

राष्ट्रीय आदिवासी छात्र शिक्षा समिति
(जनजातीय कार्य मंत्रालय के अंतर्गत
एक स्वायत्त संस्थान, भारत सरकार)
भू-तल, गेट नंबर-3ए, जीवन तारा बिल्डिंग,
संसद मार्ग, नई दिल्ली-110001
दूर. 011-23340280



National Education Society for Tribal Students
(An Autonomous Organization under
Ministry of Tribal Affairs, Govt. of India)
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File No: NESTS/Civil/EMRS Order/140/2021-22(Pt.)

Date: 14.03.2023

To,

- a) **Principal Secretary** of concerned States entrusted with EMRSs construction.
- b) **CMD/MD/CEO,**
HSCL/WAPCOS/EPIL/NPCC/B & R/MANIDCO/TCIL/MTDC
- c) **Chief Engineer/s,** CPWD

Sub: EMRS Guidelines for submission of Detailed Project Report (DPR) and Construction of EMRSs including Upgradation of KSP Reg.

Dear Sir,

Construction Agencies have been allotted construction of Eklavya Model Residential Schools (EMRSs) in the designated blocks across the country. Phase-I construction of EMRSs is in progress at many locations. DPR Guidelines for Phase-I construction was earlier issued vide NESTS Order dated 18.10.2021 which was updated vide NESTS letter dated 30.03.2022 to cover both Phase-II construction and Single-Phase Construction as the case may be. Further, Electrical & Other Services drawings were issued vide NESTS Order dated 07.05.2022. Now certain updation and improvements in the issued drawings have been made based on valuable inputs from Construction Agencies considering functional requirements and aesthetic improvements.

It has been observed that Construction Agencies are submitting architectural drawings which are found to be deviating from the Reference Drawings already issued. Also, there happens abnormal delay in preparation of DPRs due to delay in finalization of architectural drawings/Estimates/DPR. In most of the cases, Construction Agencies' Engineers simply forward the DPR/Estimate/Drawings prepared by their consultants without any proper scrutiny at their end. DPR submitted by Construction Agencies are most often incomplete lacking essential items that require several rounds of discussion and takes more time for its finalization. DPR shall be submitted as per DPR Checklist **Annexure I**.

Further, based on several valuable inputs from Construction Agencies and NESTS Engineers from field units, updation of reference drawings & specifications is being felt necessary for overall improvement of project from aesthetic and functionality point of view.

Considering the above, following initiatives are approved to facilitate & streamline preparation and submission of DPRs: -

1. **Architectural Drawings:** Requirements of EMRSs across the country are moreover of similar nature except the sites needing site-specific requirements. Further, construction of buildings in the North Eastern region and hilly areas requires adopting special design & construction as per available hilly terrain to reduce the cost of construction. To cater general needs, conceptual Architectural Drawings have been standardized by NESTS which are enclosed as **Annexure-A1, A2 & A3** mentioned below. Construction Agencies shall enclose the same with DPR to save time. However, Construction Agencies have to bring to notice of NESTS any discrepancy, violation of NBC and other norms/ local bye laws, if any, well before finalization of the planning activities.

S.N.	Type of EMRS Building	Storey	Annexure	Drawings
1	School (C-Type) (Standard)	G+1	Annexure A1	Architectural Drawings, Door/Window Schedules, Internal Electrical Layout Drawings, Wall & Floor Tiles details.
	Hostel (Standard)	G+1		
	Kitchen Dining (Standard)	G		
	Warden Residence	G		
	T-II Qtrs (Standard)	G+1/G+2		
	T-III Qtrs (Standard) i/c one no. integrated Guest house at GF	G+1		
	Principal Residence	G		
	ESS, Sump, Pump Room & Septic Tank, Entrance Gate etc	G		
2	School (NE) (Standard)	G+2	Annexure A2	Architectural Drawings, Door/Window Schedules, Electrical Layout Drawings (For remaining drawing Refer Annexure A1)
	Hostel (G+2) (With bunk bed & integrated Kitchen-Dining at GF)	G+2		
3	School (Hilly) (Standard)	G+2	Annexure A3	Architectural Drawings, Door/Window Schedules, Electrical Layout Drawings (For remaining drawings Refer Annexure A1)
	Hostel (G+2) (Without bunk bed)	G+2		

2. **Detailed Estimate:** Reference Estimates for standard buildings and North East have been prepared by NESTS. The Reference Estimates can be modified as per the site-specific structural drawings, soil investigation report and as per the site-specific requirements e.g., cutting, filling, protection works, land development proposal, external sewerage & drainage, water supply plans, electrical cable layout & distribution lines, etc. Reference estimate is indicative only. The design of buildings and services, quantities of items, rates provided in the DPR, shall be sole responsibilities of Construction Agencies. Construction Agencies shall ensure that estimate submitted along with DPR shall conform NBC Norms and other norms/ local by laws, if any.
3. **Vetted Structural Drawings:** Submission of vetted structural drawings of all building units is mandatory with DPRs. In case of delay in vetting, Construction Agencies shall give undertaking with due time frame for submission of the vetted structural drawings alongwith DPR. However, in such cases structural drawings shall be submitted alongwith DPR and thereafter, go ahead for vetting is required from NESTS. NESTS order dated 27.01.2022 for vetting of structural drawings shall strictly be followed.
4. NESTS engineers deputed in the Zone shall be consulted in finalization of site-specific estimates of cutting filling, protection works, land development proposals, external sewerage, drainage, water supply, cable route, etc.
5. **Specifications:** Specifications as **Annexure 'B'** is attached with changes as under:
 - i. PTMT Fittings are being replaced with CP brass fittings considering its durability except PTMT tower rail, towel ring, soap dispenser.
 - ii. Windows- Factory Made ISI marked MS glazed 'Z' section windows has been replaced partially with Factory Made ISI marked MS glazed Windows consisting of MS Tubular Frame/ Hollow Z section Profile and ISI marked Z section Shutter/ Tubular Profile Z Section partly fixed and/or partly side hung/top hung including MS grill of 12 mm square bar rods fixed @ spacing of 10 to 12 cm in the



Frame. Windows sizes and design shall be as per NESTS approved drawings and Schedules. Item shall be as per respective DSR item. Windows sizes and design shall be as per NESTS approved drawings and schedules.

- iii. External Façade of Stair Case - GRC Jali may be replaced with Glazed Panels in MS Tubular frame.
- iv. NESTS Preferred Make List dated 25.05.2022 shall be followed. For certain items such as CP Brass Fittings, Factory made glazed windows, etc not covered under NESTS preferred make list dated 25.05.2022, CPWD preferred make list of respective regions may be adopted and same shall be included in the DPR.
- v. Specification: **Annexure 'B1 to B 3'** can also be referred.

6. **Additional Preferred Make List** : In addition to Preferred Make List dated 25.05.2022, Preferred Make List of Additional Items is enclosed for inclusion in DPR as under:

S.No.	Material/Article	Manufacturers/ Agencies/ Brand Make
1.	Factory Made steel Glazed / Gauged windows & ventilators	SKS Steel Industries /Madhu Industries / MULTIWIN /M/s Classic Engineers and Fabricators /Ajanta /CPWD LATEST Approved Make of respective region
2.	Solar Lighting System	WIPRO/Panasonic /Phillips/ Crompton /CPWD LATEST Approved Make of respective region
3.	CP Brass Fittings/ Fixtures	JAQUAR, MARC, Hindware, Parryware, CERA /Parko CPWD LATEST Approved Make of respective region.

7. ***Furniture:** Now, DPR shall be inclusive of furniture provisions. Hence, Construction Agencies are to include furniture provision in the Detailed Estimate. Furniture layout and detailed items' specifications including 3-D indicative photographs is enclosed at **Annexure 'C'** for preparation of estimate for Furniture & Fittings. Construction Agencies shall make these items part of DPR and accordingly, additional condition needs to be stipulated for supply and installation of furniture. Construction Agencies need to enclose preferred list from available reputed brand/manufacturers in this field in the NIT along with additional condition for timely supply and quality work. Further, Construction Agencies shall arrange the sample of each item for inspection by NESTS before releasing the bulk order, as & when requested for. The Budget Provision of Furniture is kept for Rs 1.25 Crore. While specifying the reputed brands/manufacturers, Construction Agencies shall ensure following criteria:

- a. The reputed brands shall have certain minimum turnover for past three years.
- b. They shall have sufficient work experience of similar works in Government organization.
- c. They shall have registered service center in the State.
- d. The furniture shall carry the service warranty of minimum three years from the date of installation.

8. ***Kitchen Tools & Plants:** Now, DPR shall also be inclusive of provisions of Kitchen Machinery and Tool & Plant. An indicative layout of Kitchen equipment and Tools & Plants including list of items is enclosed at **Annexure 'D'** along with details of items. Construction Agencies shall finalize the specification and rates and include these provisions in DPR. The provision for Kitchen Machinery and T & P has been kept for Rs 25 Lakhs.

***(It may be noted that procurement with respect to point 7 & 8 shall be done on actual basis based upon due assessment of existing/available furniture and kitchen tools & plants in the school.)**

9. **Time Frame for Pre-Construction Activities:** The timeframe for pre-construction activities as indicated earlier shall strictly have to be adhered to as provided in the MoU.

10. **Quality Plan, Monitoring and Quality Control:** -



- i. Quality Plan- Construction Agencies are generally not submitting any Quality Plan for construction along with DPRs. Hence, Model Quality Plan for quality control and TPQA related activities is enclosed which shall form part of the DPR (**Annexure 'E'**). TPQA shall be conducted by NIT/IIT as per TPQA Guidelines dated 20.04.2022. The Construction Agencies shall in consultation with NESTS finalize Third Party Quality Assurance (TPQA) Agency before commencement of work. No work shall be permitted without TPQA agency.
- ii. NESTS shall be informed regarding final position of buildings at the site including site development plan, contour level, etc. before commencement of the building works.
- iii. The CA shall ensure the proper demarcation of the land before start of the execution related activities. In case, any deviation in the approved area/boundary line, the revised MLP with reference to actual available land area/boundary shall be shared to NESTS for revised approval.
- iv. Working Drawings- A complete set of architectural/ working drawings incorporating all features of MLP and Plinth level of buildings, finished road level, septic tank level etc shall be shared to NESTS before execution.
- v. Other Layout- The layout diagram of Storm Water Drains, Sewerage, Water Distribution Diagrams, UG cables, Street lights, etc shall be shared with NESTS after the layout marking at site is finalized.
- vi. Vetted copy of Structural Drawings - The vetted copy of structural drawings shall be available at the time of physical commencement of work. No building work shall be permitted without vetted structural drawings.
- vii. The Quality plan and Design Mix Plant shall be available at the site before the time of commencement.
- viii. Construction Agencies shall ensure thorough checking/cross checking of reinforcements before casting of RCC, casting of all RCC work in presence of Site engineer, mandatory testing of materials at prescribed frequencies as per Quality Plan, etc to ensure quality construction.
- ix. The important activities like layout and positioning of Columns, Beams, Brick Work shall be marked properly as per architectural drawings to avoid any deviation in architectural drawings.
- x. The Critical Activities like DPC, water proofing of toilets and terrace must be done with specialized agency to avoid future leakage, water seepage etc.
- xi. Joint visit of Architect, Structural Engineer, TPQAA and Engineering Team of Construction Agency is essentially required before commencement of building work to ensure layout of building units, other services in proper order and quality work as per the approved drawings. This would help to finalize the site development works like road, drainage, building levels, etc. The report of joint site visit shall be shared with NESTS.
- xii. Construction Agencies shall intimate the major construction activities e.g., layout finalization, foundation casting, other important RCC casting, bar bending, etc to the NESTS Consultant in advance so that the NESTS Technical Consultant visit the site. Any observation on quality issue raised during visit needs to be addressed immediately and a final report duly accepted by NESTS Consultant shall be submitted in Running Account Bill.
- xiii. The regular monitoring and frequent site visit by engineering team including Zonal Head of the Construction Agency is absolutely necessary to ensure quality, reinforcements are in place and the construction is being done as per approved architectural and vetted structural drawings. Construction Agencies must ensure that the site engineer is stationed at the site for proper execution of the work.

11. **Execution of Critical Items-** Construction Agencies shall have to share in advance detail work plan for following critical activities:

- i. Waterproofing with authorized waterproofing vendor only
- ii. Flooring as per layout approved by NESTS
- iii. Plumbing: Trial run of plumbing works in part of building before execution in general
- iv. Windows: Only factory-made window of standard section shall be permitted. CPWD approved make list shall only be used. No local/site fabrication. NESTS approved drawing to be used.
- v. Doors: Only Factory-made doors and pre- laminated doors of approved make
- vi. Septic tank and Sewage: Relevant IS Code & NESTS Guidelines/CPWD specification to be followed
- vii. Roads: CC road section as per site condition in coordination with NESTS
- viii. Finishing, Façade and other allied works: Shall be as per NESTS approved plan.
- ix. Expansion Joint – Construction and treatment of expansion joint shall be done as per IS Code and respective DSR items.

12. **Electromechanical Services** - A detailed guidelines for supply, installation & testing of Electromechanical services like Transformer, LT/HT Panels, Wiring, LAN services, DG Set, Pump, Internal & External Lighting, Fire Fighting Equipment, etc is attached at **Annexure 'F'**.

13. **Deviation Regarding:**

- i. The Construction Agencies shall have to share and discuss final layout with demarcated position of buildings vis-à-vis approved MLP with NESTS before commencement. This would help in avoiding deviation in quantities and expenditure involving cutting, filling and earth protection works.
- ii. The finalization of Structural Drawings at DPR stage to arrive at correct estimation of RCC quantity will avoid future deviation. Before commencement of RCC work, Construction Agencies shall cross verify the quantities of reinforcement & RCC of vetted structural drawings with BOQ and any deviation shall be brought to the notice of NESTS immediately.
- iii. The Construction Agencies shall take adequate measures to avoid deviation at every stage of construction. In this regard, proper technical scrutiny of site conditions, layout, foundation, structural drawings, etc, involving competent technical manpower, Zonal Manager are essentially required. No expenditure beyond A/A & E/S provisions shall be permitted considering the budget constraint.
- iv. Submission of Deviation- Deviation Statement shall be submitted along with details of measurements, vetted structural drawings, approved architectural drawings & MLP as per MoU.

14. **Documentation and Photograph of ongoing construction:** - Construction Agencies shall have to continuously share the GPS enabled photographs of ongoing construction to the EMRS Civil & Construction Agency Coordination WhatsApp group. The photographs need be shared at every stage of construction for important items and milestones like foundation reinforcement, RCC casting of foundations, columns, beams & Slab, masonry work, etc and along with each running bill.

15. **Manpower Deployment:** -

- i. The Construction Agencies shall have to inform the details of the Nodal Engineer from the dedicated cell at the respective Construction Agencies' HQ with name, experience, designation, etc for coordinating with NESTS along with name, qualification (CA number of the Architect), experience of appointed architect and structural engineer for the EMRS work along with DPR.
- ii. Construction Agencies shall share the details of Site Engineer, Project Engineer for each location with name designation, experience before commencement of the work as per Clause 2.3 of MoU.

Provision of Clause 2.3 of MoU is reiterated "The Construction Agency shall nominate full time regular technically qualified and experienced engineers at each site for supervision, monitoring and execution of the project in time bound manner". The deployment of competent and experienced technical manpower is integral part of project management to ensure timely and quality construction of high valued project. The Clause stipulates provision of one Project Manager (regular) for every 4 site engineers" The clause 2.7 of MoU specifies also certain minimum standard of qualification and experience of technical manpower to be deployed in construction site."

16. **EMRS in North East/Hilly Area:** The construction of EMRS in the North Eastern region and hilly areas requires adopting construction & special design as per the available hilly terrain. The EMRS building may be planned along contour with special design to reduce the cost of construction. Every structure in hilly area is required to be designed as per availability of terrain of the land. Regarding roofing in high rainfall areas, the roof truss with pre-coated profile sheet roofing shall be considered in place of flat RCC slab roof for school buildings. The special planning and design in respect of North East Region and Hilly region are detailed below: -

- i. The school building shall be G +2 with pre-coated roof/flat roof depending upon rainfall intensity.
- ii. The Hostel buildings shall be G +2 including kitchen & Dinning. No separate Kitchen and Dining Building.
- iii. Conceptual Architectural drawings for North East is enclosed at **Annexure A2**.
- iv. Conceptual Architectural drawings for Hilly is enclosed at **Annexure A3**.



The above guidelines, specifications, updated architectural drawings and procedures shall be followed henceforth. For the project needing special modifications, site specific approval shall be obtained. However, any deviation from standard norms of educational buildings, anomalies, etc in drawings shall be brought to the notice of NESTS. Further, Phase-II approval shall be conveyed only after compliance of all pending issues related to drawings, quality, vetting, etc of Phase-I Construction.

In view of above, Construction Agencies are requested to take up pre-construction activities like submission of Final MLP and Preliminary Estimates for issue of A/A & E/S for Phase-II and Single-phase construction, as the case may be, as per the guidelines mentioned above, so that, further construction activities like approval of DPR/Supplementary DPR, etc may be processed. The Likely Project Cost on completion of Phase-I shall be shared along with Preliminary Estimate of Phase-II in prescribed table indicated in the earlier guidelines dated 30.03.2022. The Construction Agencies shall exercise due care to submit the total Project Cost of Phase-I considering deviation, if any. These guidelines are in conformity of the Clause 3.22 of revised MoU with Construction Agencies and shall form part of agreement. These specifications and guidelines shall prevail over previous guidelines and shall also be applicable for upgradation work of KSP to EMRS in the state of Madhya Pradesh. The whole work of EMRS and Up-gradation shall be carried out in most systematic manner as per MoU and EMRS guidelines enclosed herewith.

Further, for any item to be procured by Construction Agencies relevant provisions of latest GFR/Ministry of Finance guidelines/CPWD Works Manual, etc is to be strictly adhered to. As per Agreement with NESTS in any case, the calling of tender, its publicity, assessment of reasonability of tender, its rates and awarding of work to the L-1 bidder is the sole responsibility of Competent Authority of the Construction agency.

This order issues with the approval of Competent Authority.

Encl.: As above.

Yours sincerely,



(Gourav Sharma),
Assistant Commissioner, NESTS

Copy to:

1. PS to the Principal Secretary/Secretary/Nodal Officer of EMRS Works of the Tribal Welfare/Development Department of the State Government concerned please.
2. Nodal Officer of the EMRS Works of the CONSTRUCTION AGENCIES concerned;
3. PS to Commissioner, NESTS;
4. PS to Additional Commissioner;
5. Guard File.

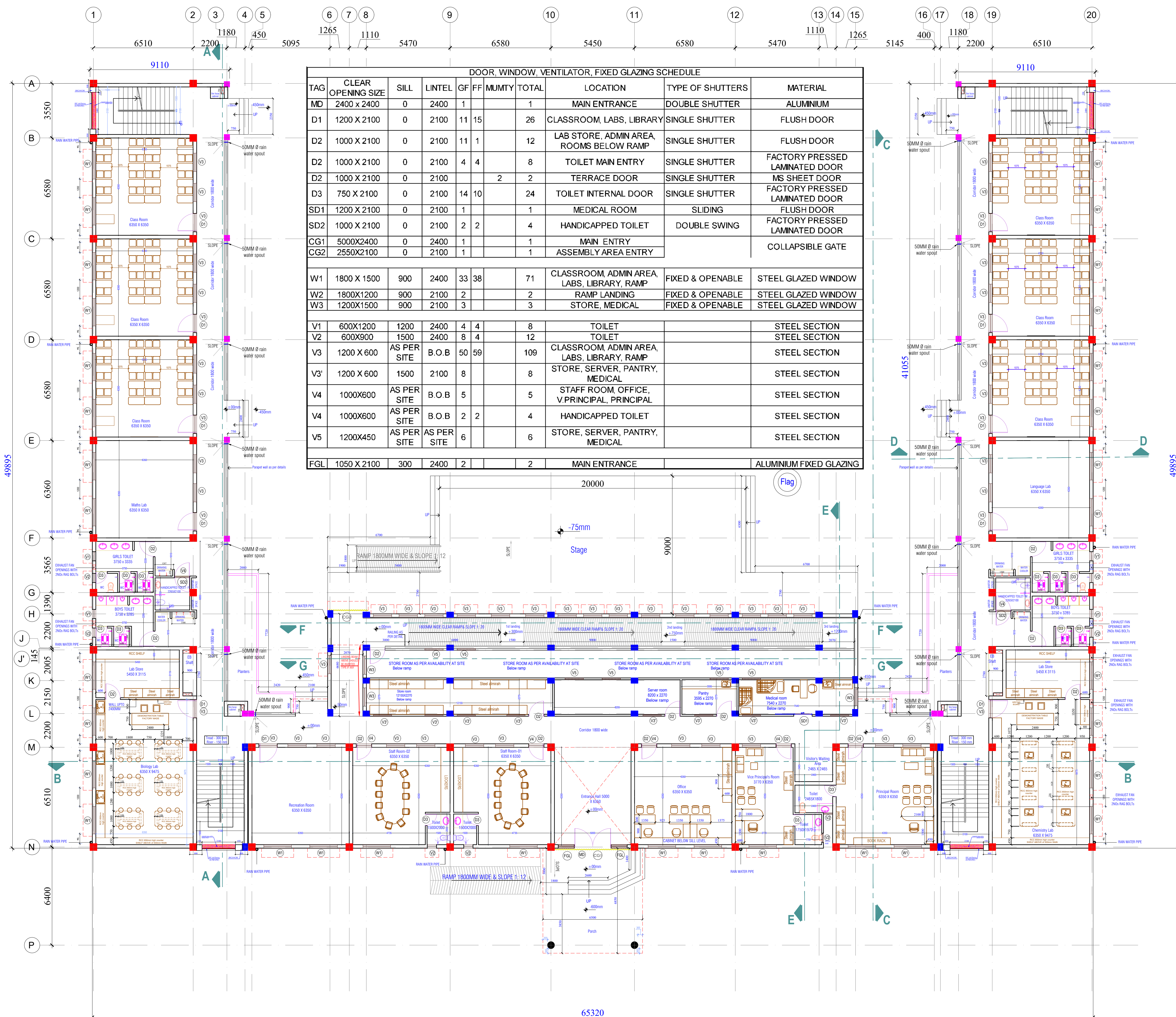
ANNEXURE-I

SITE: EMRS - Location, Block/ Mandal, District & State				
Sl. No	Features	Provided (Y/N)	Page Nos	Remarks
1	Project Overview (Complete Scope of Work)			
2	Essential Features			
3	Location			
4	Details of Formal Sanction of EMRS			
	a. Approval Order			
	b. LSR and Sketch/Key Plan			
	c. Deviation, if any, in Land area mentioned in LSR and Surveyed site plan/approved MLP, details thereof.			
6	Details of AA & ES (Revised)			
	a. Approval Order			
	b. Revised Cost of PE based on DPR Cost			
7	Details of Detailed Estimate -Single Phase/Phase-II			
	a. Cost of DE Based on DSR 2019			
	b. Detailed Analysis of Rates with supporting documents for:			
	c. Applicable Cost Index with supporting document			
8	Documents to be enclosed in r/o			
	a. MLP/Revised MLP Sanction Order			
	b. Handing Over & Taking Over of the Land			
	c. Alienation of Land			
	d. Water Level, Availability of water			
	h. Availability of nearest sewer-line and disposal system			
9	EMRS Specification/ Standard			
10	Structural Drawings			
	a. Soil Report			
	b. Report of Structural Designer (Design parameters e. g. DL, LL, WL, Design life, Design Method, Earth quake zone, foundation recoomendation,etc)			
	c. Copy Vetted Strucural Drawings.			
	d. In case vetted copy is not submitted , a complete set of Strucural Drawings of all buildings submitted to NIT/IIT for vetting shall be enclosed.			
11	Coceptual Drawings to be enclosed			
	a. Final MLP with contour (Revised, if any)			
	b. MLP without contour			
	c. Approved Architectural Drawings			
	d. Local body approval details, if any			
12	Internal Plumbing Drawings & Inventory			
13	Electrical Inventory (Internal)			
14	Construction Materials; Source & Lead			
15	Deployment plan of Engineers (Name , Designation, Experience of Engineer to be deployed at respective EMRS location for supervision and quality control.)			
16	a. Undertaking on Quality control measures i. e. CPWD Specification, mandatory tests, Checklists,etc			
17	b. Quality Plan			
18	Undertaking for environmental risk/legal/contractual risk			
19	Site specific issue, if any, requiring attention of EMRS to commence the work (supporting photographs etc. to be furnished)			
20	Preferred Make List issued by NESTS dated 25.05.2022(R-2) including any additional items issued by NESTS			

Sepeate Annexures				
21	Annexure-A : Two set of Architecural Drawings with Plan, Section , Elevation of all buildings including MLP with contour & without contour. One signed copy shall be returned to PSU for execution.			
22	Annexure-B : Complete set of Structural Drawings for all buildings.			
23	Annexure-C : Two set of layout diagrams of Storm Water Drains, Sewerage, Water Distribution Diagrams, UG cables, Street lights, etc . One signed copy shall be returned to PSU for execution.			



