAL PLINTH BEAM TYP SECTION (230X350)



DETAILS OF BEAM B2/B6 (230x450)

A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (CHECKED BY SSE/DOE)	sd- (13.12.2017)
BIBHA CHANDRA (DESIGNED BY SSE/DOE)	sd- (13.12.2017)
RAKESH KUMAR (PREPARED BY/JE/D&D.)	sd- (13.12.2017)

NORTHERN RAILWAY

Drawing Description
STAFF QUARTER TYPE - II

Drawing Description
Plinth Beams,Stair and Mumty Details

SCALE : NTS @A3 | SHEET NO. 28 OF 30

N.R.H.Q.E. PLAN NO. HQ/12/12/2017

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

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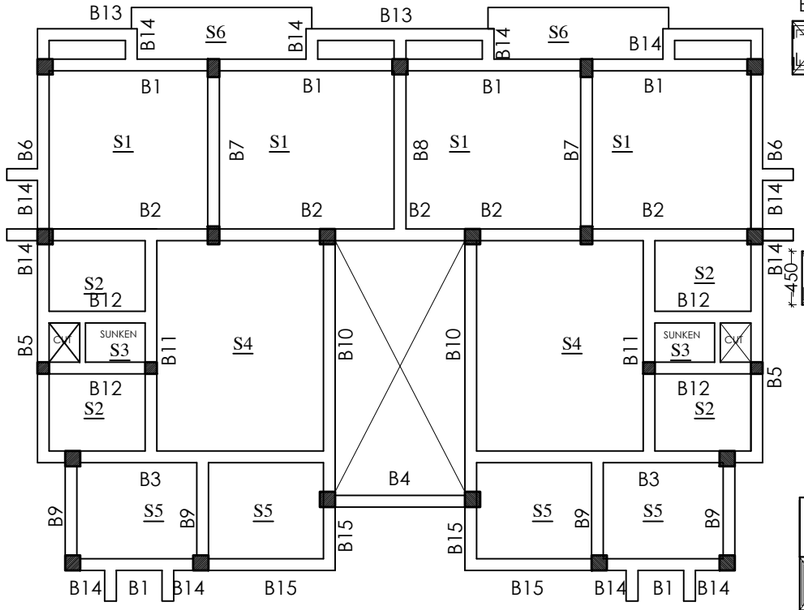
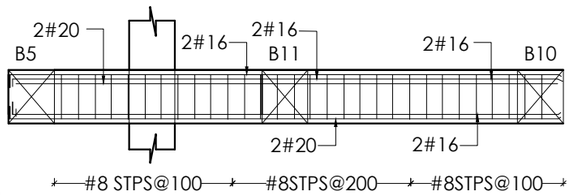
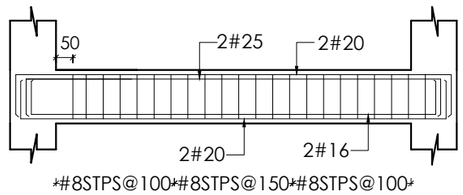


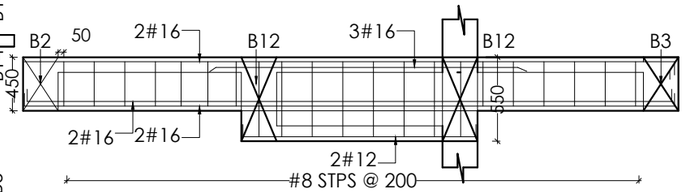
TYPICAL FLOOR BEAM PLAN



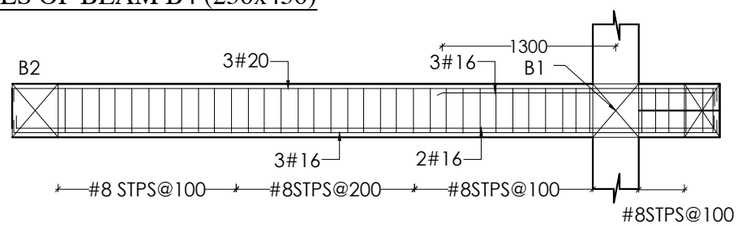
DETAILS OF BEAM B3 (230x450)



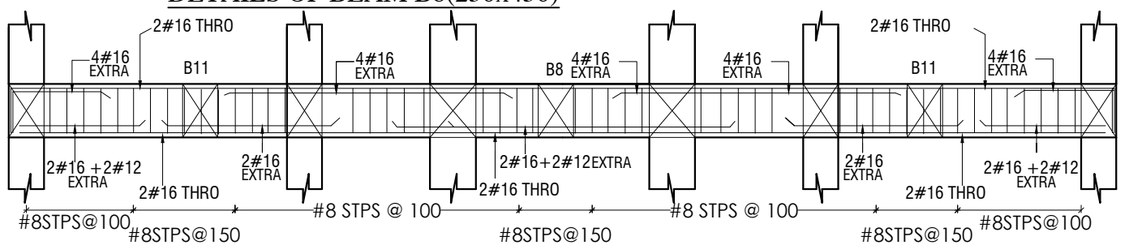
DETAILS OF BEAM B4 (230x450)