A D P Keshri
Chief Technical Consultant



DOOR, WINDOW, VENTILATOR, FIXED GLAZING SCHEDULE

TAG	CLEAR OPENING SIZE	SILL	LINTEL	GF	FF	MUMTY	TOTAL	LOCATION	TYPE OF SHUTTERS	MATERIAL
MD	2400 x 2400	0	2400	1			1	MAIN ENTRANCE	DOUBLE SHUTTER	ALUMINIUM
D1	1200 X 2100	0	2100	11	15		26	CLASSROOM, LABS, LIBRARY	SINGLE SHUTTER	FLUSH DOOR
D2	1000 X 2100	0	2100	11	1		12	LAB STORE, ADMIN AREA, ROOMS BELOW RAMP	SINGLE SHUTTER	FLUSH DOOR
D2	1000 X 2100	0	2100	4	4		8	TOILET MAIN ENTRY	SINGLE SHUTTER	FACTORY PRESSED LAMINATED DOOR
D2	1000 X 2100	0	2100			2	2	TERRACE DOOR	SINGLE SHUTTER	MS SHEET DOOR
D3	750 X 2100	0	2100	14	10		24	TOILET INTERNAL DOOR	SINGLE SHUTTER	FACTORY PRESSED LAMINATED DOOR
SD1	1200 X 2100	0	2100	1			1	MEDICAL ROOM	SLIDING	FLUSH DOOR
SD2	1000 X 2100	0	2100	2	2		4	HANDICAPPED TOILET	DOUBLE SWING	FACTORY PRESSED LAMINATED DOOR
CG1	5000X2400	0	2400	1			1	MAIN ENTRY		
CG2	2550X2100	0	2100	1			1	ASSEMBLY AREA ENTRY		COLLAPSIBLE GATE
W1	1800 X 1500	900	2400	33	38		71	CLASSROOM, ADMIN AREA, LABS, LIBRARY, RAMP	FIXED & OPENABLE	STEEL GLAZED WINDOW
W2	1800X1200	900	2100	2			2	RAMP LANDING	FIXED & OPENABLE	STEEL GLAZED WINDOW
W3	1200X1500	900	2100	3			3	STORE, MEDICAL	FIXED & OPENABLE	STEEL GLAZED WINDOW
V1	600X1200	1200	2400	4	4		8	TOILET		STEEL SECTION
V2	600X900	1500	2400	8	4		12	TOILET		STEEL SECTION
V3	1200 X 600	AS PER SITE	B.O.B	50	59		109	CLASSROOM, ADMIN AREA, LABS, LIBRARY, RAMP		STEEL SECTION
V3'	1200 X 600	1500	2100	8			8	STORE, SERVER, PANTRY, MEDICAL		STEEL SECTION
V4	1000X600	AS PER SITE	B.O.B	5			5	STAFF ROOM, OFFICE, V.PRINCIPAL, PRINCIPAL		STEEL SECTION
V4	1000X600	AS PER SITE	B.O.B	2	2		4	HANDICAPPED TOILET		STEEL SECTION
V5	1200X450	AS PER SITE	AS PER SITE	6			6	STORE, SERVER, PANTRY, MEDICAL		STEEL SECTION
FGL	1050 X 2100	300	2400	2			2	MAIN ENTRANCE		ALUMINIUM FIXED GLAZING

PROJECT -EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS

Notes-
 Furniture in all the rooms except class rooms will be decided at later stage.

AREA STATEMENT	
SCHOOL BUILDING	
DETAILS	AREA (in Sqm)
MAIN BUILDING	
GROUND FLOOR PLINTH AREA	1380.28
FIRST FLOOR PLINTH AREA	1241.85
ENTRANCE PORCH AREA	
AREA OF PORCH / 2	22.26
RAMP AREA	
AREA / 2	72.65
TOTAL AREA	2717.00

N.K.
 (NARENDRA KUMAR)

pl Approved 10.3.23
 (Prasad Approved)

ccmt 13/3/23
 (R.K. Gang)

Rev SS 13/3/23
 (SANDEEP SOOD)

A.P.K.
A D P Keshri
 Chief Technical Consultant

CATEGORY : SCHOOL BUILDING

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO. - EMRS NAME/SCH/AR_01

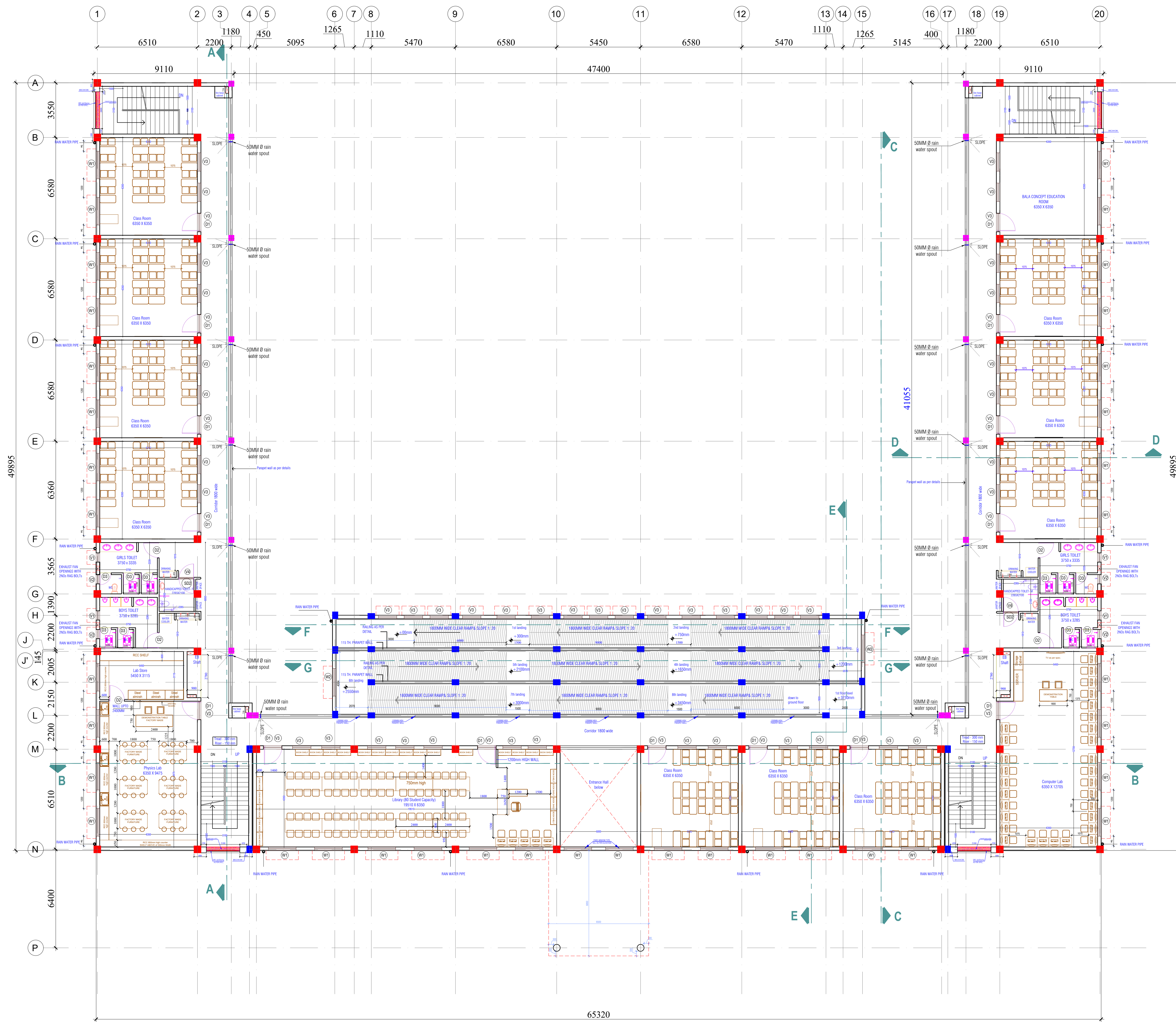
DATE - 09 MARCH 2023

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT - GOVERNMENT OF INDIA MINISTRY OF TRIBAL AFFAIRS NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



Notes- Furniture in all the rooms except class rooms will be decided at later stage.



FIRST FLOOR PLAN

65320

CATEGORY : SCHOOL BUILDING

DRAWING TITLE : FIRST FLOOR PLAN

DWG. NO.- EMRS NAME/SCH/AR_02

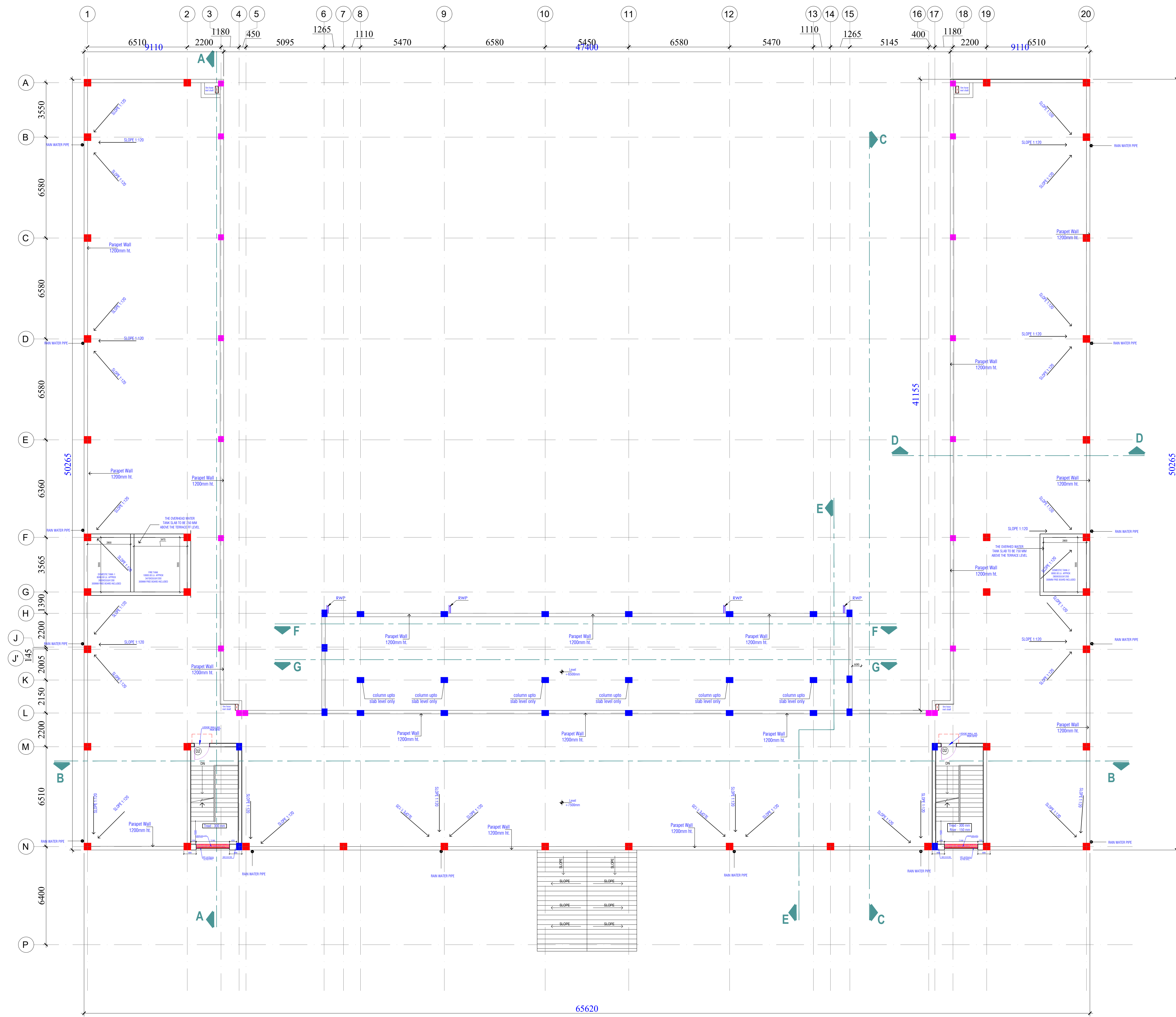
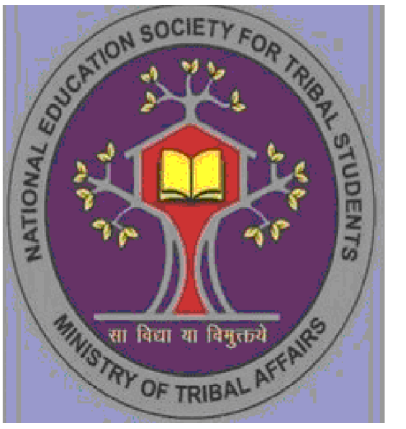
DATE - 09 MARCH 2023

NDJ.
(NARENDRA KUMAR)
pk Agrawal 10.3.23
(Approved)
Leant 13/3/23
(R.K. Gang)
Rm SS: 13/3/2023.
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -
GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



TERRACE FLOOR PLAN

N.K.
(NARENDRA KUMAR)
p.k. Approved 10/3/23
(Armed Approval)
Leant 13/3/23
(R.K. Gang)
San SS 13/3/23.
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : SCHOOL BUILDING

DRAWING TITLE : TERRACE FLOOR PLAN

DWG. NO.- EMRS NAME/SCH/AR_03

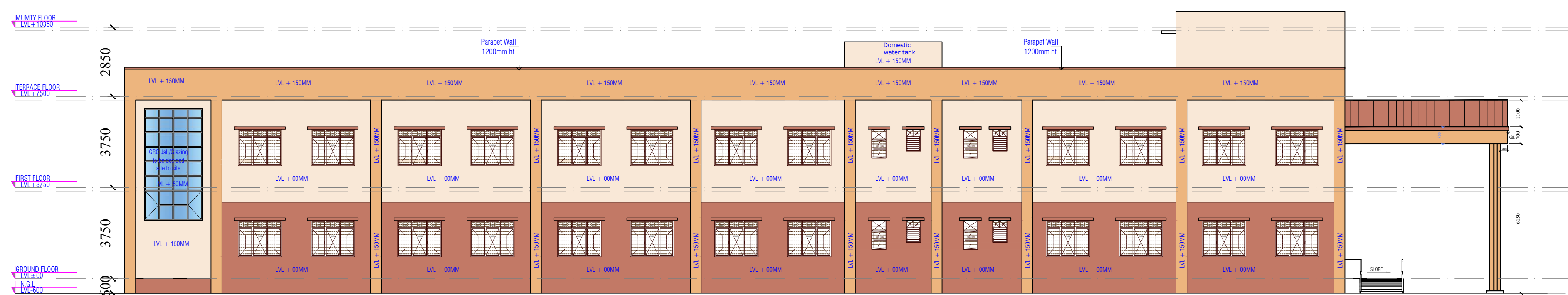
DATE - 09 MARCH 2023

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

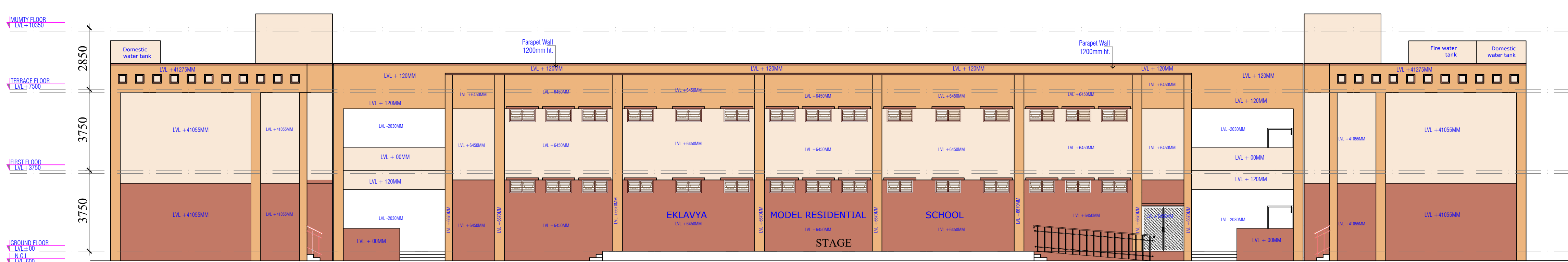
CLIENT -
GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



FRONT ELEVATIONS



LEFT SIDE ELEVATIONS



REAR ELEVATIONS



RIGHT SIDE ELEVATIONS

N.K.
 (NARENDRA KUMAR)
 pl Approved 10.3.23
 (Prasad Approved)
 (Lent 13/3/23
 (K Gang)
 8m 95
 13/3/2023.
 (SANDEEP SOOD)

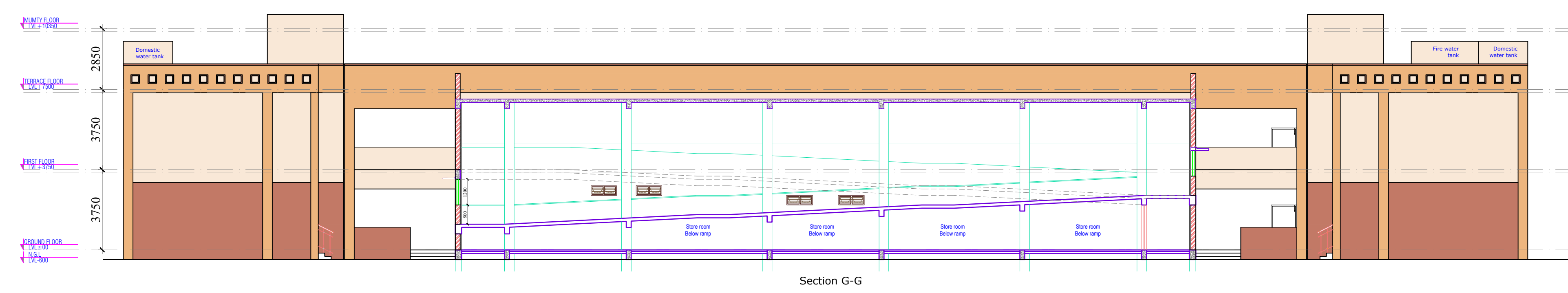
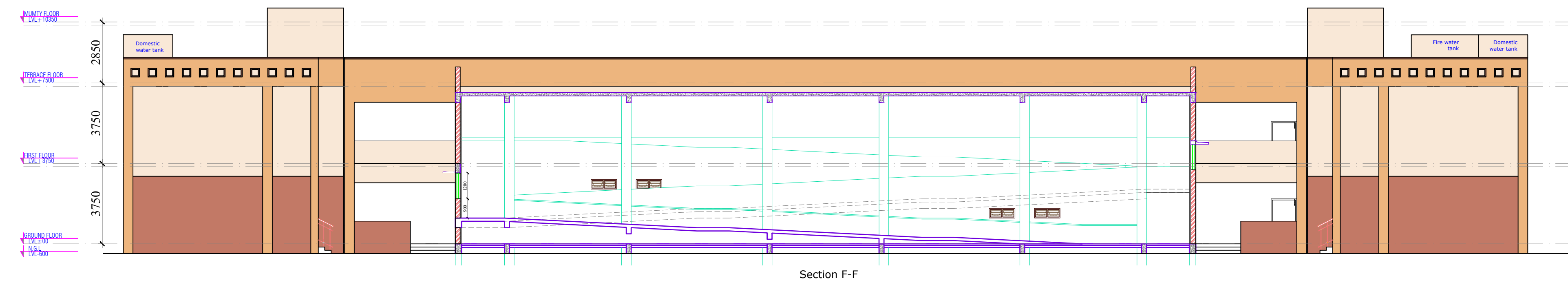
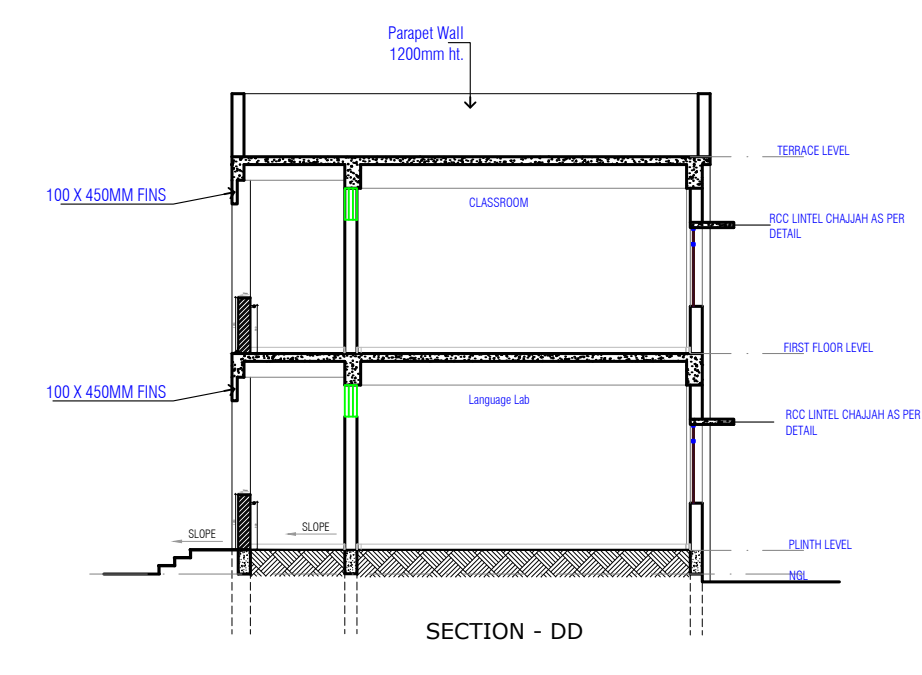
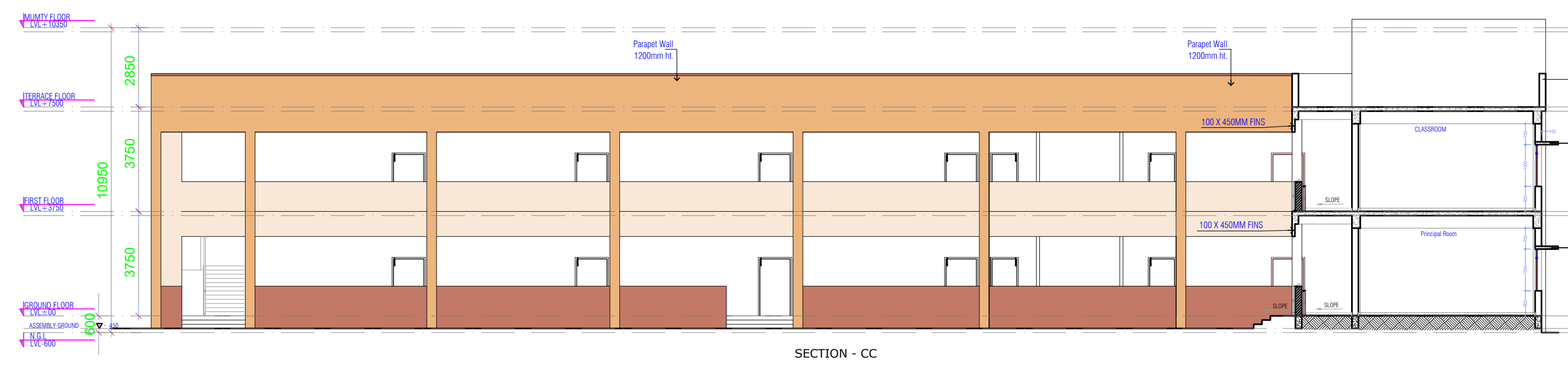
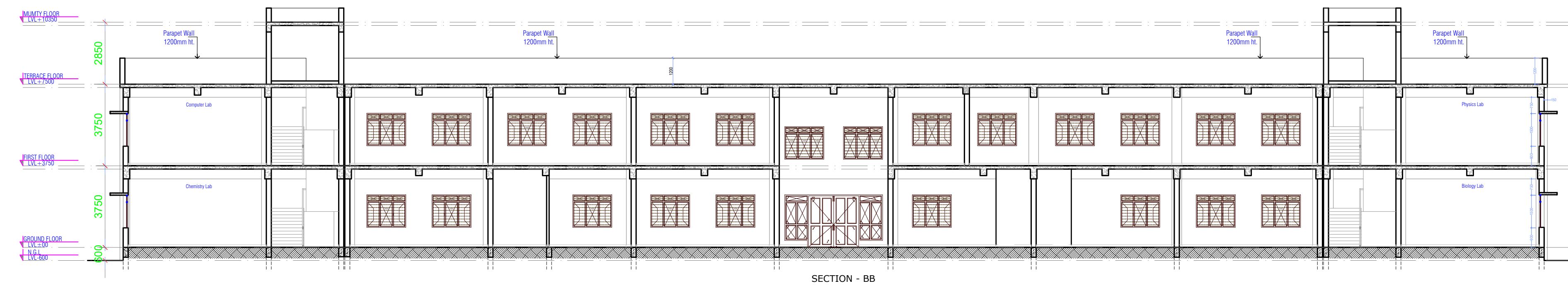
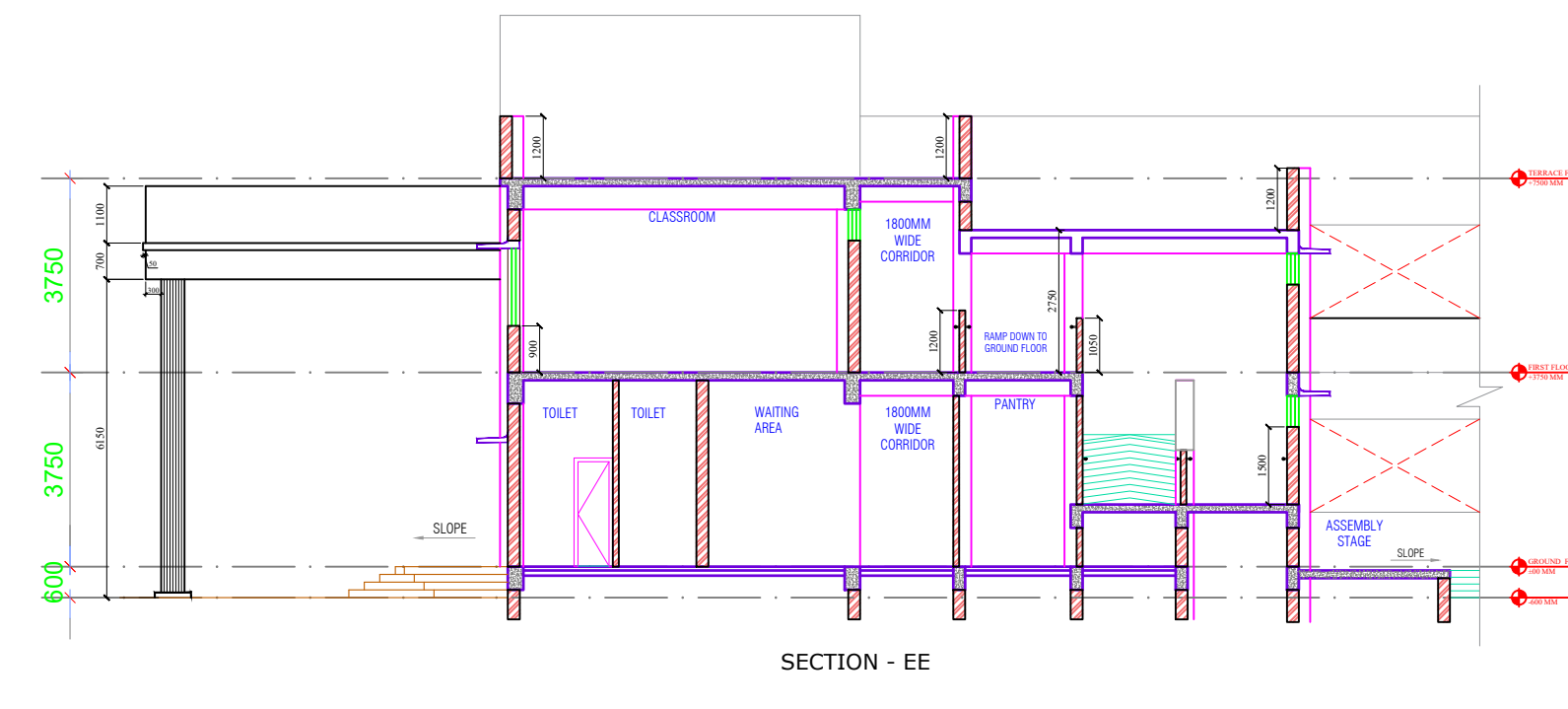
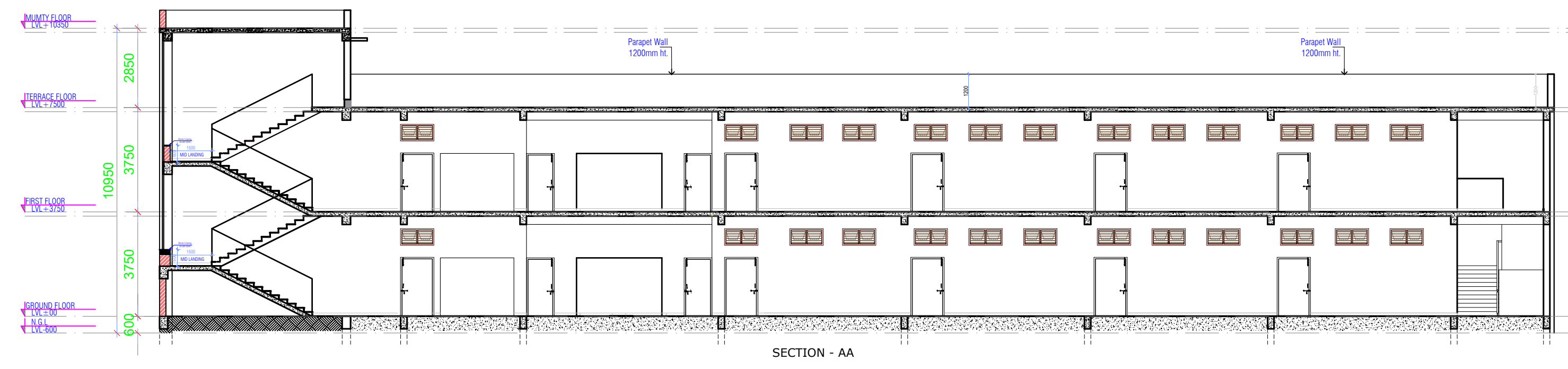
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : SCHOOL BUILDING

DRAWING TITLE : FRONT ELEVATION & LEFT ELEVATION
 REAR ELEVATION & RIGHT ELEVATION

DWG. NO.- EMRS NAME/SCH/AR_04

DATE - 09 MARCH 2023



N.K.
(NARENDRA KUMAR)

pk Agrawal 10.3.23
(Charmed Agrawal)

Leant 13/3/23
(R.K. Gang)

San 13/3/2023.
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : SCHOOL BUILDING

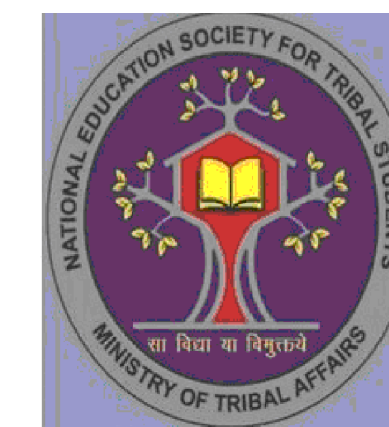
DRAWING TITLE : SECTIONAL DETAIL

DWG. NO.- EMRS NAME/SCH/AR_05

DATE - 09 MARCH 2023

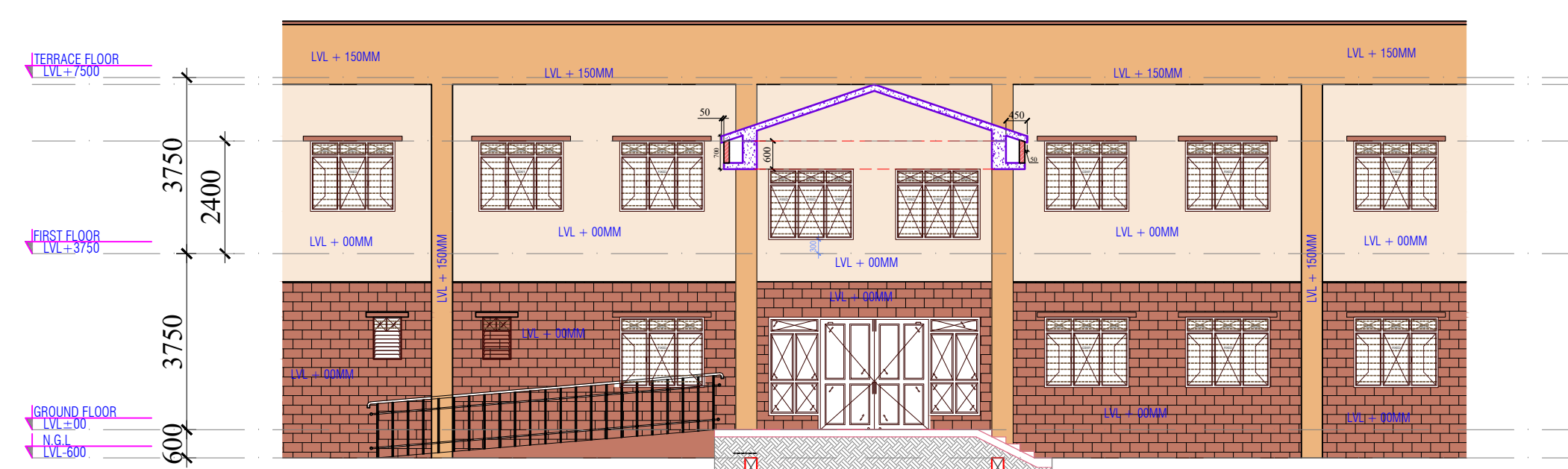
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -
GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS

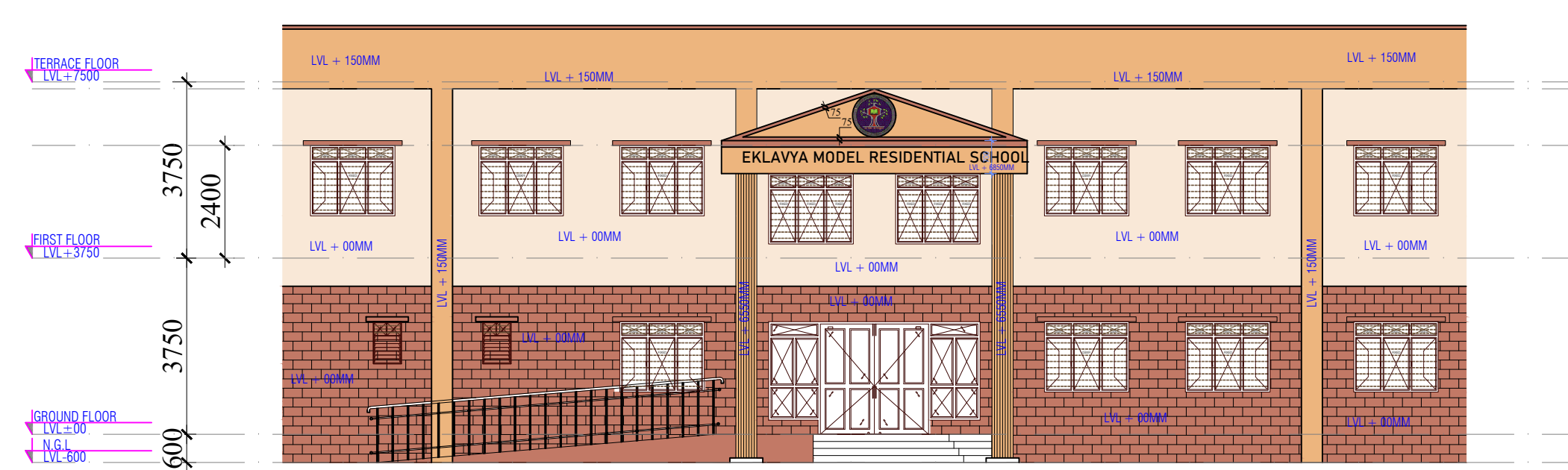


NDK
 (NARENDRA KUMAR)
 p/Approved 10.3.23
 (Prasad Approval)
 (CA) 13/3/23
 (Rk Gang)
 20/3/23
 13/3/2023
 (SANDEEP SOOD)

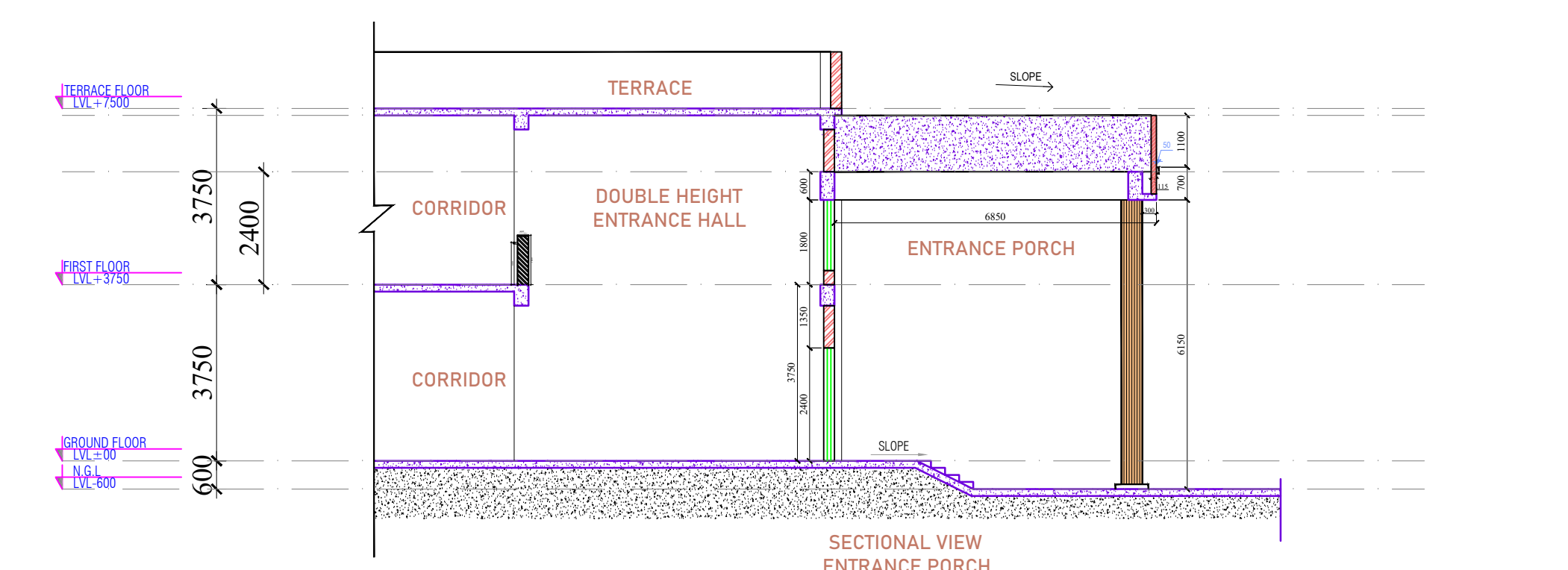
APK
A D P Keshri
 Chief Technical Consultant



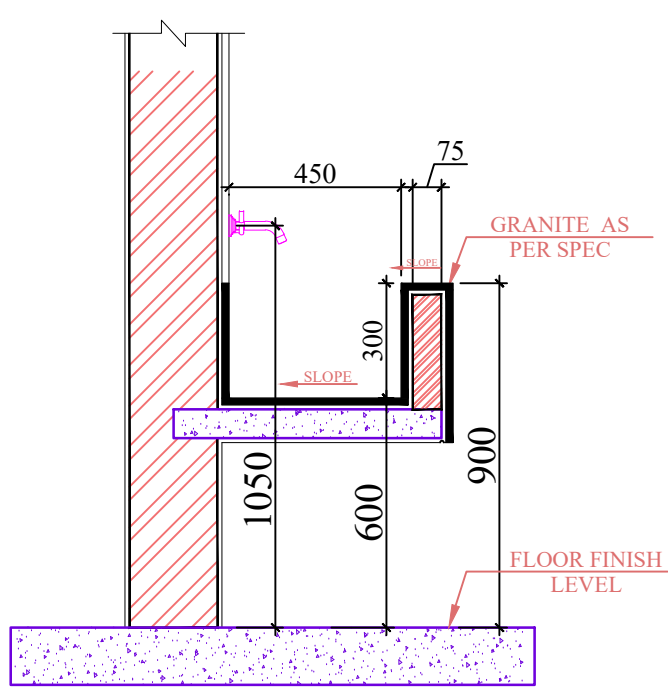
SECTIONAL FRONT VIEW ENTRANCE PORCH



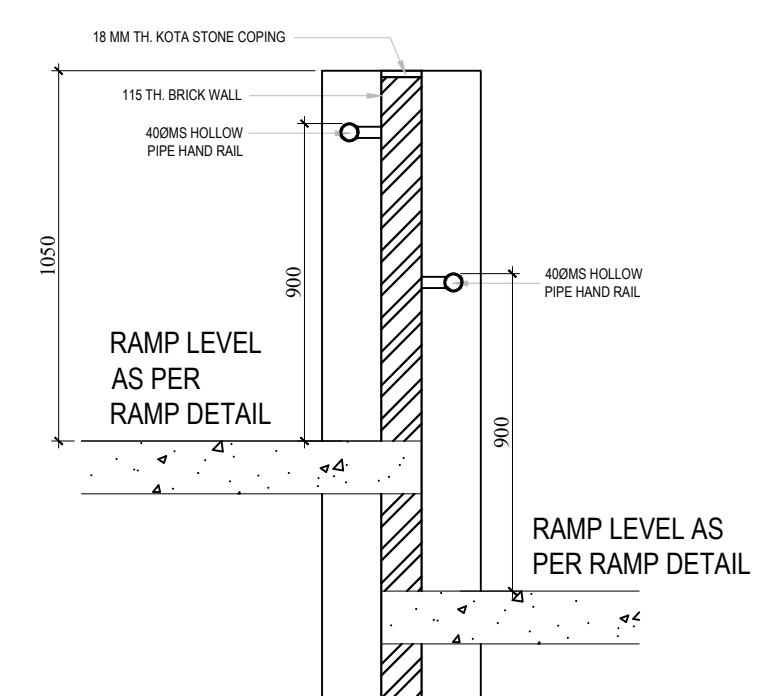
FRONT ELEVATION ENTRANCE PORCH



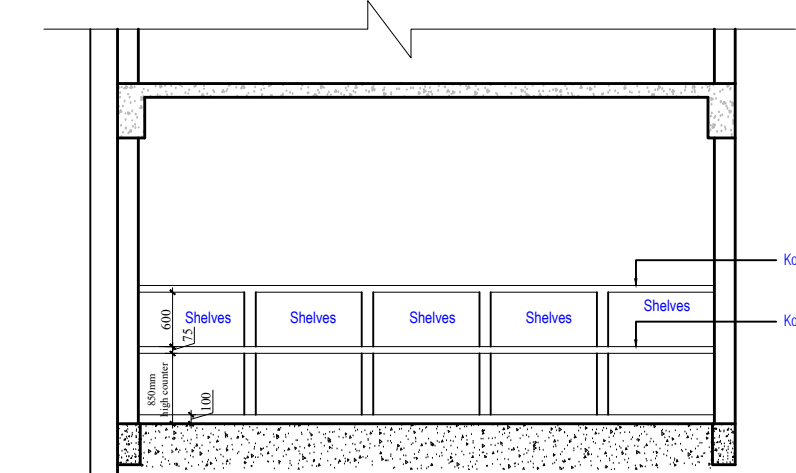
SECTIONAL VIEW ENTRANCE PORCH



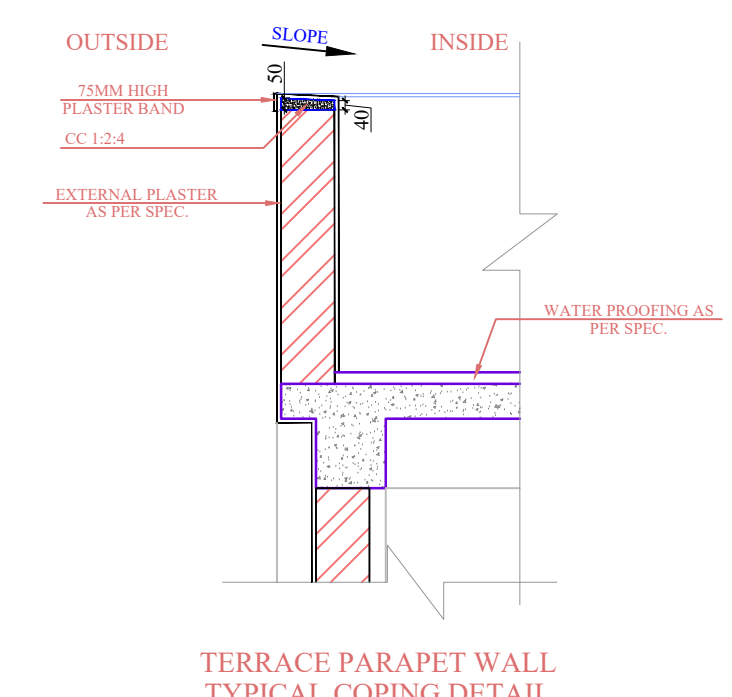
TROUGH TYPICAL SECTION



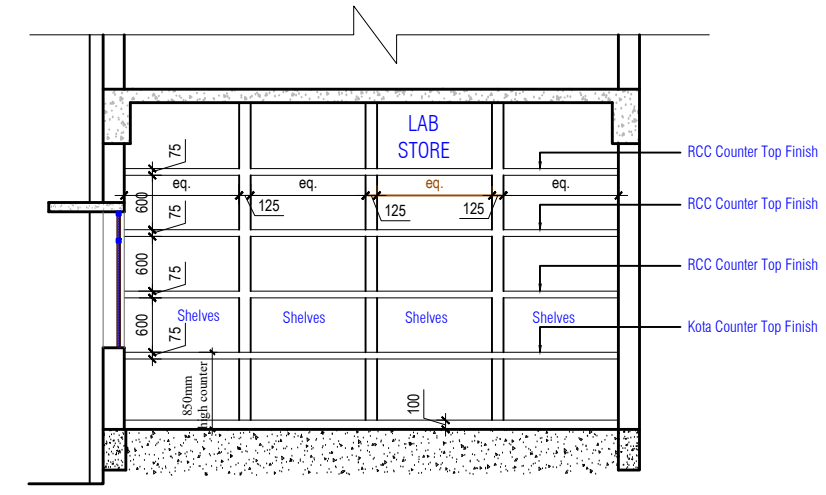
RAMP RAILING DETAIL



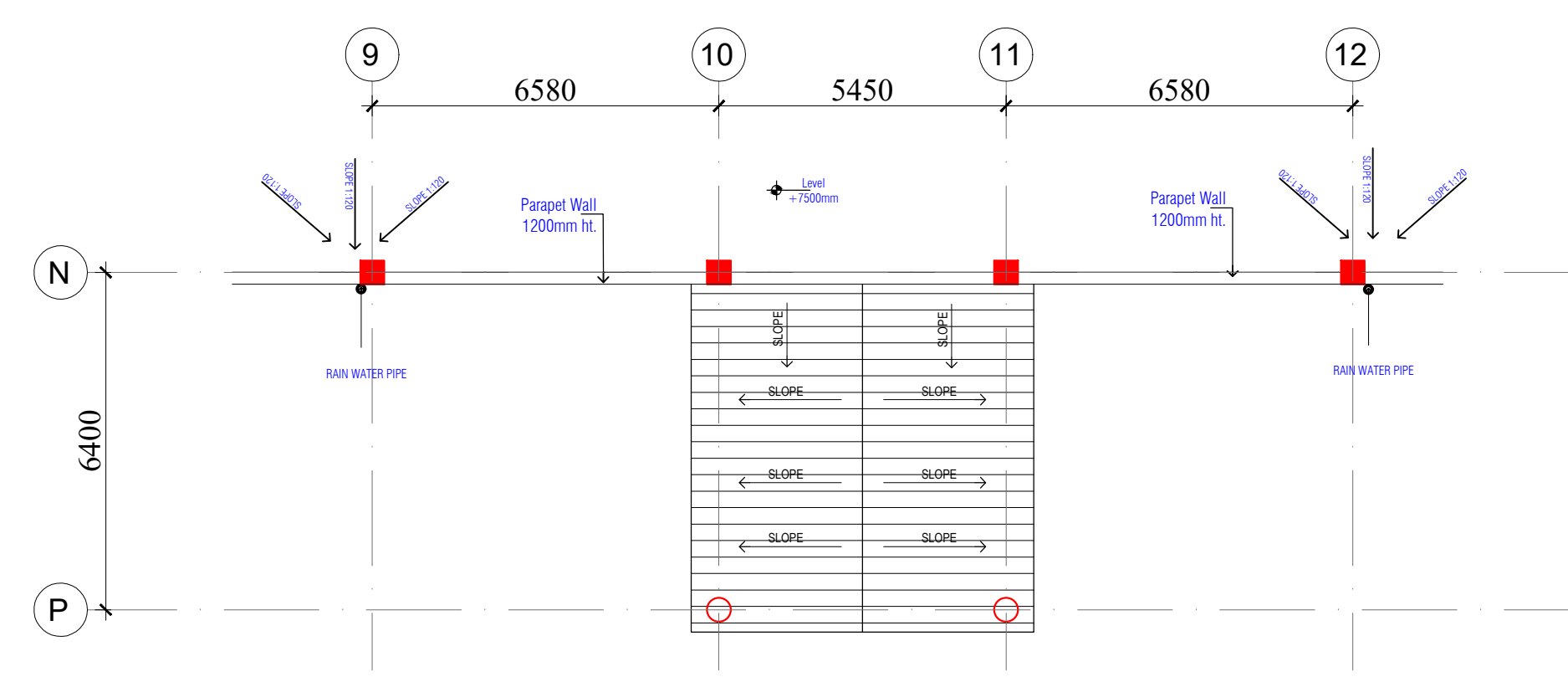
LAB RCC850MM HIGH COUNTER WITH SHELF ABOVE-RCC SHELVES DETAIL



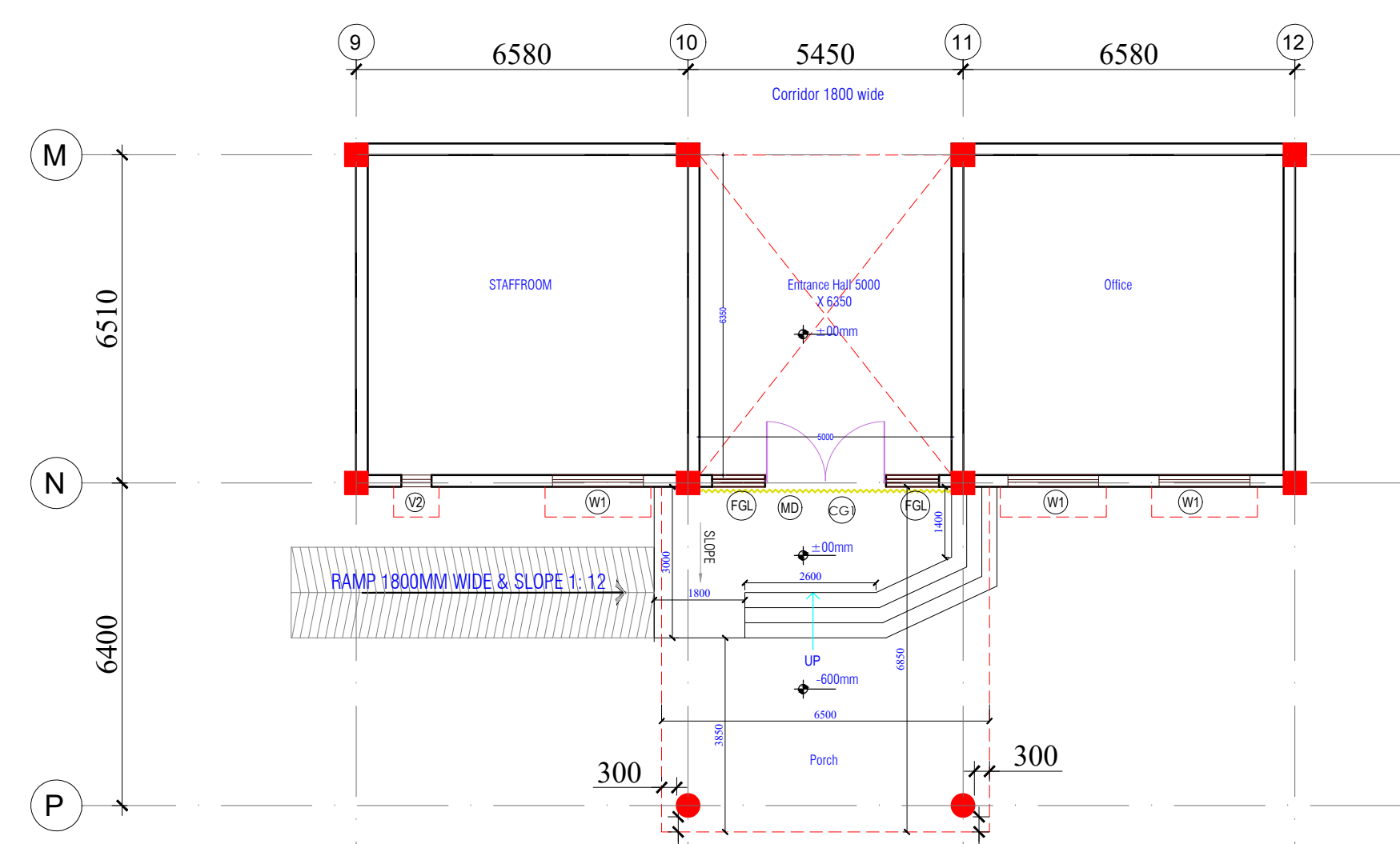
TERRACE PARAPET WALL TYPICAL COPING DETAIL