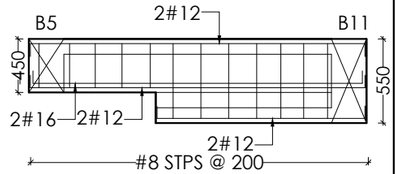
DETAILS OF BEAM B11 (230x450,230X550)



DETAILS OF BEAM B8(230x450)



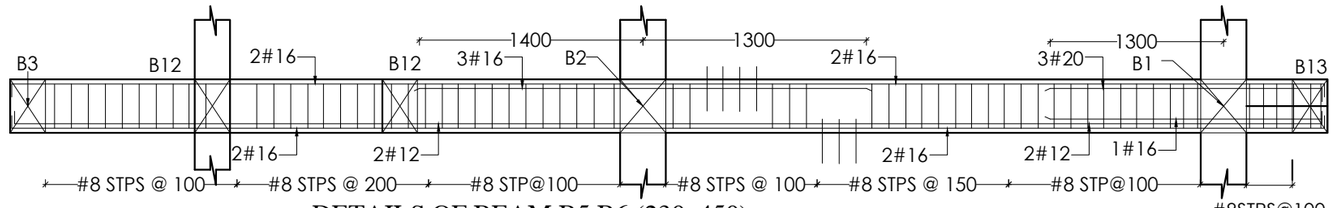
DETAILS OF FLOOR BEAM B2 (230x450)



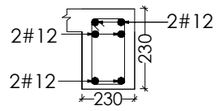
DETAILS OF BEAM B12
(230x450, 230X550)

TABLE- 2

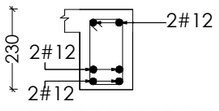
TYPICAL FLOOR SLAB REINF. DETAILS						
SR. NO.	SLAB NO.	Thickness (t MM)	REINFORCEMENT			
			MAIN BARS	CROSS BARS	EXTRA TOP	
			Along shorter span	Along longer span	Along shorter span	Along longer span
1	S1	120	#8 @ 150	#8 @ 200	#8 @ 200	#8 @ 200
2	S2	120	#8 @ 200	#8 @ 200	#8 @ 200	#8 @ 200
3	S3	100	#8 @ 175	#8 @ 175	#8 @ 200	#8 @ 200
4	S4	120	#8 @ 125	#8 @ 150	#8 @ 200	#8 @ 200
5	S5	120	#8 @ 200	#8 @ 200	#8 @ 200	#8 @ 200



DETAILS OF BEAM B5,B6 (230x450)



TYP. SECTION OF
BEAM B14(230X230)



TYP SECTION OF
BEAM B13(230X230)

TABLE -3

TYPICAL FLOOR BEAM SCHEDULE

SR. NO.	TIE BEAM NO.	BEAM SIZE		LONGITUDINAL REINFORCEMENT						STIRRUPS		SIDE FACE REINF. (ON EACH FACE)
				TOP FACE REINFORCEMENT			BOTTOM FACE REINFORCEMENT			END ZONE '2L'STPS	MIDDLE ZONE '2L'STPS	
		W mm	D mm	Ast1 (Left) (Thro at Top)	Ast2 (Right) (Extra at support)	Ast3 (Extra at support)	Asb1 Extra at Support	Asb2 (Extra at Support)	Asb3 (Extra at middle)			
	B1	230	450	2#16	2#16 + 2#20	2#16+2#20	2#16	3#12	-	#8STPS @100	#8STPS @200	-
	B7	230	450	3#20	3#16	3#16	3#16	2#16	-	#8STPS @100	#8STPS @200	-
	B9	230	450	2#16	2#16+2#20	2#20	3#16	2#16	-	#8STPS @100	#8STPS @200	-
	B10	230	450	2#16	4#20	4#20	4#16	-	-	#8STPS @100	#8STPS @200	-
	B15	150	420	4#16	-	2#16+2#20	2#16	2#12	-	#8STPS @100	#8STPS @200	-

A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (CHECKED BY SSE/DOE)	sd- (13.12.2017)
BIBHA CHANDRA (DESIGNED BY SSE/DOE)	sd- (13.12.2017)
RAKESH KUMAR (PREPARED BY/JE/D&D.)	sd- (13.12.2017)