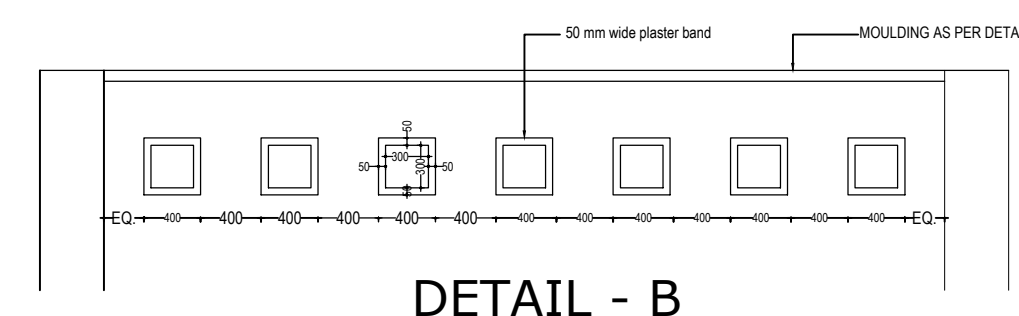
LAB STORE-RCC SHELVES DETAIL



TERRACE FLOOR PLAN ENTRANCE PORCH



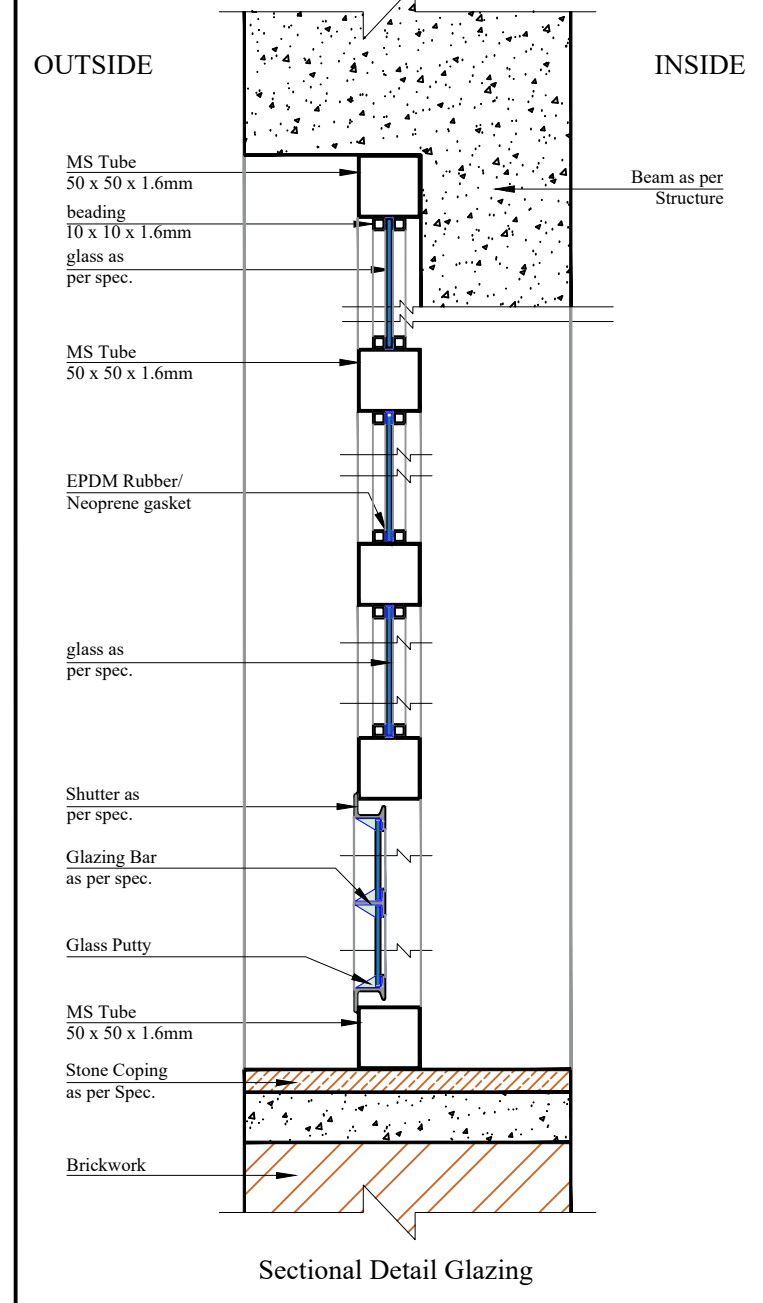
GROUND FLOOR PLAN ENTRANCE PORCH



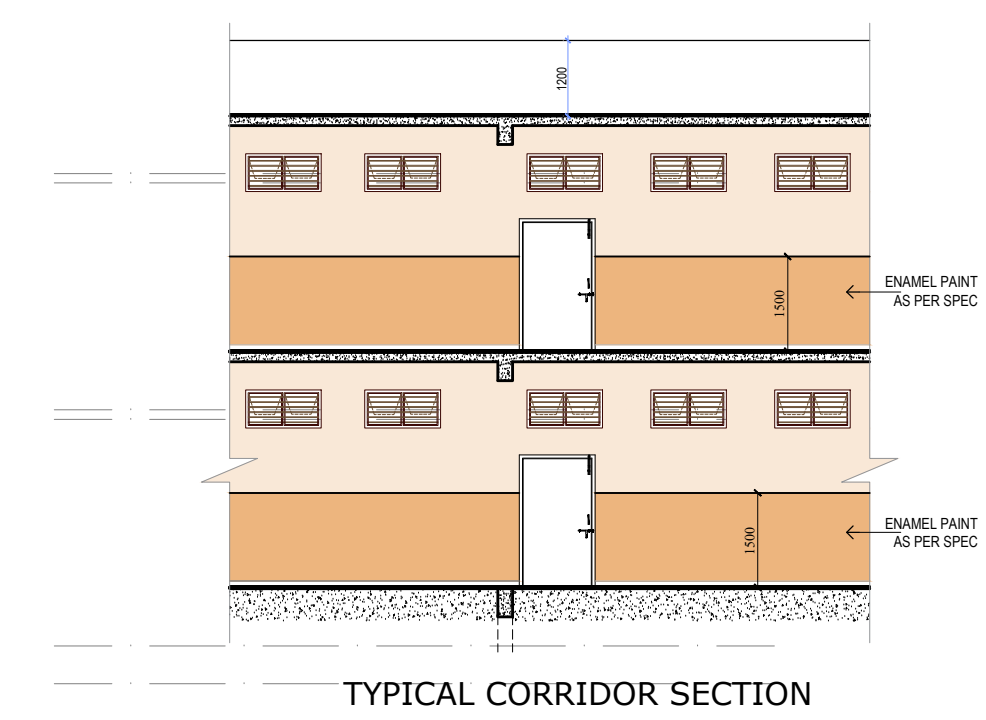
DETAIL - B



Chemistry Lab Counter as above Counter Top to be of Granite



Sectional Detail Glazing



TYPICAL CORRIDOR SECTION

CATEGORY : SCHOOL BUILDING

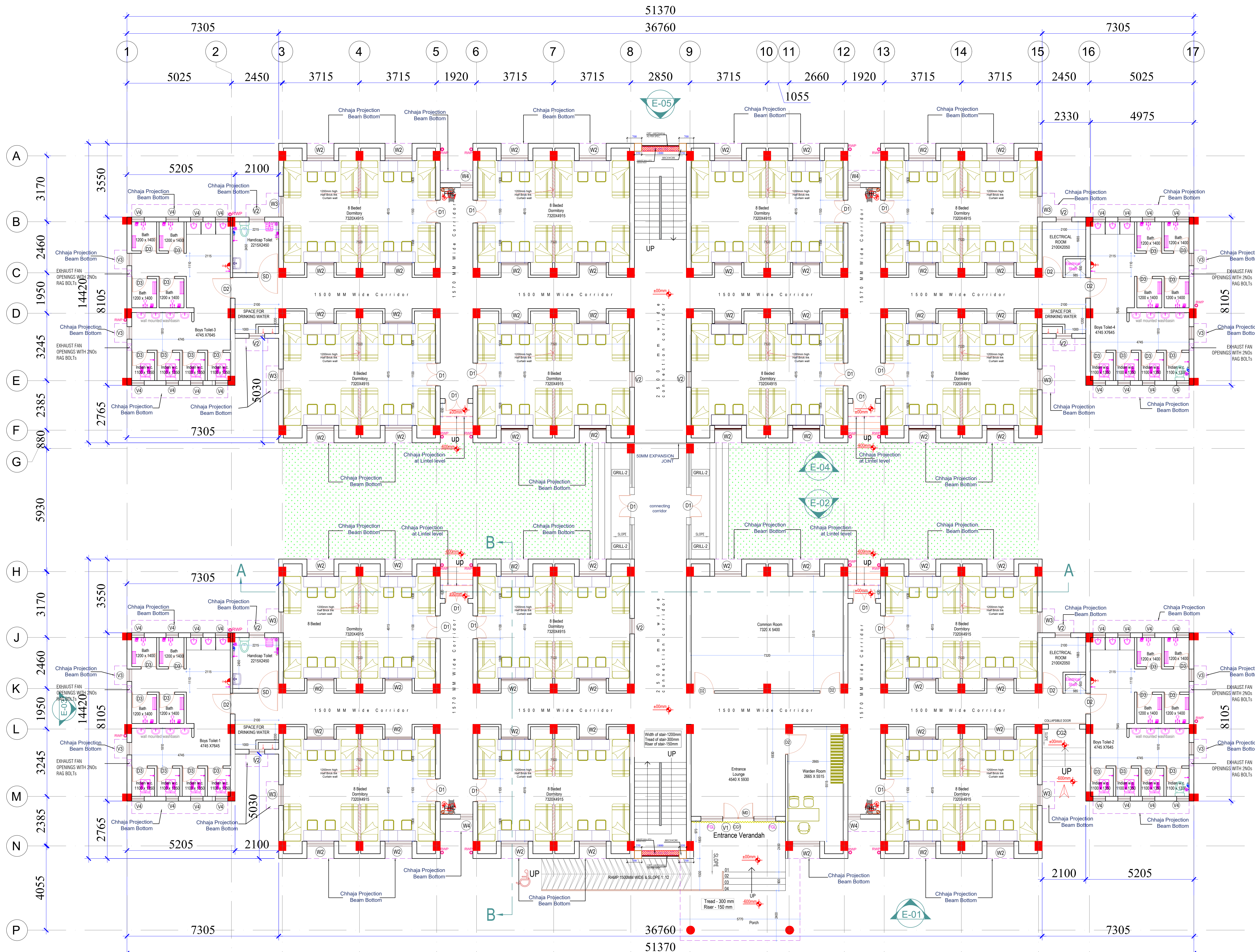
DRAWING TITLE : ENTRANCE PORCH DETAIL, OTHER DETAIL

DWG. NO.- EMRS NAME/SCH/AR_06

DATE - 09 MARCH 2023



AREA STATEMENT			
HOSTEL BUILDING			
DETAILS	Phase-I (In Sqm)	Phase-II (In Sqm)	TOTAL FLOOR AREA
MAIN BUILDING	583.12	584.81	1167.93
GROUND FLOOR PLINTH AREA	574.55	574.55	1149.10
FIRST FLOOR PLINTH AREA	574.55	574.55	1149.10
TOTAL AREA	1157.67	1159.36	2317.03
ENTRANCE PORCH AREA			
AREA/ 2			12.76
Total			2330.00



N.K.
(NARENDRA KUMAR)
pk approval 10.12.23
(Sharma approval)
Count 13/1/23
(R.K. Gang)
24.05.23 15/3/2023.
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

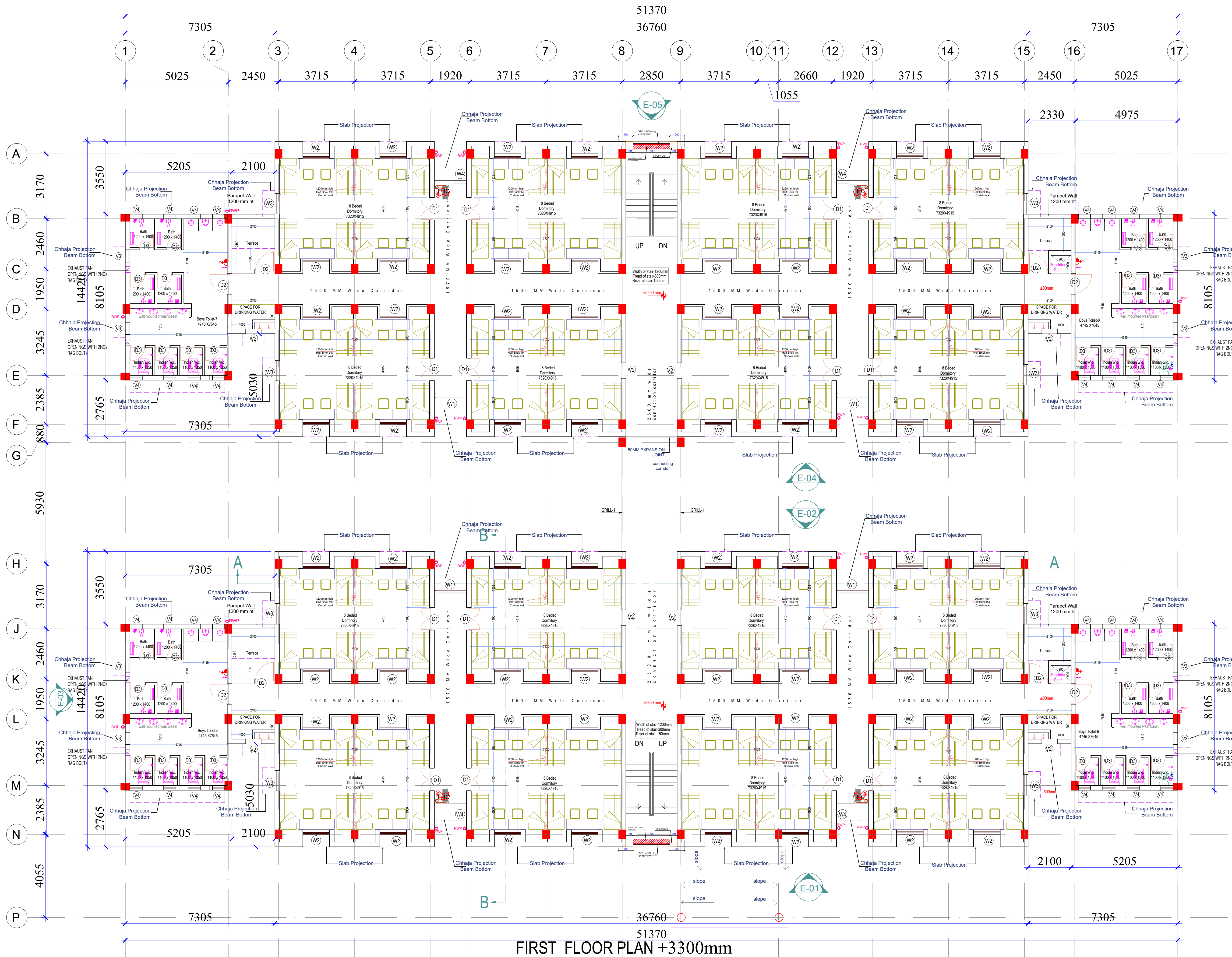
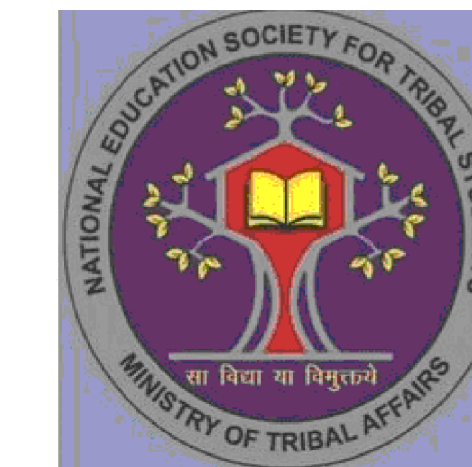
CATEGORY : BOYS HOSTEL

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.-
EMRS NAME/BH/AR_01

DATE - 09 MARCH 2023

GROUND FLOOR PLAN ±00mm



51370
36760
51370
FIRST FLOOR PLAN +3300mm

N.K.
(NARENDRA KUMAR)
P.K. Approval 10.12.23
(Pranod Approval)
Count 13/1/23
(R.K. Gang)
2nd SS 15/3/2023.
(SANDEEP SOOD)

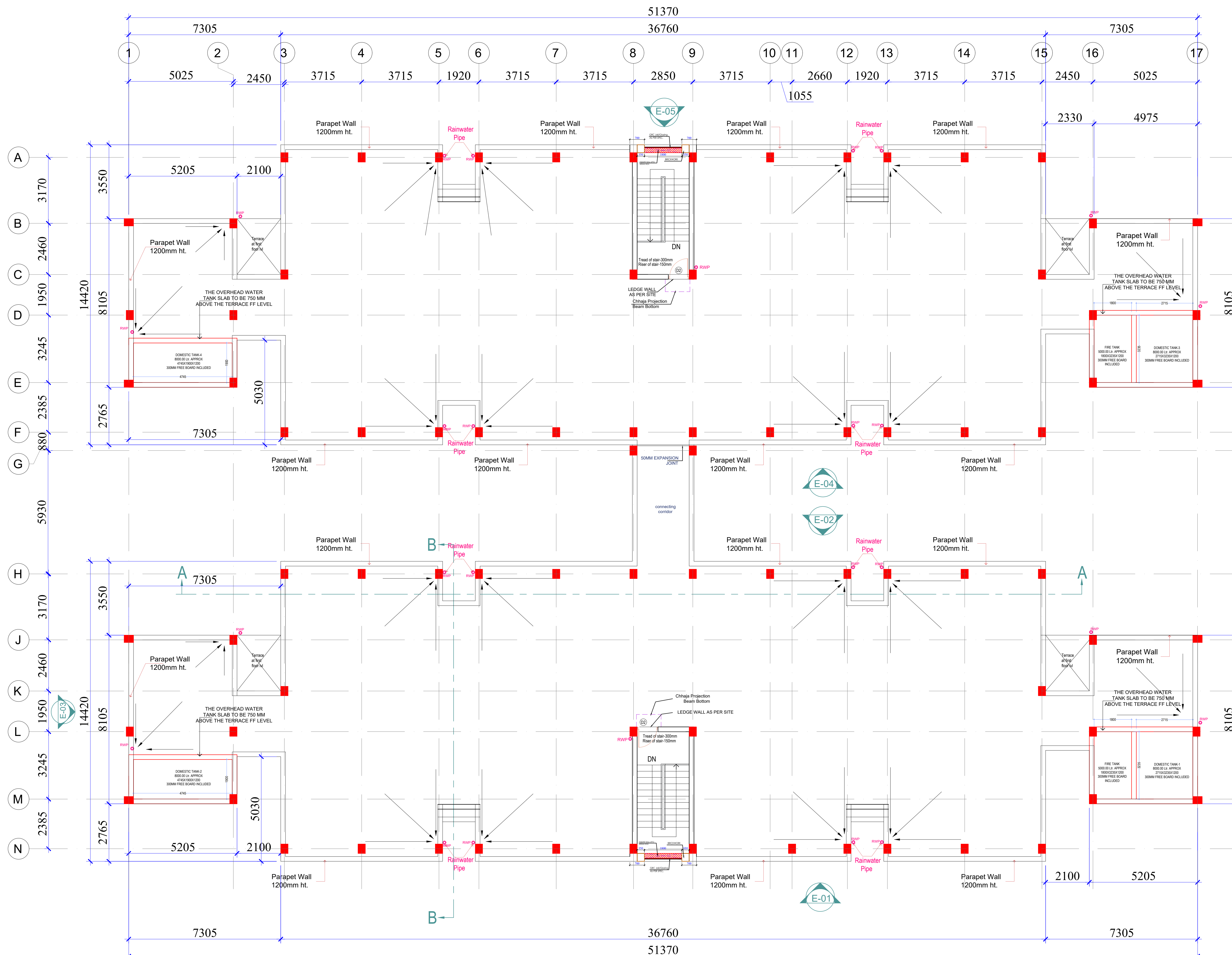
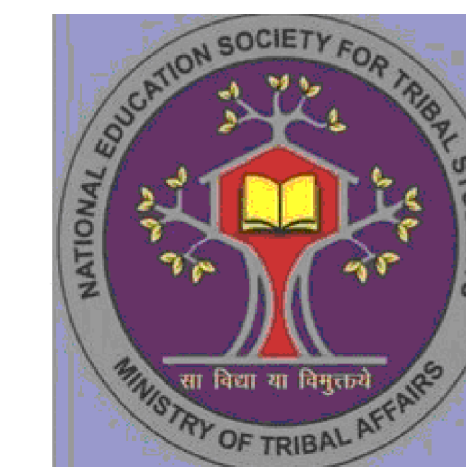
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : BOYS HOSTEL

DRAWING TITLE : FIRST FLOOR PLAN

DWG. NO.-
EMRS NAME/BH/AR_02

DATE - 09 MARCH 2023



N.K.
 (NARENDRA KUMAR)
 p.k. Approval 10.12.23
 (Pranod Approval)
 10/13/23
 (R.K. Gang)
 8/15/23
 (SANDEEP SOOD)

A.P.K.
A D P Keshri
 Chief Technical Consultant

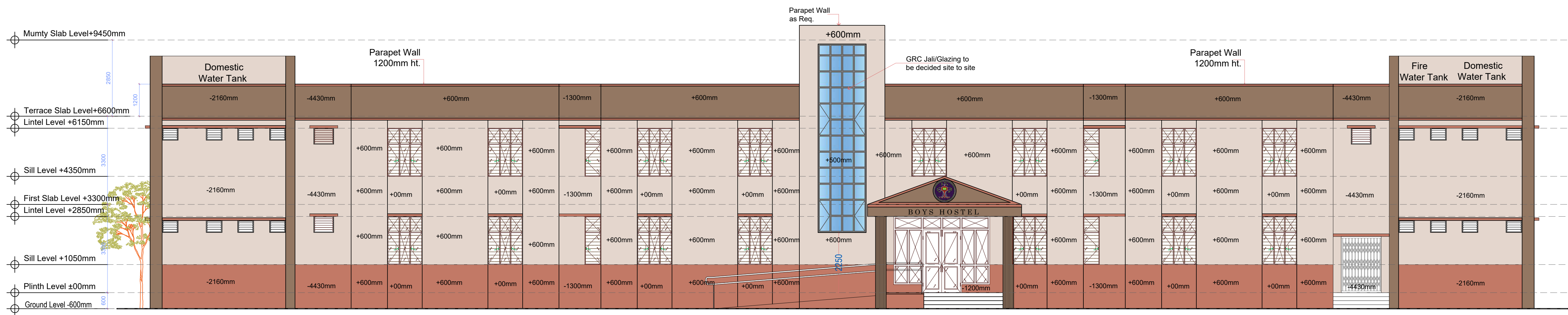
CATEGORY : BOYS HOSTEL

DRAWING TITLE : TERRACE FLOOR PLAN

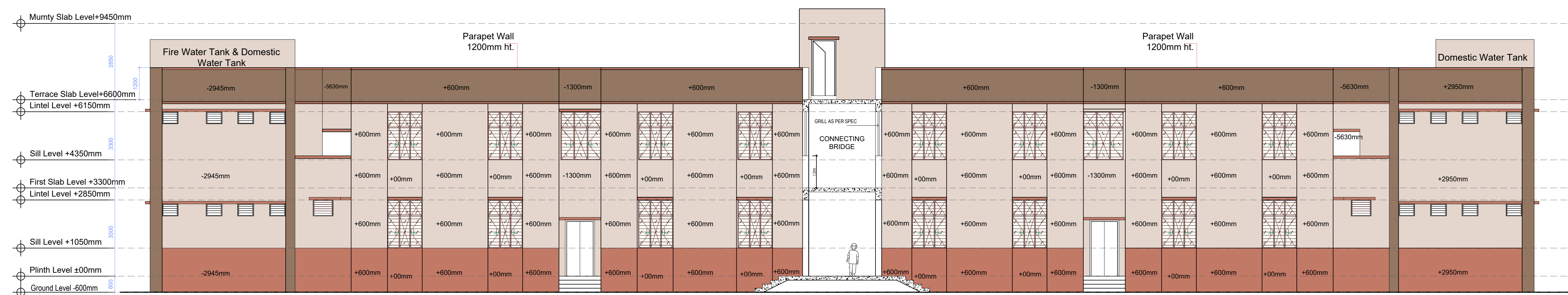
DWG. NO.-
EMRS NAME/BH/AR_03

DATE - 09 MARCH 2023

TERRACE FLOOR PLAN +6600 mm

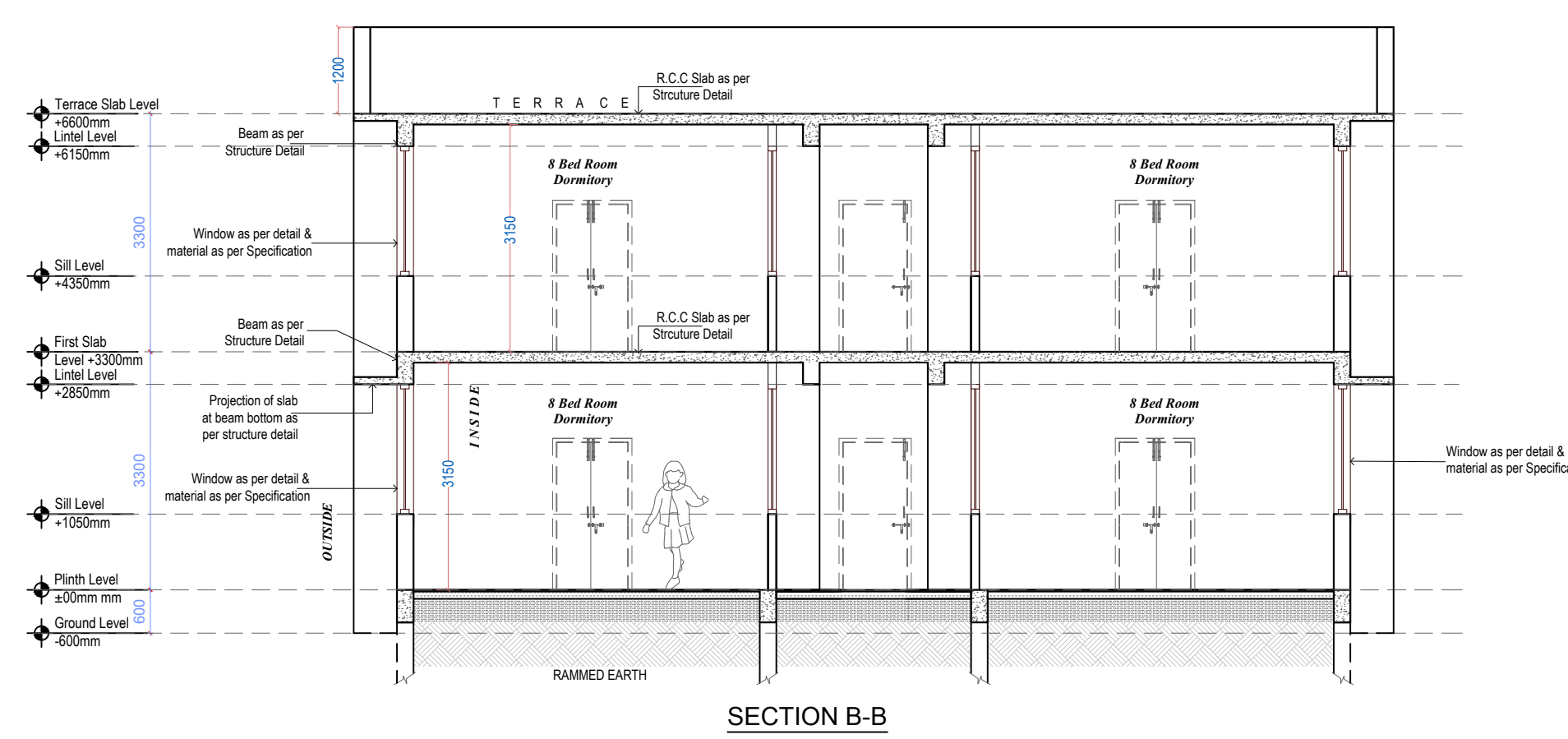


FRONT ELEVATION E-01

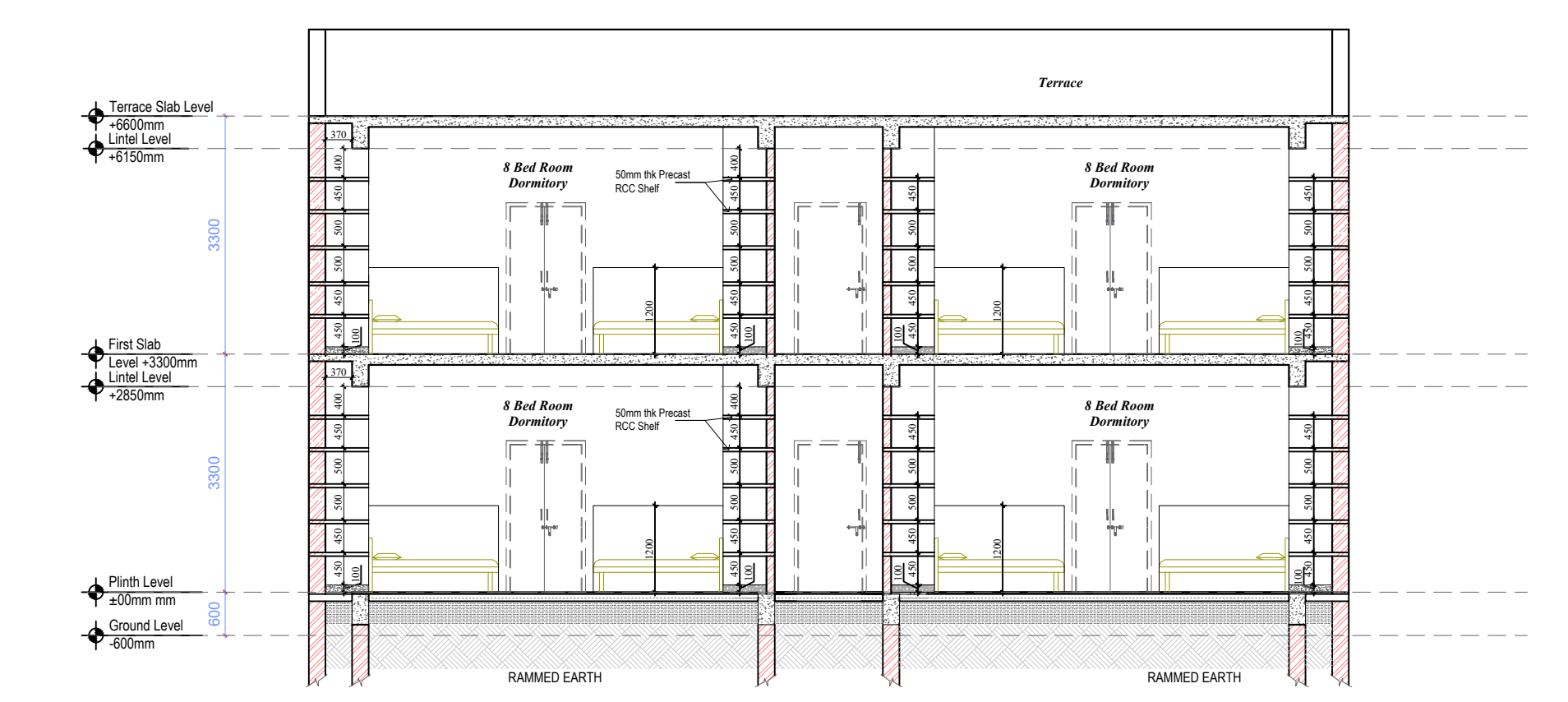


REAR SIDE ELEVATION E-02

BOYS HOSTEL BUILDING										
DOOR, WINDOW, VENTILATOR, FIXED GLAZING SCHEDULE										
TAG	CLEAR OPENING SIZE	SILL	LINTEL	GF	FF	MUMTY	TOTAL	LOCATION	TYPE OF SHUTTERS	MATERIAL
MD	1500X2400	0	2400	1			1	MAIN ENTRANCE DOOR	DOUBLE SHUTTER	ALUMINIUM
D1	1100X2100	0	2100	20	16		36	DORMITORY, CORRIDOR EXITS	DOUBLE SHUTTER	FLUSH DOOR
D2	1000 X 2100	0	2100	5	4		9	ELECTRICAL ROOM, COMMON ROOM & WARDEN	SINGLE SHUTTER	FLUSH DOOR
D2	1000 X 2100	0	2100	4	4		8	TOILET MAIN ENTRY	SINGLE SHUTTER	FACTORY PRESSED LAMINATED DOOR
D2	1000 X 2100	0	2100			2	2	TERRACE DOOR	SINGLE SHUTTER	MS SHEET DOOR
D3	750 X 2100	0	2100	32	32		64	TOILET INTERNAL DOOR	SINGLE SHUTTER	FACTORY PRESSED LAMINATED DOOR
SD	1000 X 2100	0	2100	2			2	HANDICAP TOILET	DOUBLE SWING	FACTORY PRESSED LAMINATED DOOR
CG1	4540X2400	0	2400	1			1	MAIN ENTRY		COLLAPSIBLE GATE
CG2	2100X2100	0	2100	1			1	WARDEN ENTRY		COLLAPSIBLE GATE
W1	1500X1800	1050	B.O.B		4		4	CORRIDOR	FIXED & OPENABLE	STEEL GLAZED WINDOW
W2	1300X1800	1050	B.O.B	59	64		123	DORMITORY, CORRIDOR, WARDEN ROOM	FIXED & OPENABLE	STEEL GLAZED WINDOW
W3	1000X1800	1050	B.O.B	8	8		16	DORMITORY	FIXED & OPENABLE	STEEL GLAZED WINDOW
W4	600X1800	1050	B.O.B	4	4		8	VERTICAL CORRIDOR	FIXED & OPENABLE	STEEL GLAZED WINDOW
V1	1500X450	2400	B.O.B	1			1	MAIN ENTRANCE		ALUMINIUM FIXED GLAZING
V2	750X600	2250	B.O.B	10	8		18	TOILET, DRINKING WATER, SERVICE AREA		STEEL SECTION
V3	600X1200	1050	B.O.B	8	8		16	TOILET		STEEL SECTION
V4	600X450		B.O.B	32	32		64	TOILET		STEEL SECTION
GRILL-1	5100X1650		B.O.B		2		2	CONNECTING CORRIDOR		
GRILL-2	1650X1650		B.O.B	4			4	CONNECTING CORRIDOR		
FGL	1050 X 2550	300	B.O.B	2			2	MAIN ENTRANCE		ALUMINIUM FIXED GLAZING



SECTION B-B



N.K.
(NARENDRA KUMAR)
pk Approval 10.3.23
(Pranod Approval)
Count 13/4/23
(R.K. Gang)
2nd SS 15/3/2023.
(SANDEEP SOOD)

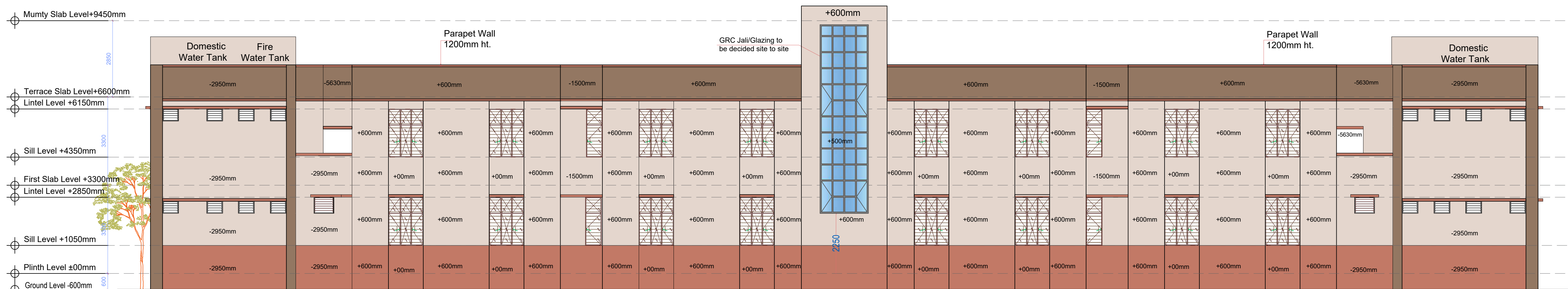
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : BOYS HOSTEL

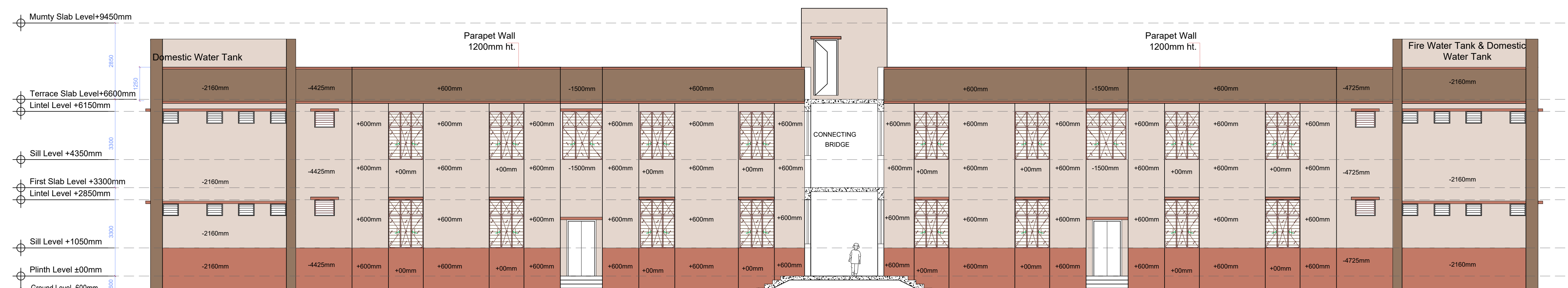
DRAWING TITLE : ELEVATION & SECTION

DWG. NO.- EMRS NAME/BH/AR_04

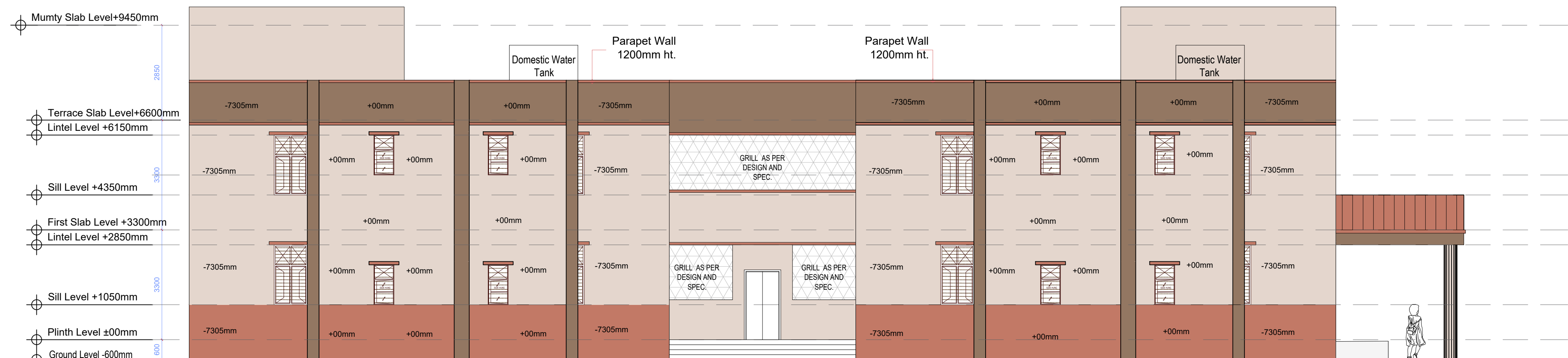
DATE - 09 MARCH 2023



REAR ELEVATION E-05



FRONT SIDE ELEVATION E-04



SIDE ELEVATION E-03

N.K.
(NARENDRA KUMAR)
pk Approved 10.3.23
(Approved Approval)
Leant 13/3/23
(R.K. Gang)
San 15/3/2023.
(SANDEEP SOOD)