NORTHERN RAILWAY

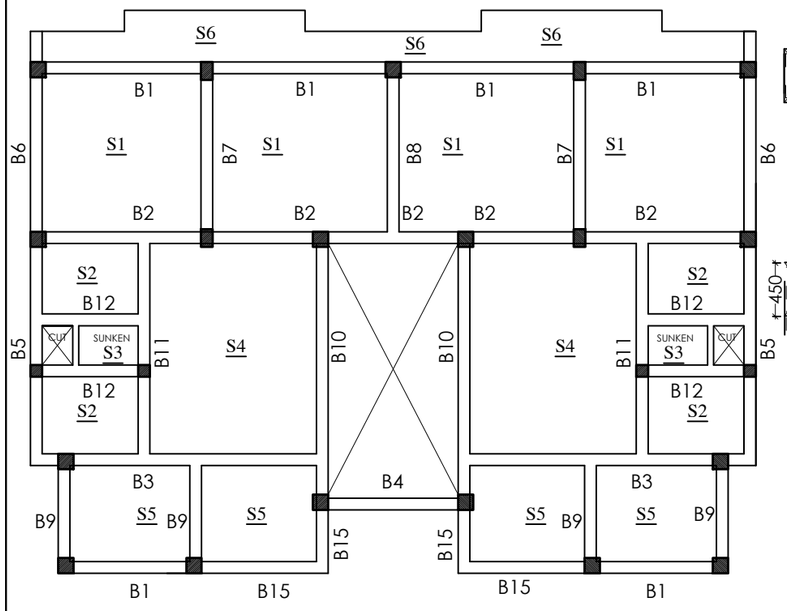
Drawing Description
STAFF QUARTER TYPE - II

Drawing Description
Typical Floors And Slab Reinforcement Details

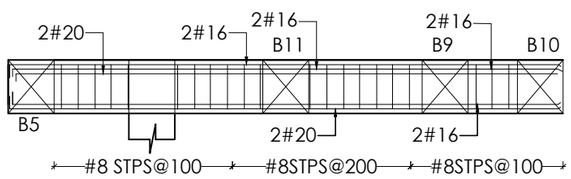
SCALE : NTS @A3	SHEET NO. 29 OF 30
N.R.H.Q.E. PLAN NO. HQ/12/12/2017	

N.R.H.Q.E. PLAN NO.	: HQ/12/12/2017
TYPE PLAN NO.	: Q-149/2017
CANCEL TYPE PLAN NO.	: Q-143/R1

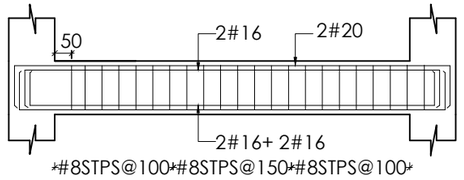
Do not Scale this drawing.
This drawing is to be read with all related information.
All Dimensions to be verified on site by Main Contractor before the commencement of any quarter drawing or work whatsoever.



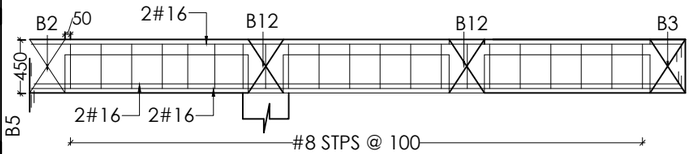
TYPICAL TERRACE BEAM PLAN



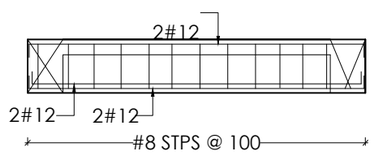
DETAILS OF BEAM B3 (230x450)



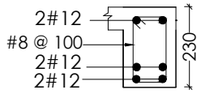
DETAILS OF BEAM B4 (230x450)



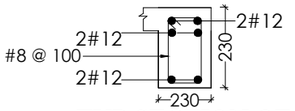
DETAILS OF BEAM B11 (230x450)



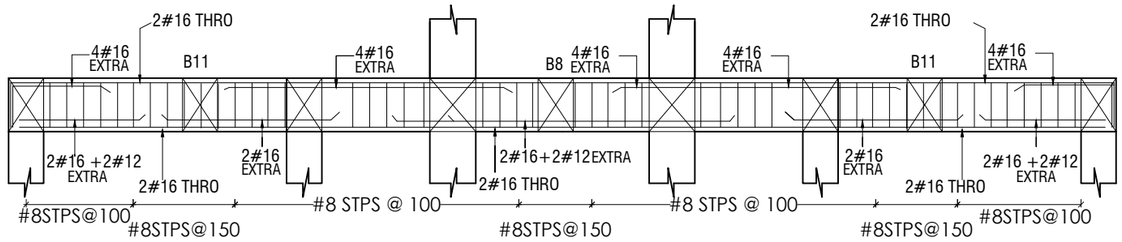
DETAILS OF BEAM B12 (230x350)