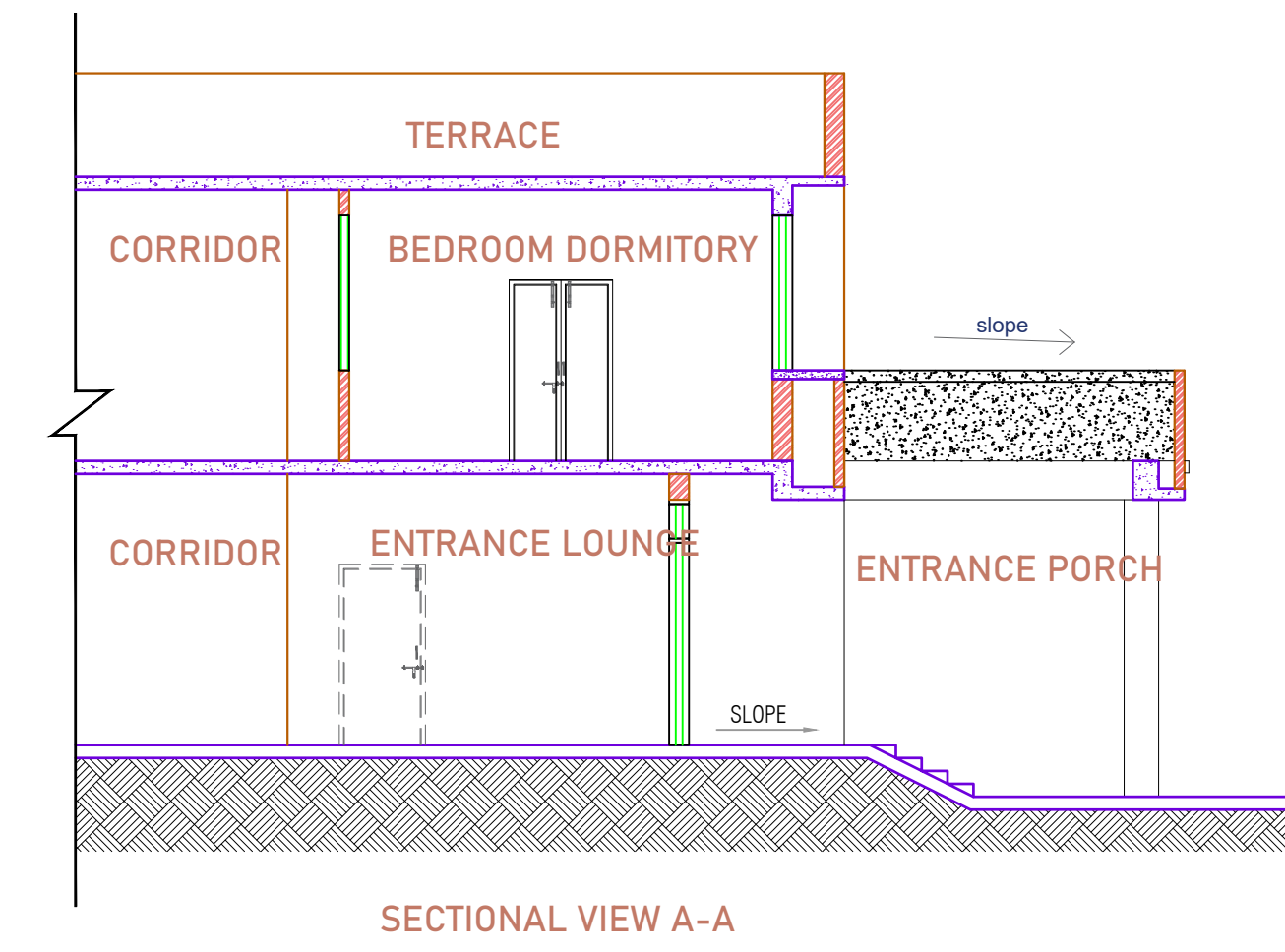
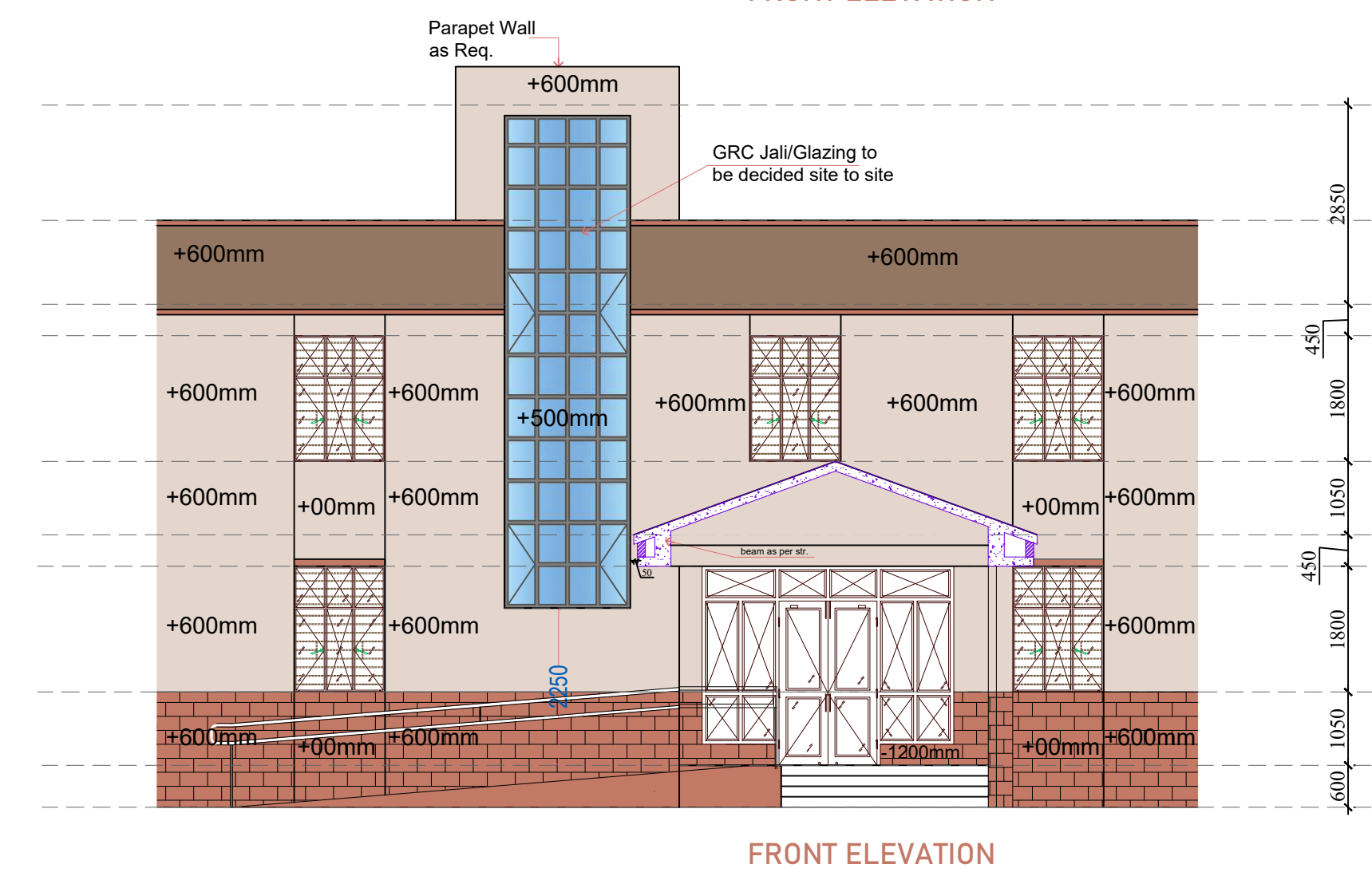
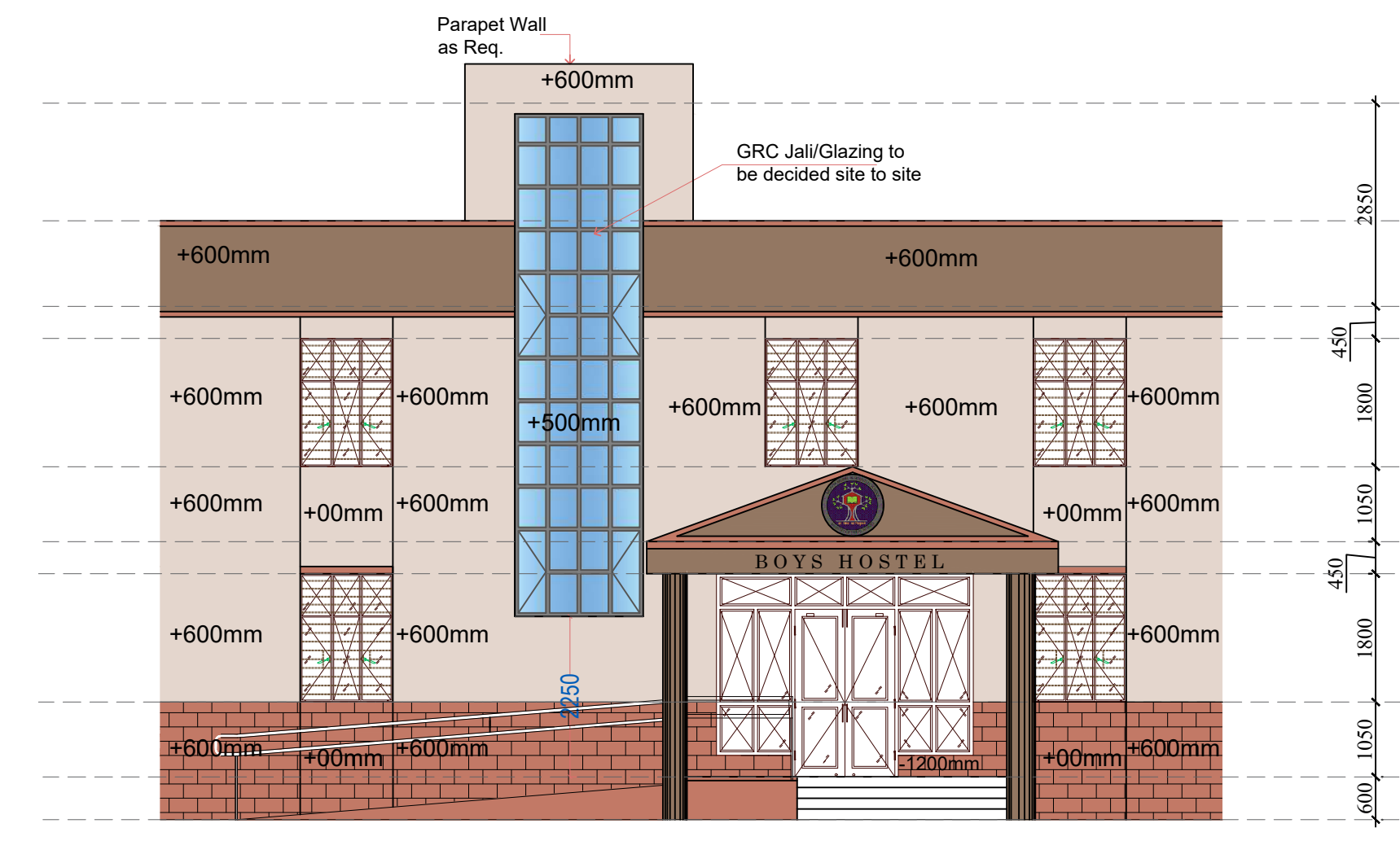
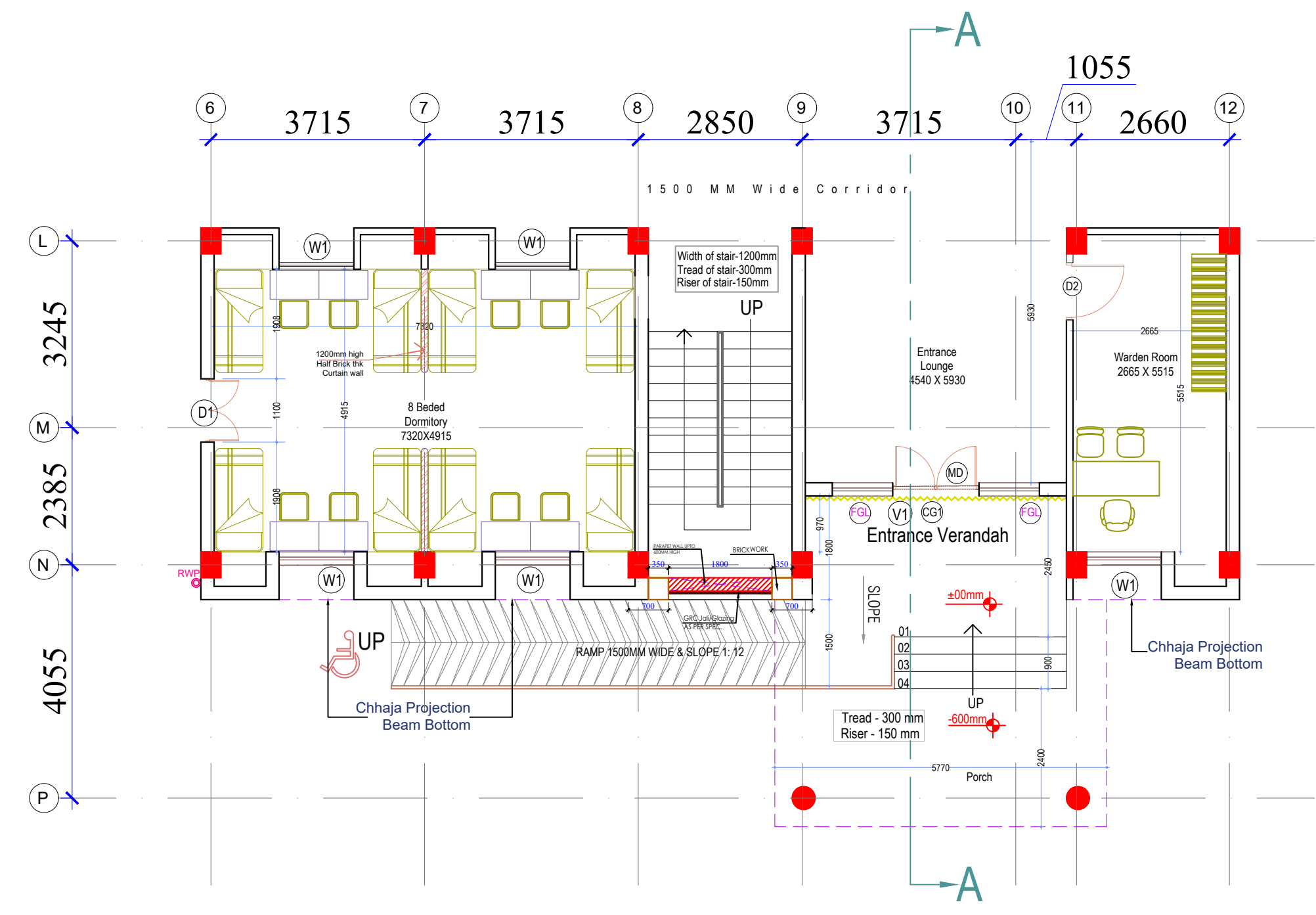
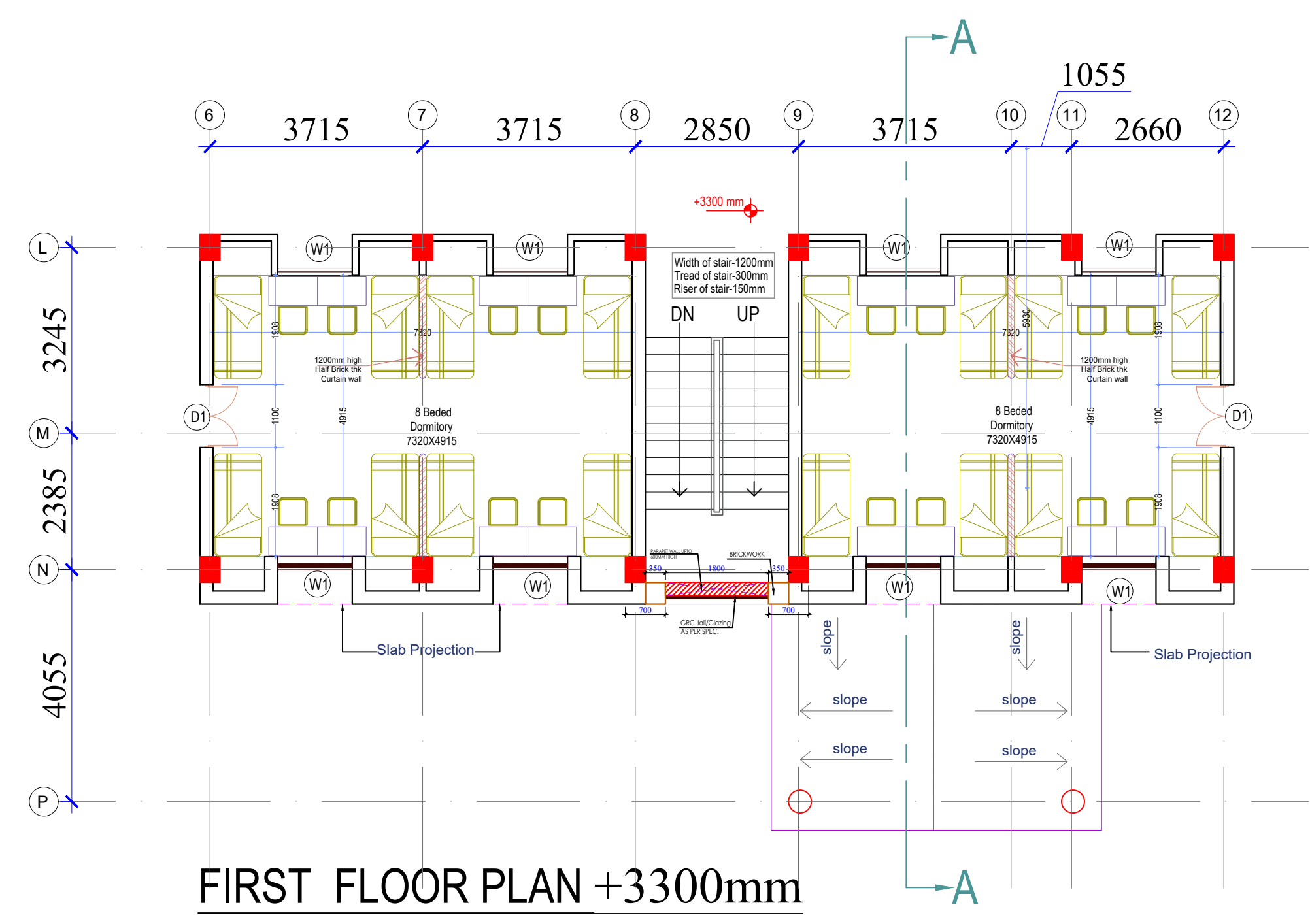
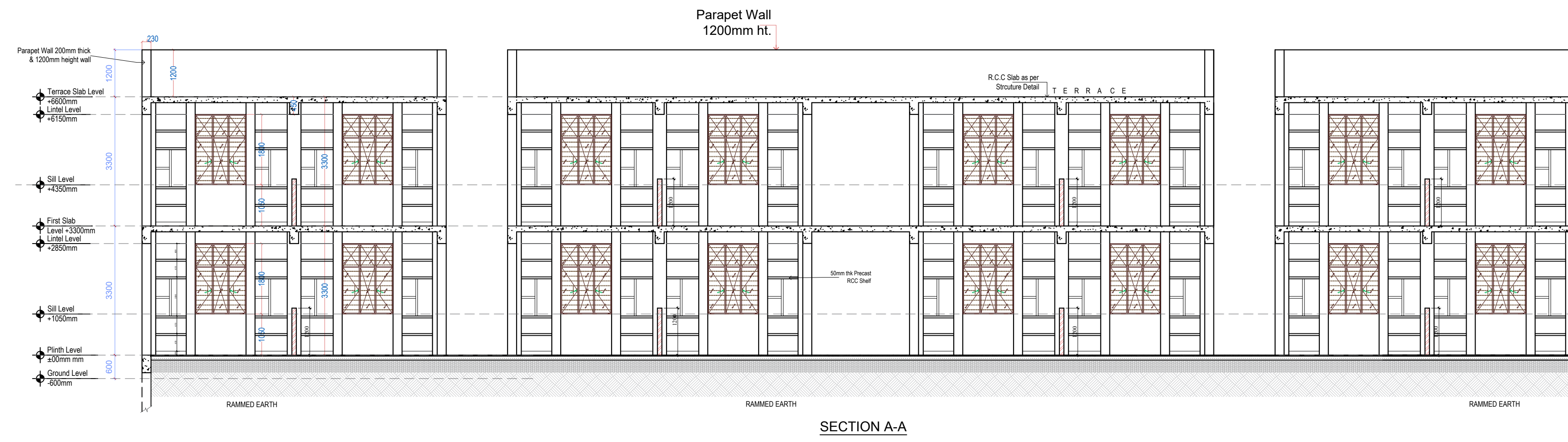
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : BOYS HOSTEL

DRAWING TITLE : ELEVATION

DWG. NO.-
EMRS NAME/BH/AR_05

DATE - 09 MARCH 2023

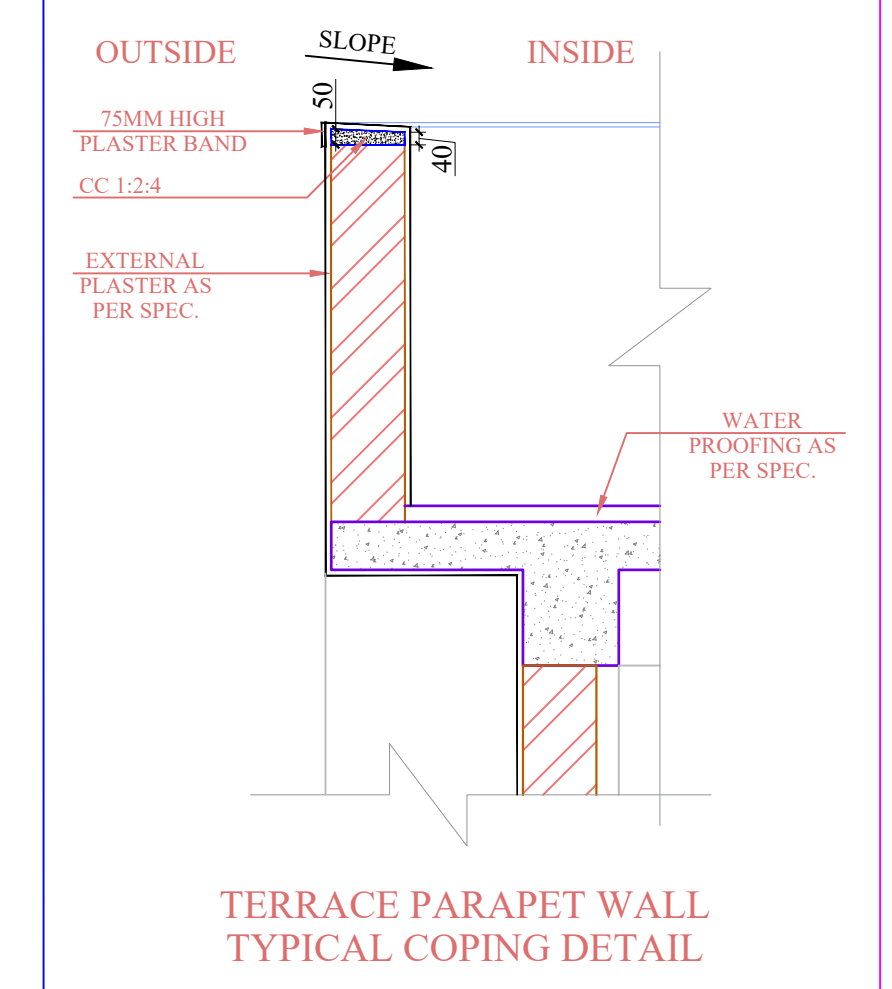
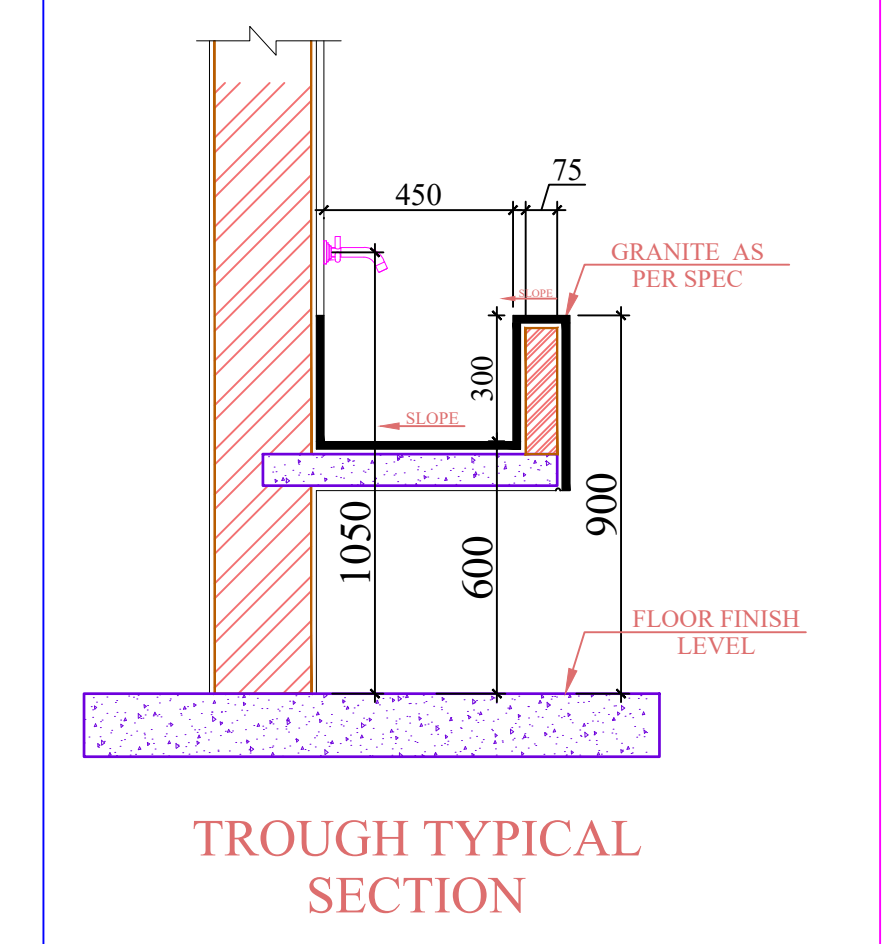


PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



N.K.
(NARENDRA KUMAR)
pk approved 10.3.23
(Prasad Approved)
Count 13/3/23
(K Gang)
24.3.23
13/3/2023.
(SANDEEP SOOD)

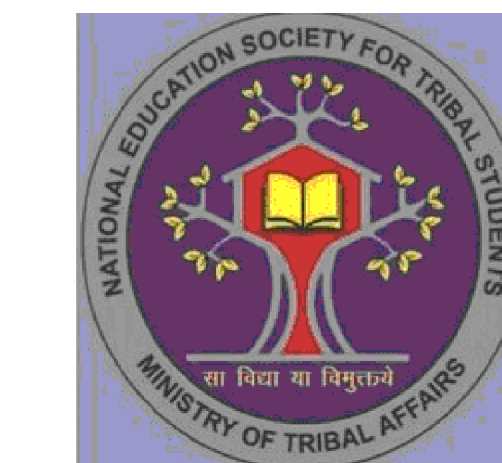
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY: BOYS HOSTEL

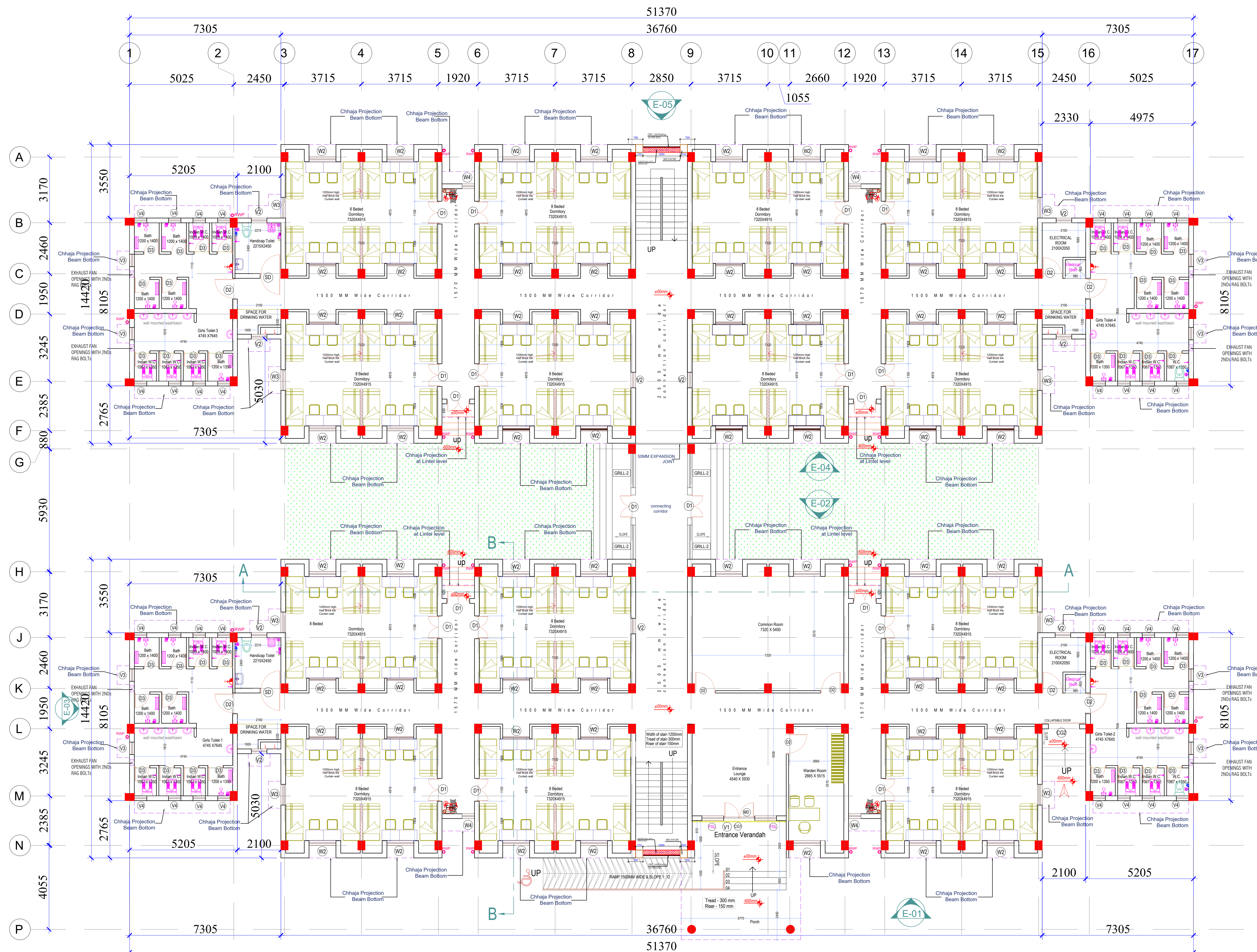
DRAWING TITLE: SECTION & PORCH DETAIL

DWG. NO.- EMRS NAME/BH/AR_06

DATE - 09 MARCH 2023



AREA STATEMENT			
HOSTEL BUILDING			
DETAILS	Phase-I (in Sqm)	Phase-II (in Sqm)	TOTAL FLOOR AREA
MAIN BUILDING			
GROUND FLOOR PLINTH AREA	583.12	584.81	1167.93
FIRST FLOOR PLINTH AREA	574.55	574.55	1149.10
TOTAL AREA	1157.67	1159.36	2317.03
ENTRANCE PORCH AREA			
AREA/2			12.76
Total			2330.00



N.K.
(NARENDRA KUMAR)
P.K. Approved
(Approved)
Count 13/1/23
(R.K. Gang)
2nd SS 15/3/2023
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

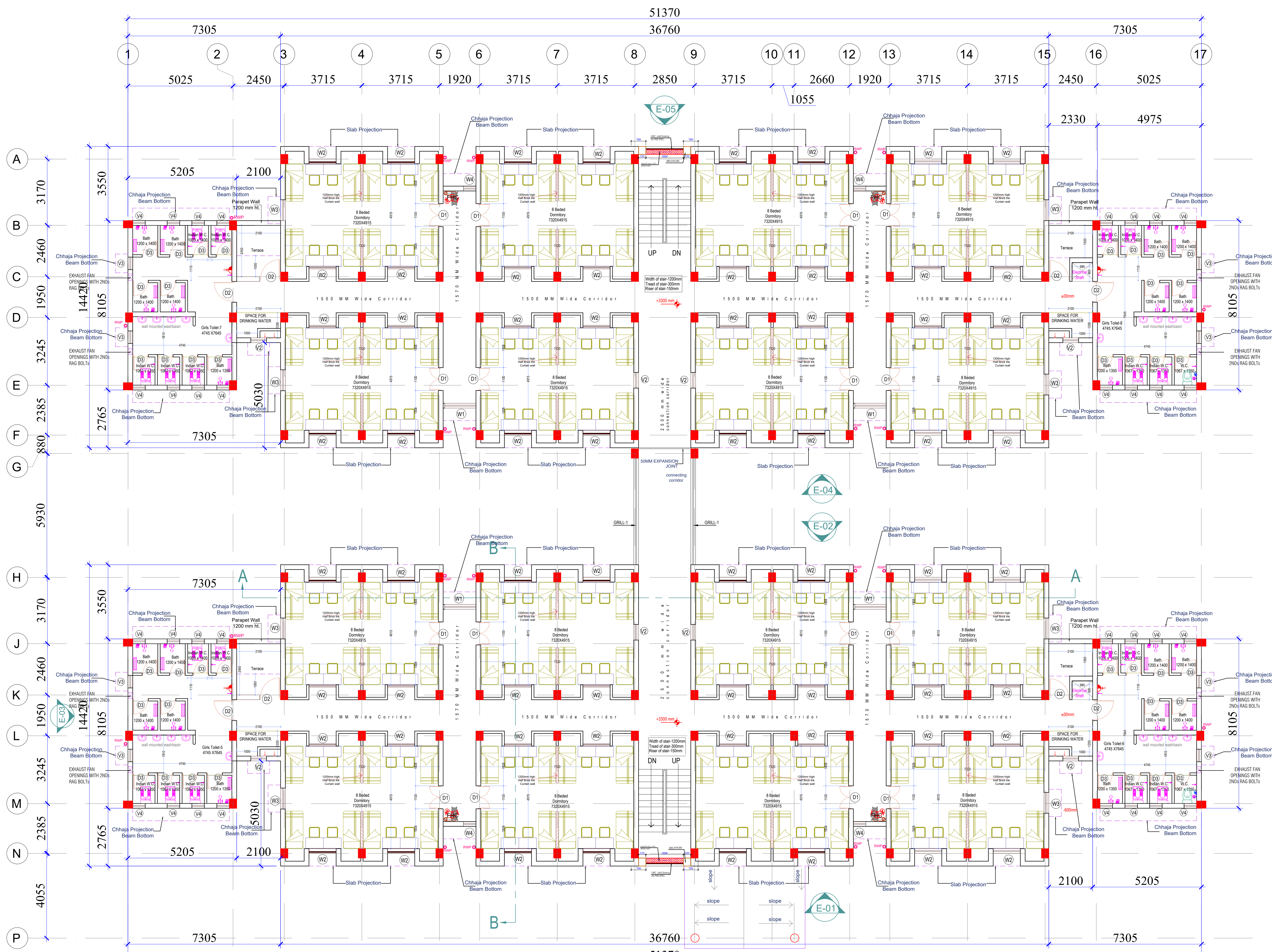
CATEGORY : GIRLS HOSTEL

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.- EMRS NAME/GH/AR_01

DATE - 09 MARCH 2023

GROUND FLOOR PLAN ±00mm



FIRST FLOOR PLAN +3300mm

N.K.
(NARENDRA KUMAR)
P.K. Agrawal
(Approved)
Count 13/1/23
(R.K. Gang)
2nd 95 15/3/2023.
(SANDEEP SOOD)

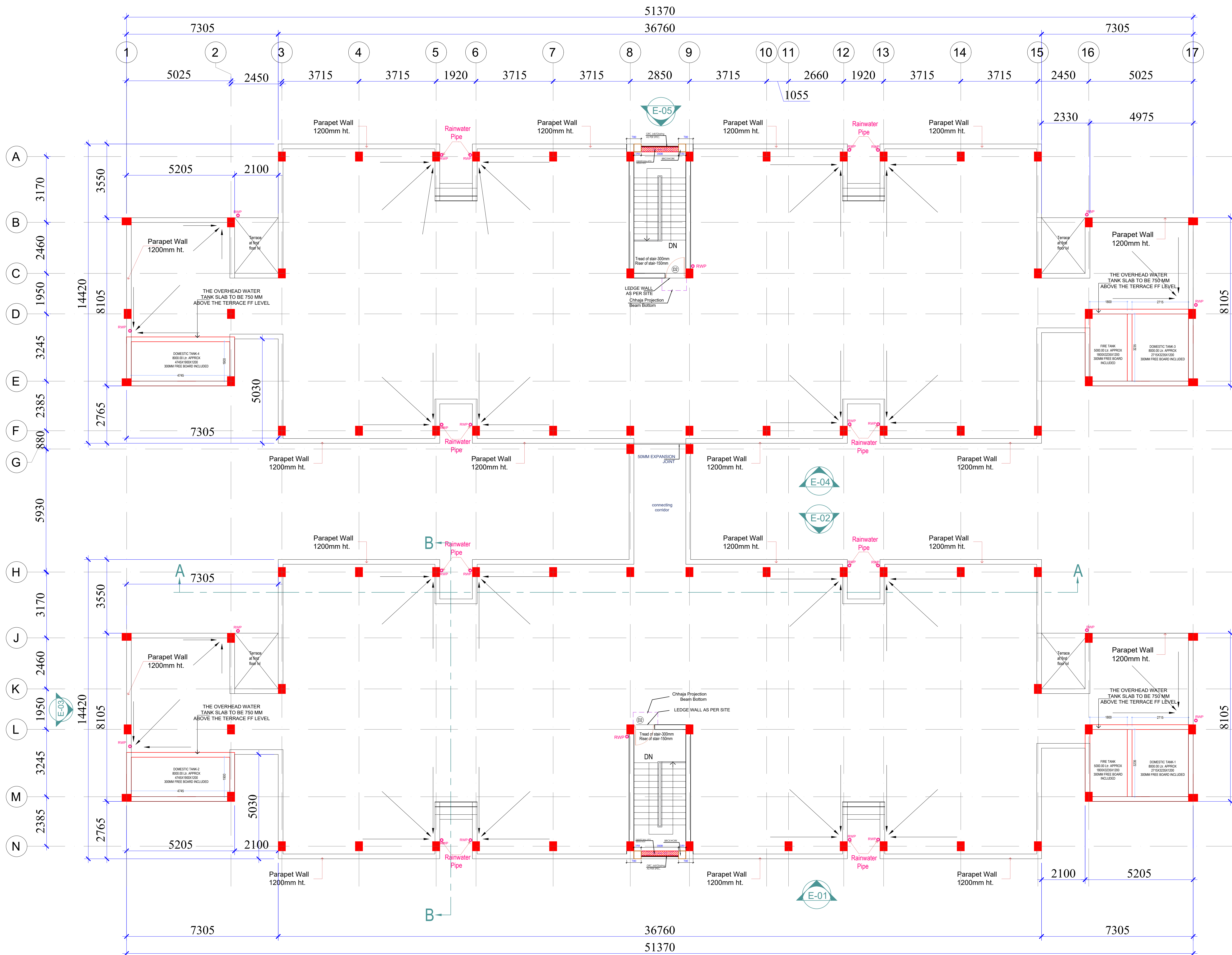
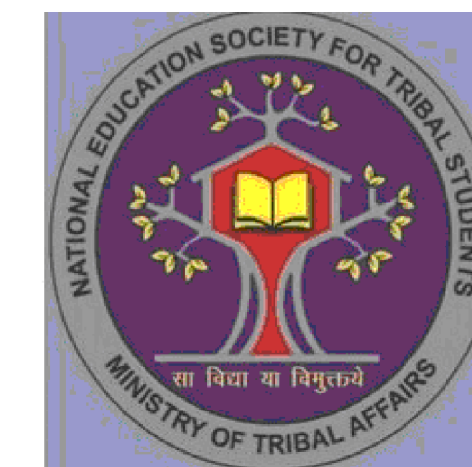
A.P.K.
A P Keshri
Chief Technical Consultant

CATEGORY : GIRLS HOSTEL

DRAWING TITLE : FIRST FLOOR PLAN

DWG. NO.- EMRS NAME/GH/AR_02

DATE - 09 MARCH 2023



N.K.
(NARENDRA KUMAR)
pk approval 10.3.23
(Prasad Approval)
Count 13/3/23
(R.K. Gang)
2nd SS 13/3/23.
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

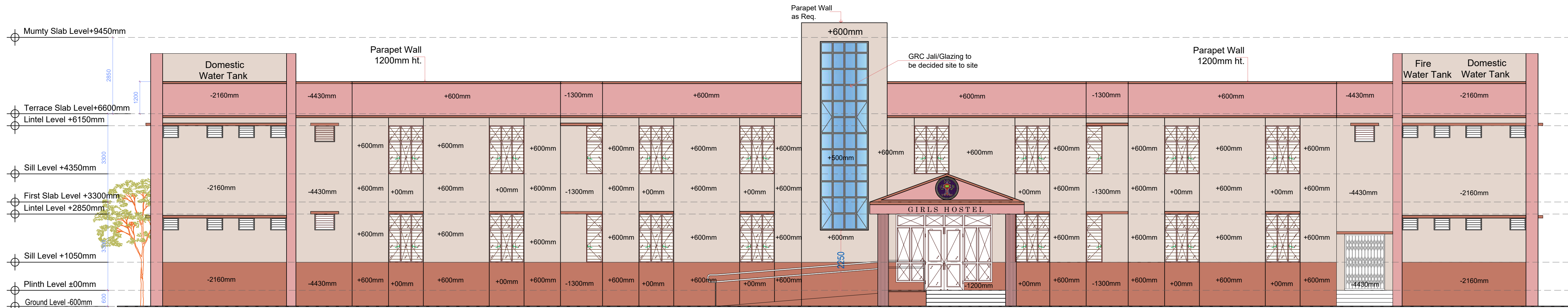
CATEGORY : GIRLS HOSTEL

DRAWING TITLE : TERRACE FLOOR PLAN

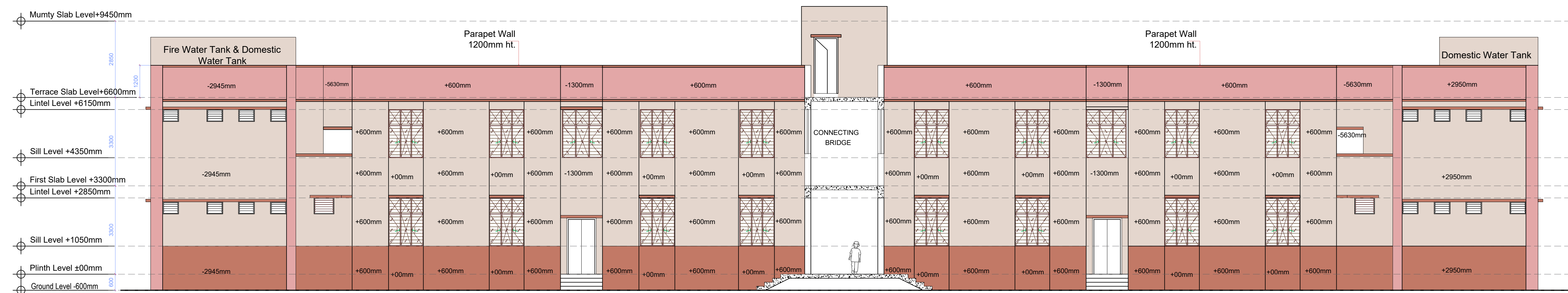
DWG. NO.-
EMRS NAME/GH/AR_03

DATE - 09 MARCH 2023

TERRACE FLOOR PLAN +6600 mm

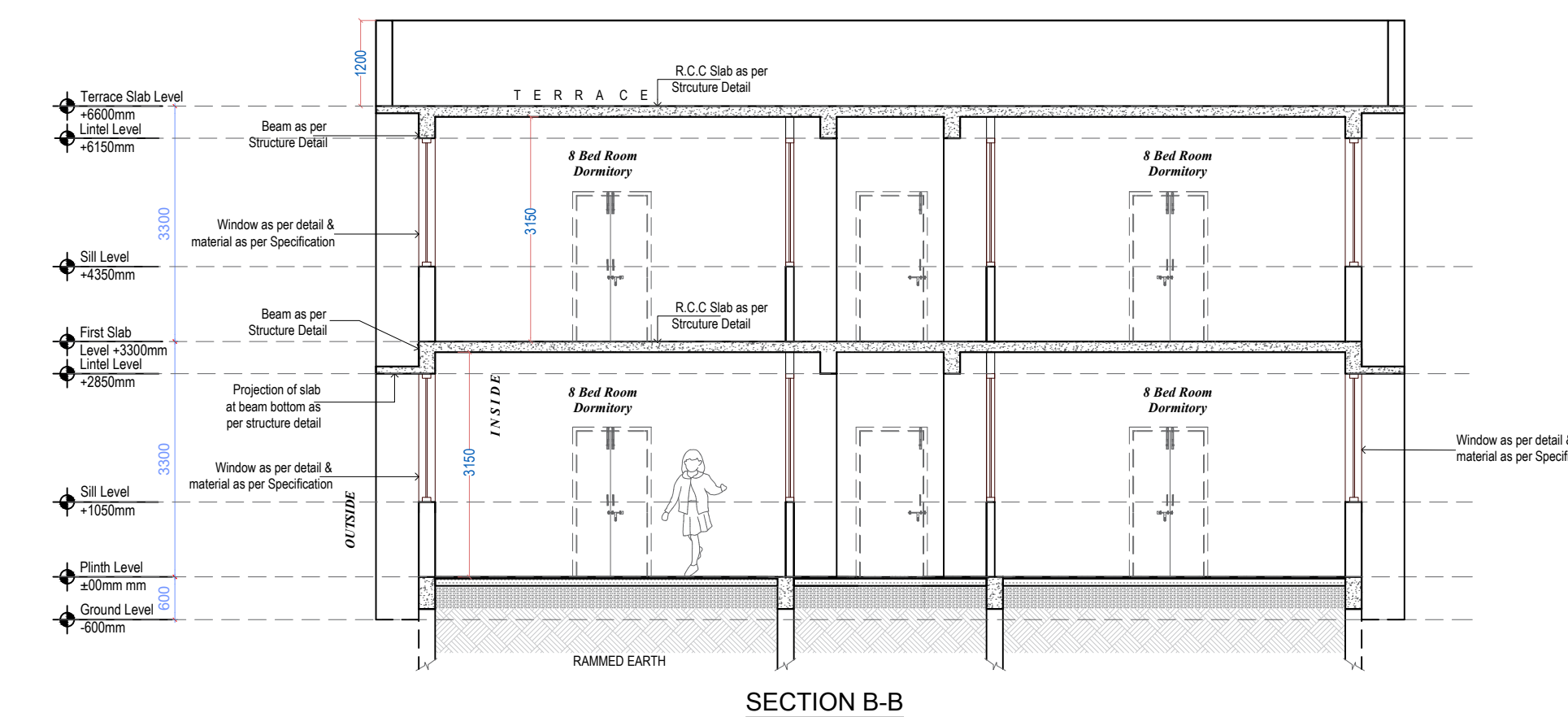


FRONT ELEVATION E-01

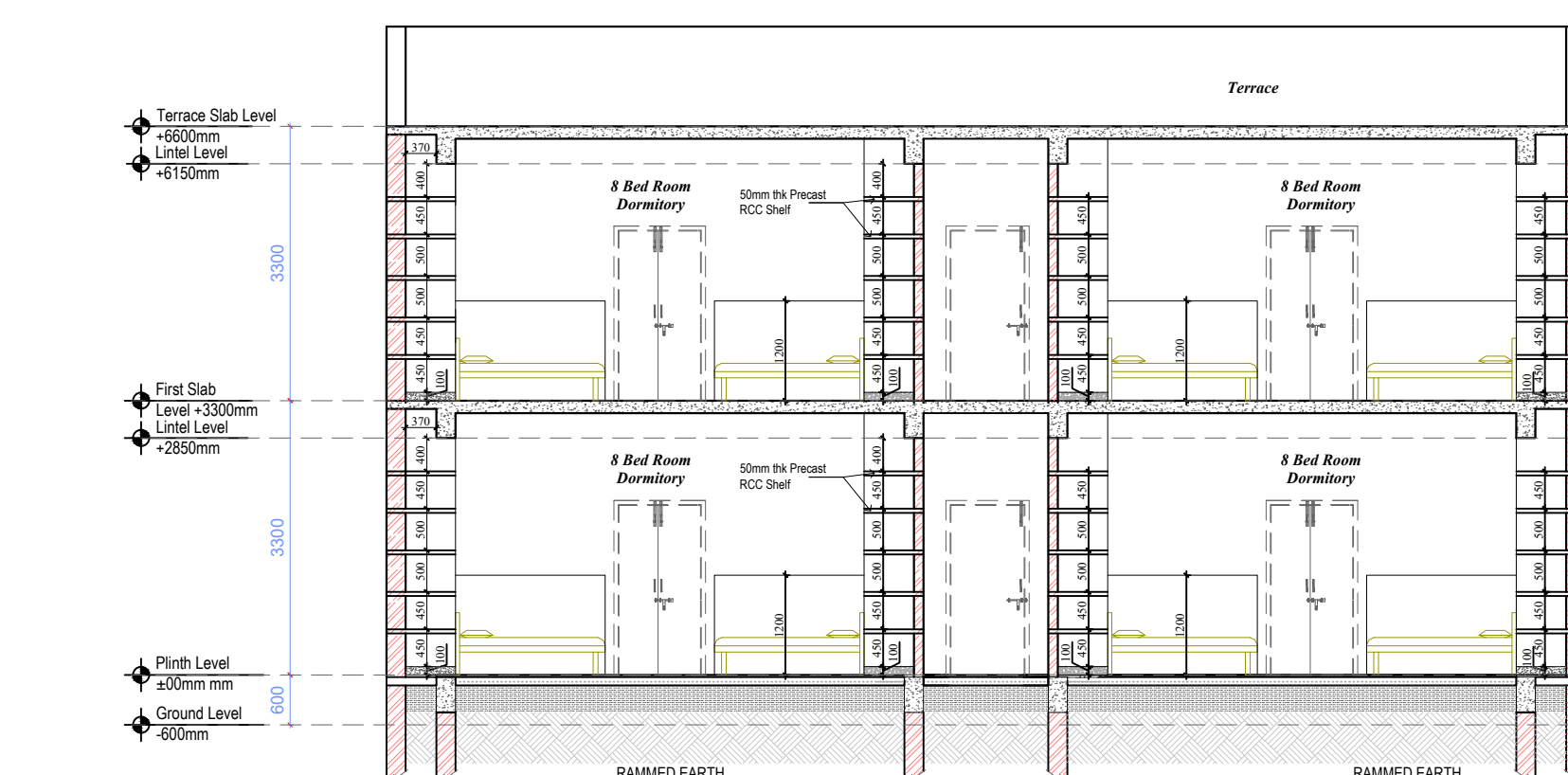


REAR SIDE ELEVATION E-02

GIRLS HOSTEL BUILDING										
DOOR, WINDOW, VENTILATOR, FIXED GLAZING SCHEDULE										
TAG	CLEAR OPENING SIZE	SILL	LINTEL	GF	FF	MUMTY	TOTAL	LOCATION	TYPE OF SHUTTERS	MATERIAL
MD	1500X2400	0	2400	1			1	MAIN ENTRANCE DOOR	DOUBLE SHUTTER	ALUMINIUM
D1	1100X2100	0	2100	20	16		36	DORMITORY, CORRIDOR EXITS	DOUBLE SHUTTER	FLUSH DOOR
D2	1000 X 2100	0	2100	5	4		9	ELECTRICAL ROOM, COMMON ROOM & WARDEN	SINGLE SHUTTER	FLUSH DOOR
D2	1000 X 2100	0	2100	4	4		8	TOILET MAIN ENTRY	SINGLE SHUTTER	FACTORY PRESSED LAMINATED DOOR
D2	1000 X 2100	0	2100			2	2	TERRACE DOOR	SINGLE SHUTTER	MS SHEET DOOR
D3	750 X 2100	0	2100	40	40		80	TOILET INTERNAL DOOR	SINGLE SHUTTER	FACTORY PRESSED LAMINATED DOOR
SD	1000 X 2100	0	2100	2			2	HANDICAP TOILET	DOUBLE SWING	FACTORY PRESSED LAMINATED DOOR
CG1	4540X2400	0	2400	1			1	MAIN ENTRY		COLLAPSIBLE GATE
CG2	2100X2100	0	2100	1			1	WARDEN ENTRY		COLLAPSIBLE GATE
W1	1500X1800	1050	B.O.B		4		4	CORRIDOR	FIXED & OPENABLE	STEEL GLAZED WINDOW
W2	1300X1800	1050	B.O.B	59	64		123	DORMITORY, CORRIDOR, WARDEN ROOM	FIXED & OPENABLE	STEEL GLAZED WINDOW
W3	1000X1800	1050	B.O.B	8	8		16	DORMITORY	FIXED & OPENABLE	STEEL GLAZED WINDOW
W4	600X1800	1050	B.O.B	4	4		8	DORMITORY	FIXED & OPENABLE	STEEL GLAZED WINDOW
V1	1500X450	2400	B.O.B	1			1	MAIN ENTRANCE		ALUMINIUM FIXED GLAZING
V2	750X600	2250	B.O.B	10	8		18	TOILET, DRINKING WATER, SERVICE AREA		STEEL SECTION
V3	600X1200	1050	B.O.B	8	8		16	TOILET, VERTICAL CORRIDOR		STEEL SECTION
V4	600X450		B.O.B	32	32		64	TOILET		STEEL SECTION
GRILL-1	5100X1650		B.O.B		2		2	CONNECTING CORRIDOR		
GRILL-2	1650X1650		B.O.B	4			4	CONNECTING CORRIDOR		
FGL	1050 X 2550	300	B.O.B	2			2	MAIN ENTRANCE	24	ALUMINIUM FIXED GLAZING



SECTION B-B



N.K.
(NARENDRA KUMAR)
pk Approval 10.3.23
(Pranav Approval)
Count 13/1/23
(R.K. Gang)
8th 95 15/3/2023.
(SANDEEP SOOD)

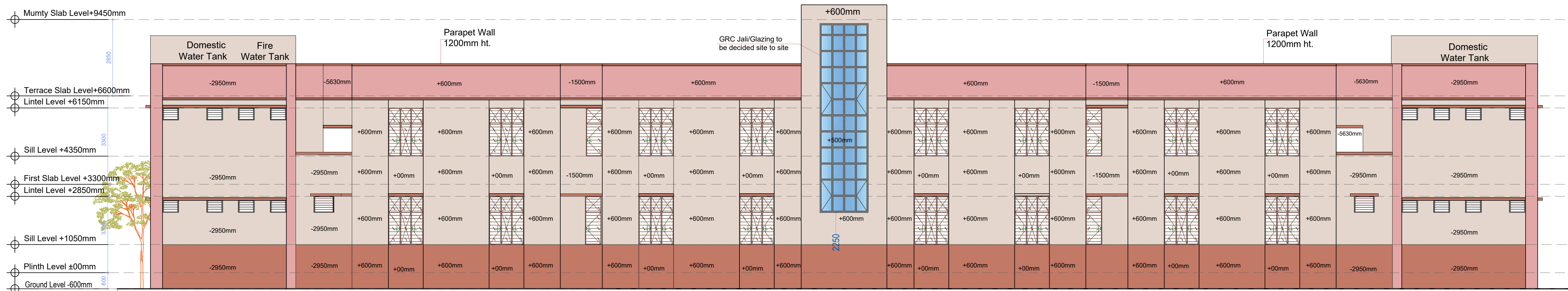
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : GIRLS HOSTEL

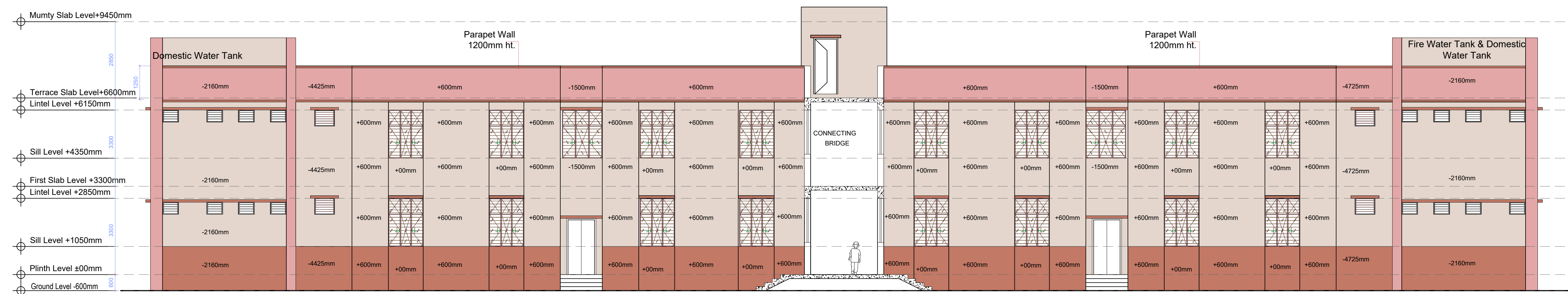
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DWG. NO.- EMRS NAME/GH/AR_04

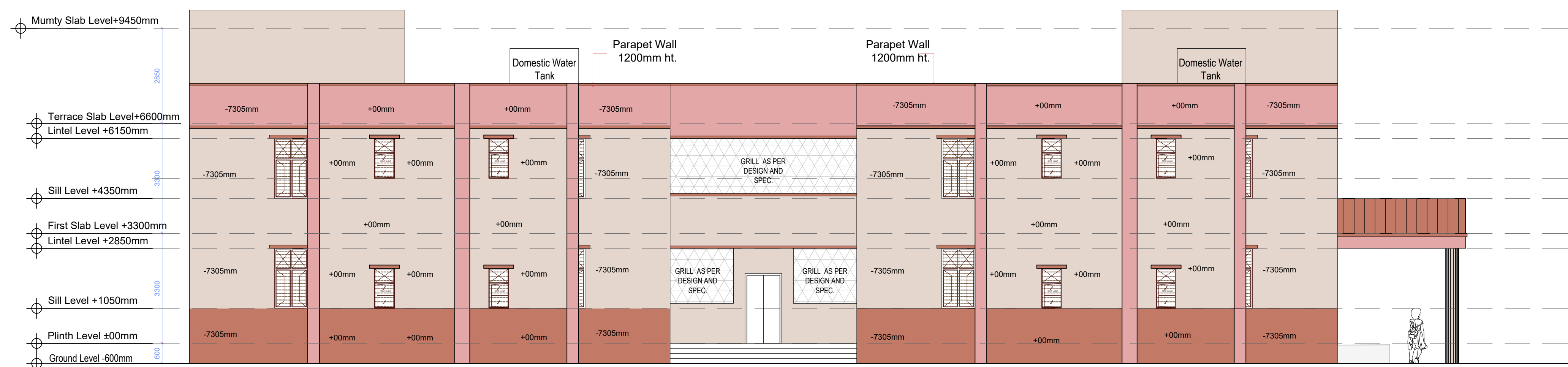
DATE - 09 MARCH 2023



REAR ELEVATION E-05



FRONT SIDE ELEVATION E-04



SIDE ELEVATION E-03

N.K.
(NARENDRA KUMAR)

pk approval 10.3.23
(Approved Approval)

Leant 13/3/23
(R.K. Gang)

2nd SS 13/3/2023.
(SANDEEP SOOD)

A.P.K.