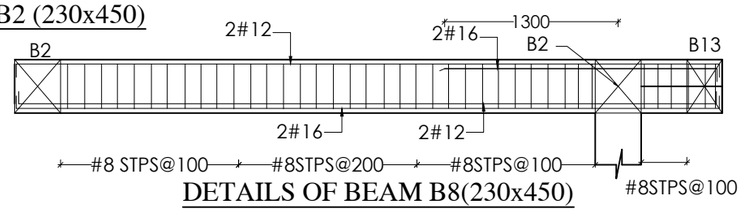
TYP SECTION OF BEAM B13(230X230)



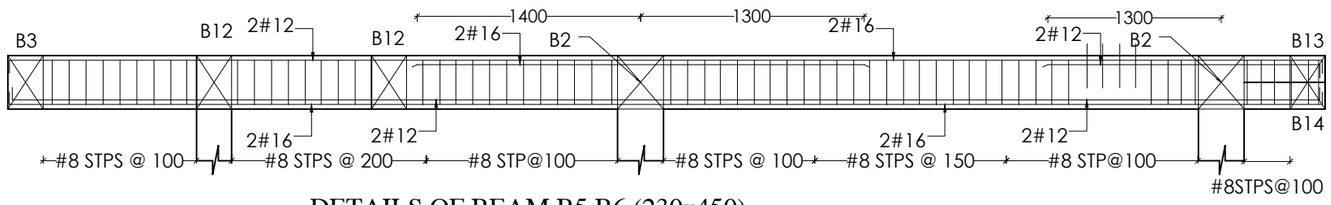
TYP SECTION OF BEAM B14(230X230)



DETAILS OF BEAM B2 (230x450)



DETAILS OF BEAM B8(230x450)



DETAILS OF BEAM B5,B6 (230x450)

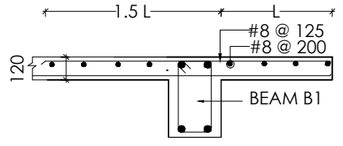
TABLE- 4

TERRACE SLAB REINF. DETAILS						
SR. NO.	SLAB NO.	Thickness (t MM)	REINFORCEMENT			
			MAIN BARS	CROSS BARS	EXTRA TOP	
			Along shorter span	Along longer span	Along shorter span	Along shorter span
1	S1	120	#8 @ 175	#8 @ 200	#8 @ 200	#8 @ 200
2	S2	120	#8 @ 200	#8 @ 200	#8 @ 200	#8 @ 200
3	S3	100	#8 @ 175	#8 @ 175	#8 @ 200	#8 @ 200
4	S4	120	#8 @ 125	#8 @ 150	#8 @ 200	#8 @ 200
5	S5	120	#8 @ 200	#8 @ 200	#8 @ 200	#8 @ 200

TABLE -5

TERRACE BEAM SCHEDULE

TIE BEAM NO.	BEAM SIZE		LONGITUDINAL REINFORCEMENT						STIRRUPS		SIDE FACE REINF. (ON EACH FACE)
			TOP FACE REINFORCEMENT			BOTTOM FACE REINFORCEMENT					
	W mm	D mm	Ast1 (Thro at Top)	Ast2 (Left) (Extra at support)	Ast3 (Right) (Extra at support)	Asb1 (Thro at Bottom)	Asb2 (Extra at Support)	Asb3 (Extra at middle)	END ZONE '2L'STPS	MIDDLE ZONE '2L'STPS	
B1	230	450	2#12	2#16	2#16	3#12	-	-	#8STPS @100	#8STPS @200	-
B7	230	450	2#12	2#16	2#16	2#16	-	2#12	#8STPS @100	#8STPS @200	-
B9	230	450	2#12	2#16	2#16	2#16	2#12	-	#8STPS @100	#8STPS @200	-
B10	230	450	2#16	2#20	2#20	3#16	-	-	#8STPS @100	#8STPS @200	-
B15	150	420	2#16+2#16	-	-	2#12	2#12	-	#8STPS @100	#8STPS @200	-



TYP SECTION OF SLAB S6(120 THK)

A.V. MITTAL (DY. CE/SD)	sd- (13.12.2017)
K.P. DANGI (CHECKED BY SSE/DOE)	sd- (13.12.2017)
BIBHA CHANDRA (DESIGNED BY SSE/DOE)	sd- (13.12.2017)
RAKESH KUMAR (PREPARED BY/JE/D&D.)	sd- (13.12.2017)

NORTHERN RAILWAY

Drawing Description
STAFF QUARTER TYPE - II

Drawing Description
Details Of Terrace Beam & Slab Reinforcement

SCALE : NTS @A3 | SHEET NO. 30 OF 30

N.R.H.Q.E. PLAN NO. HQ/12/12/2017