A D P Keshri
Chief Technical Consultant

CATEGORY : GIRLS HOSTEL

DRAWING TITLE : ELEVATION

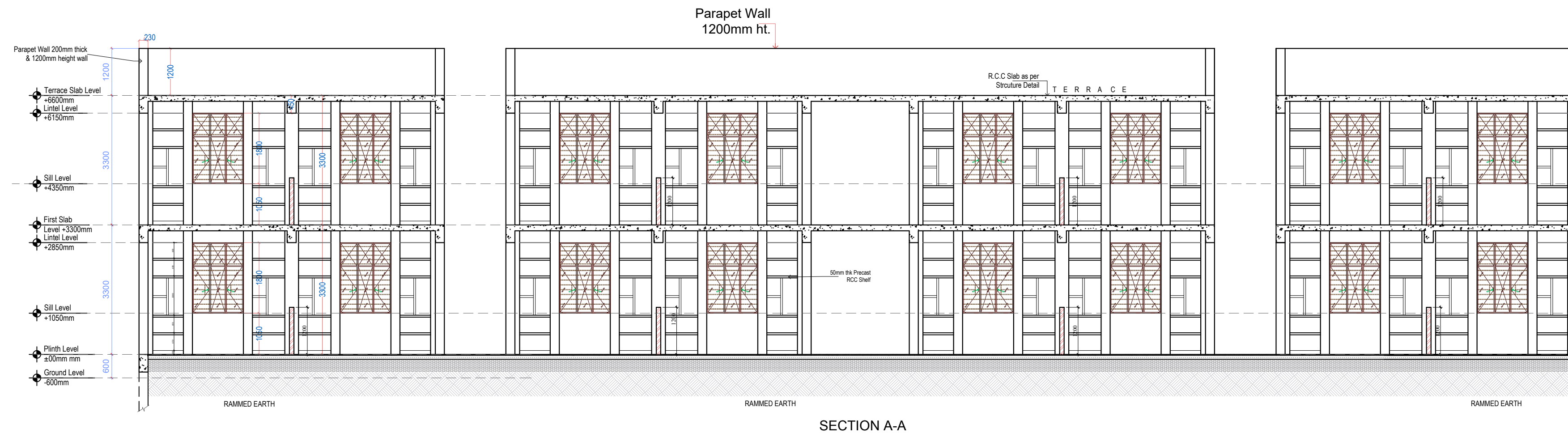
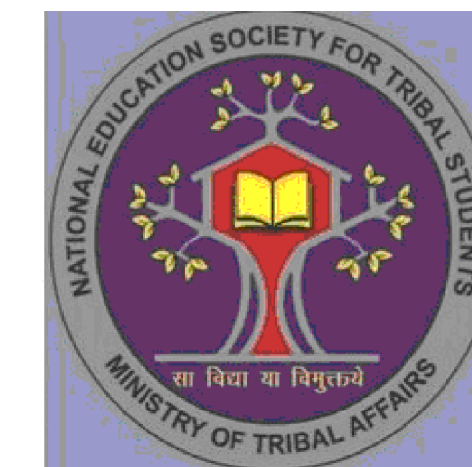
DWG. NO.-
EMRS NAME/GH/AR_05

DATE - 09 MARCH 2023

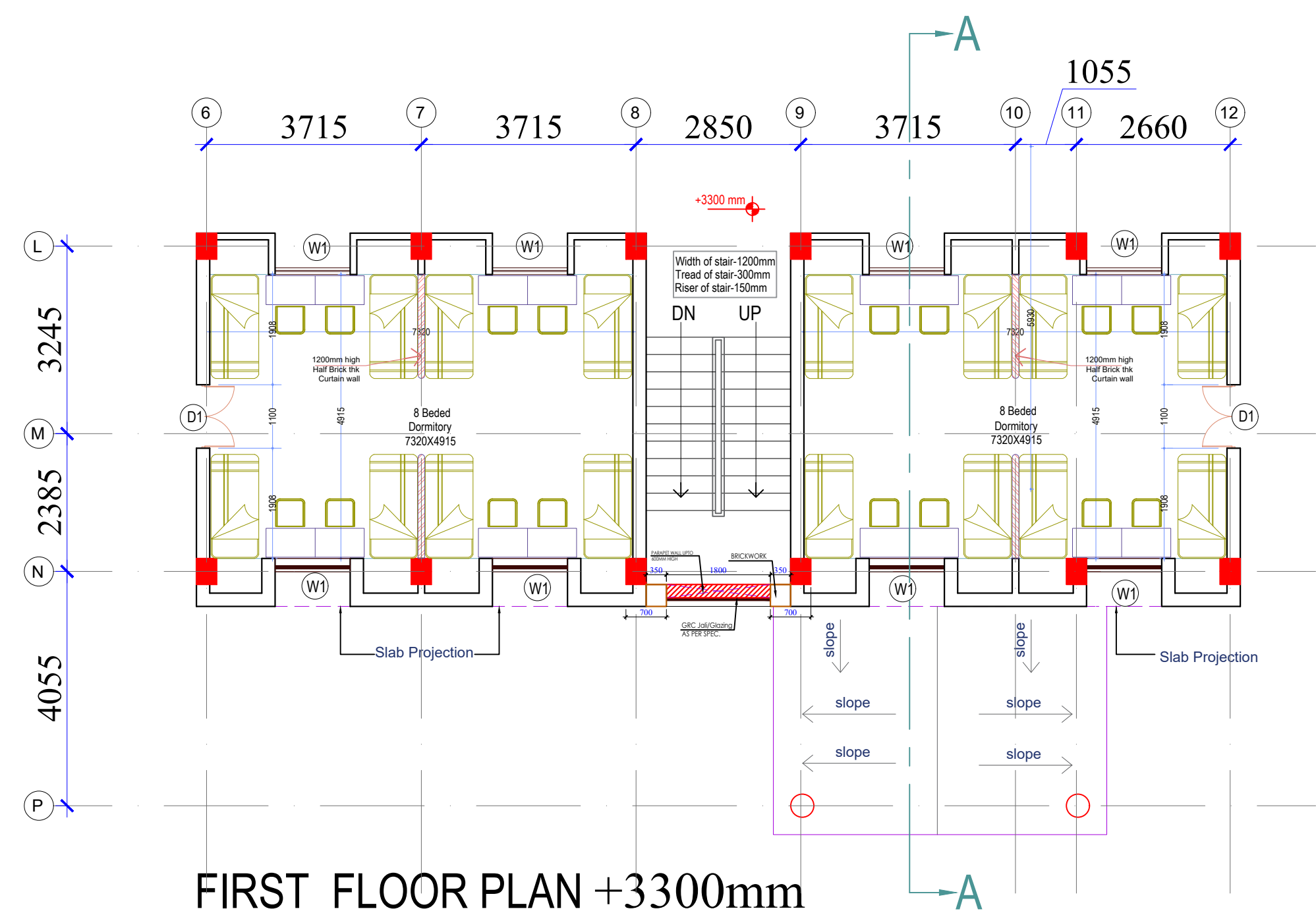
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

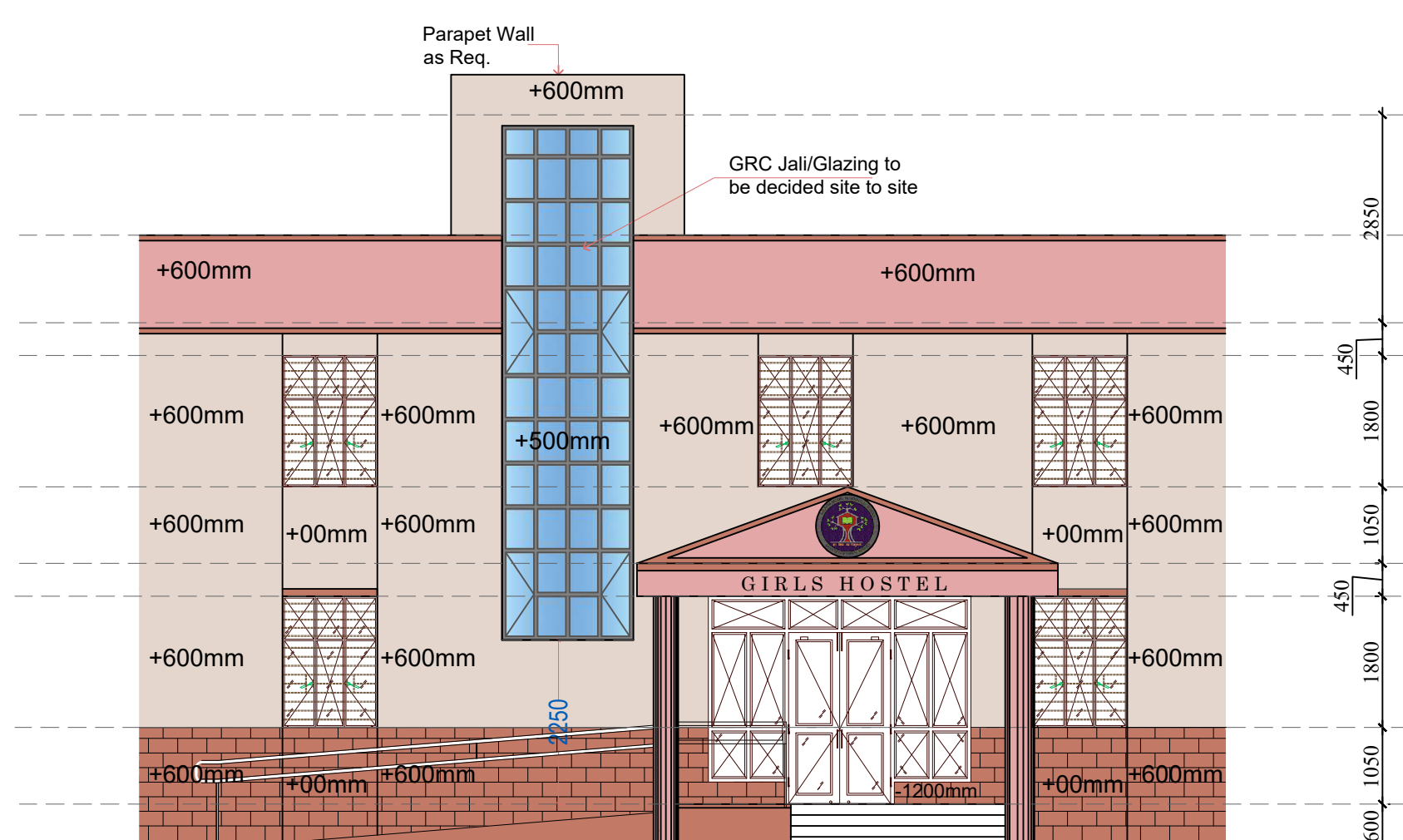
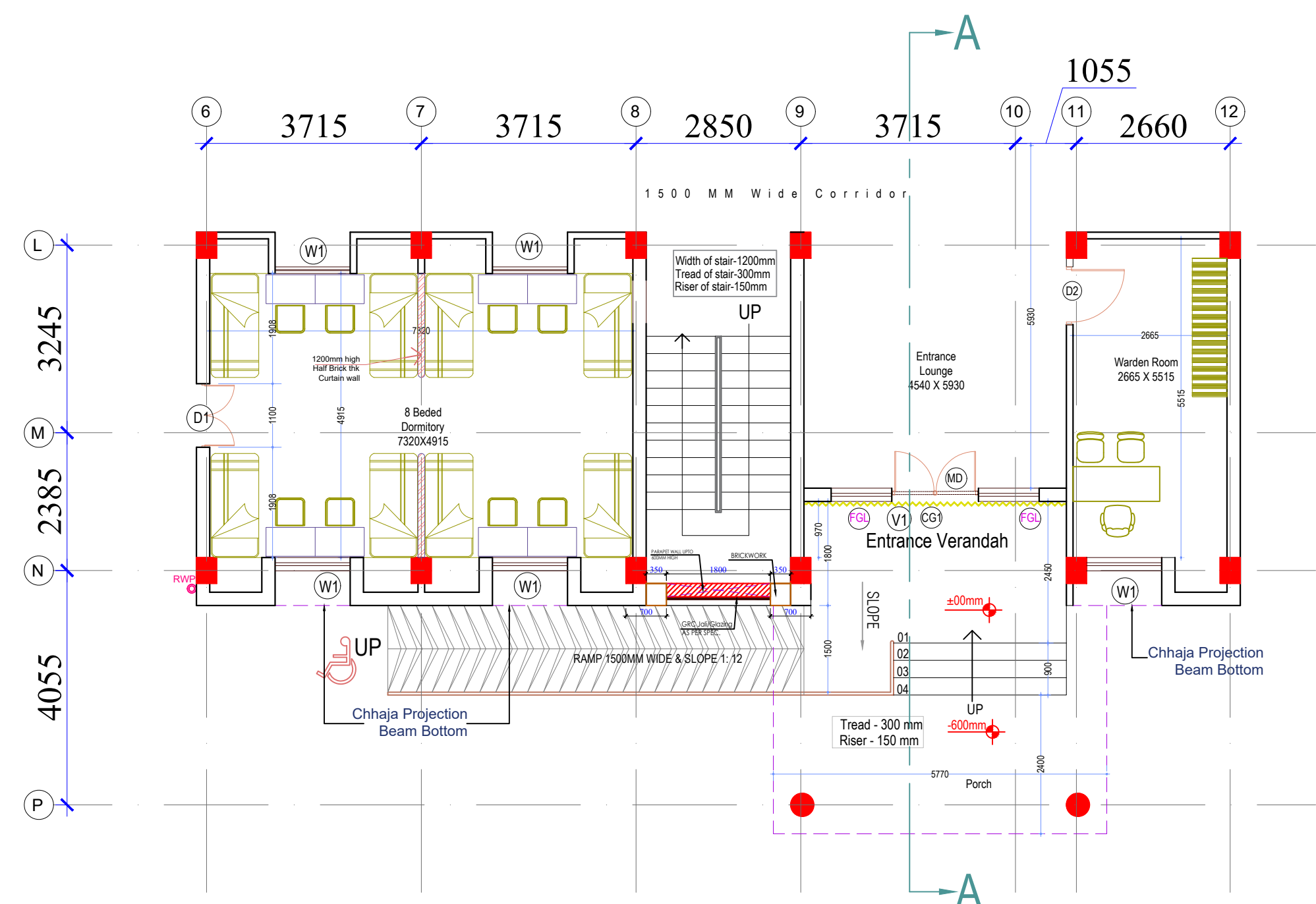
GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



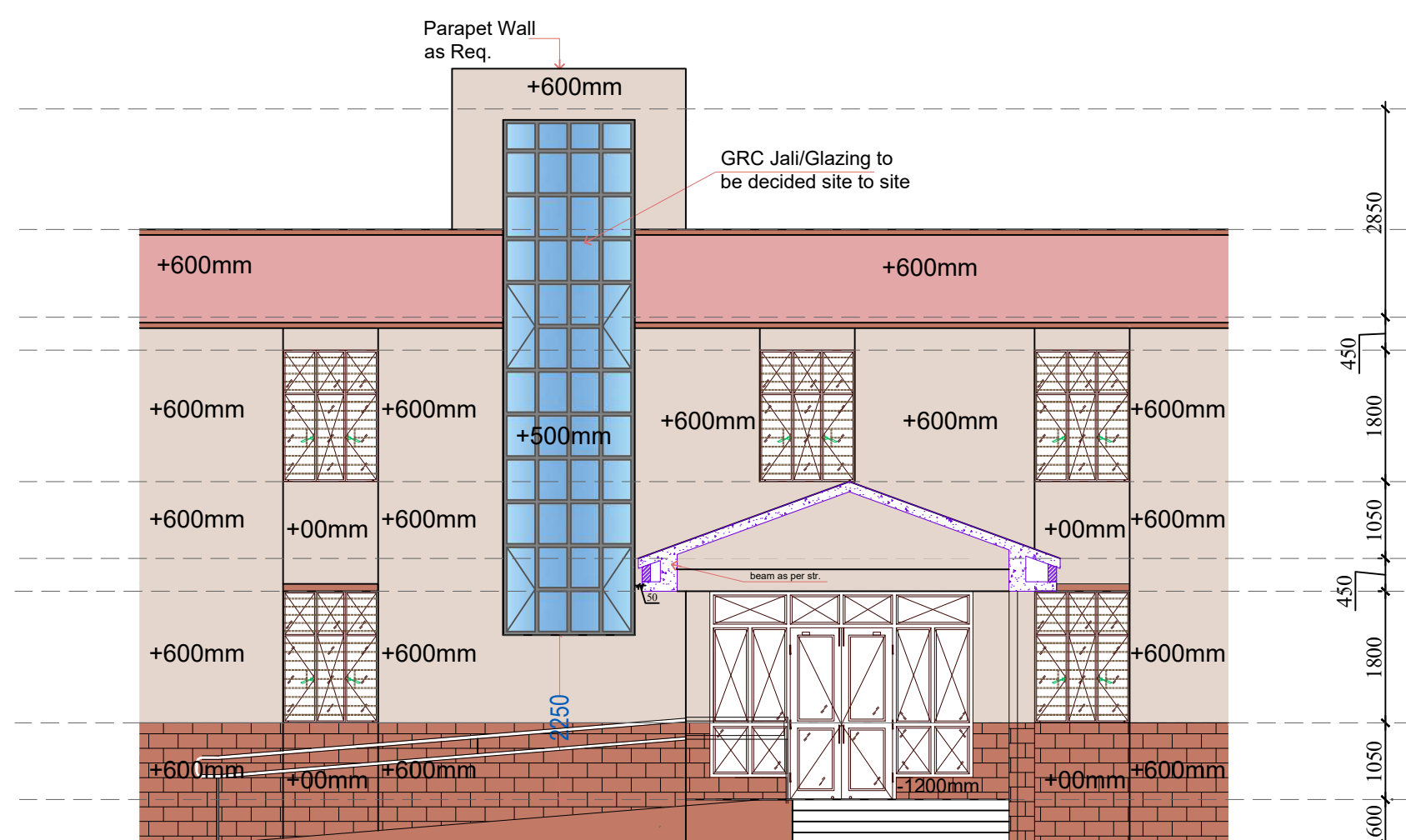
SECTION A-A



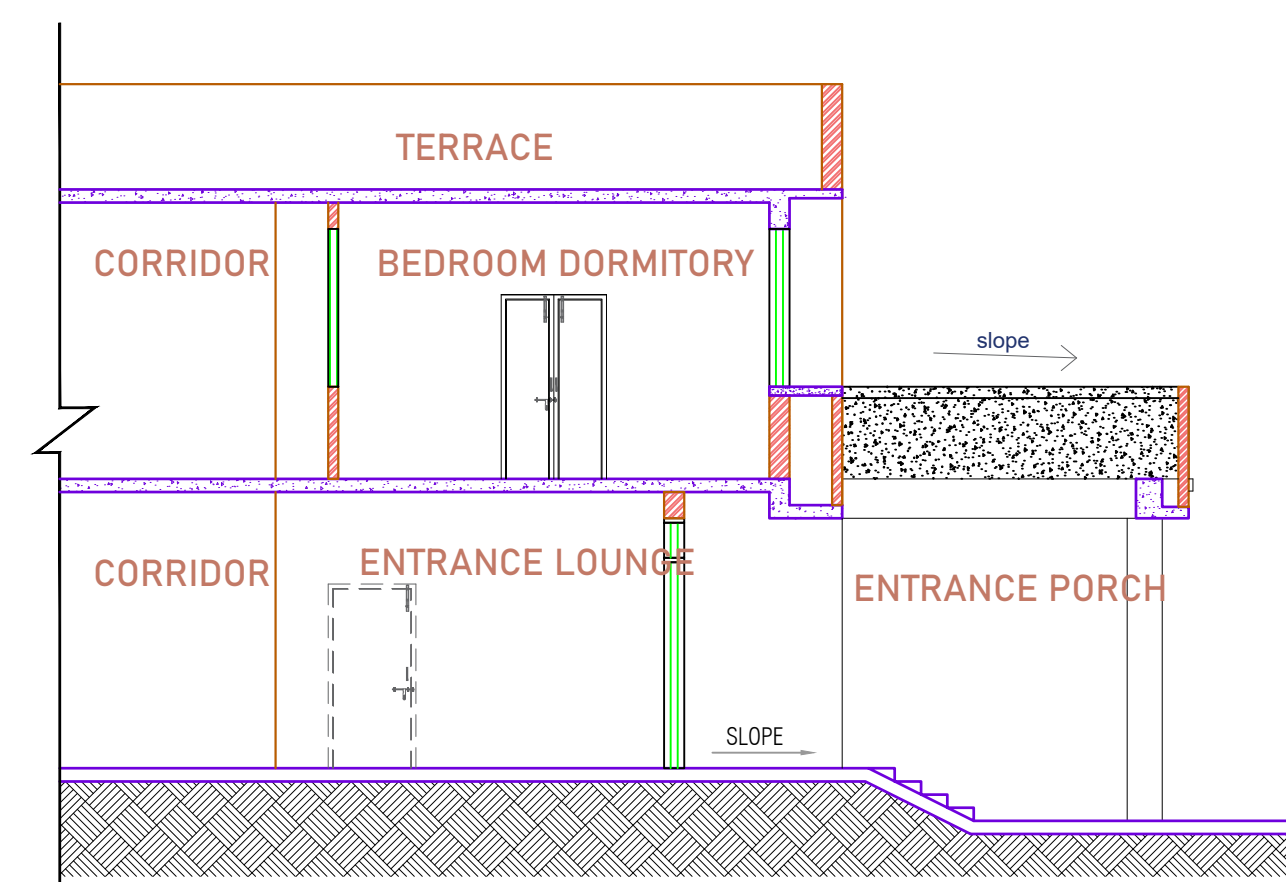
FIRST FLOOR PLAN +3300mm



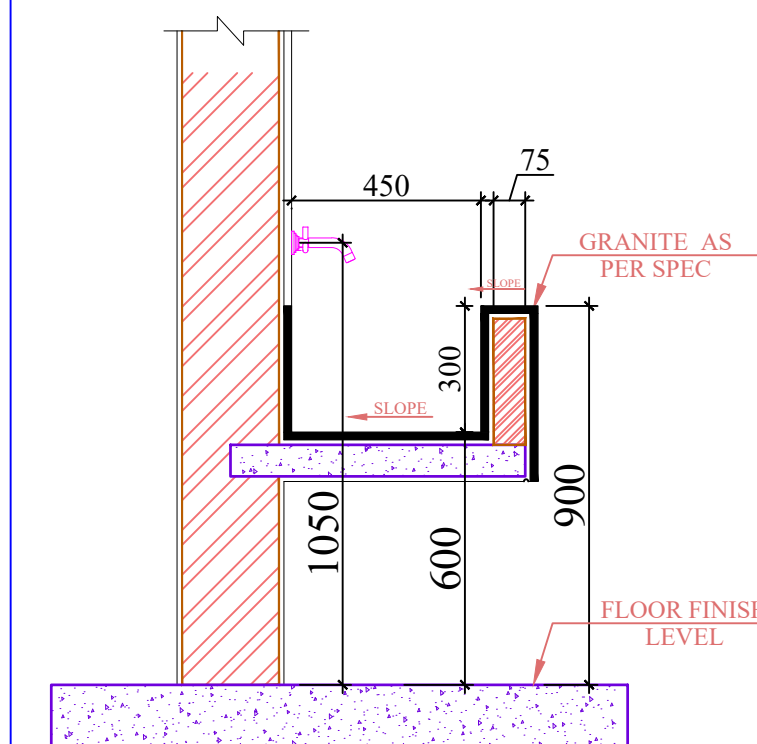
FRONT ELEVATION



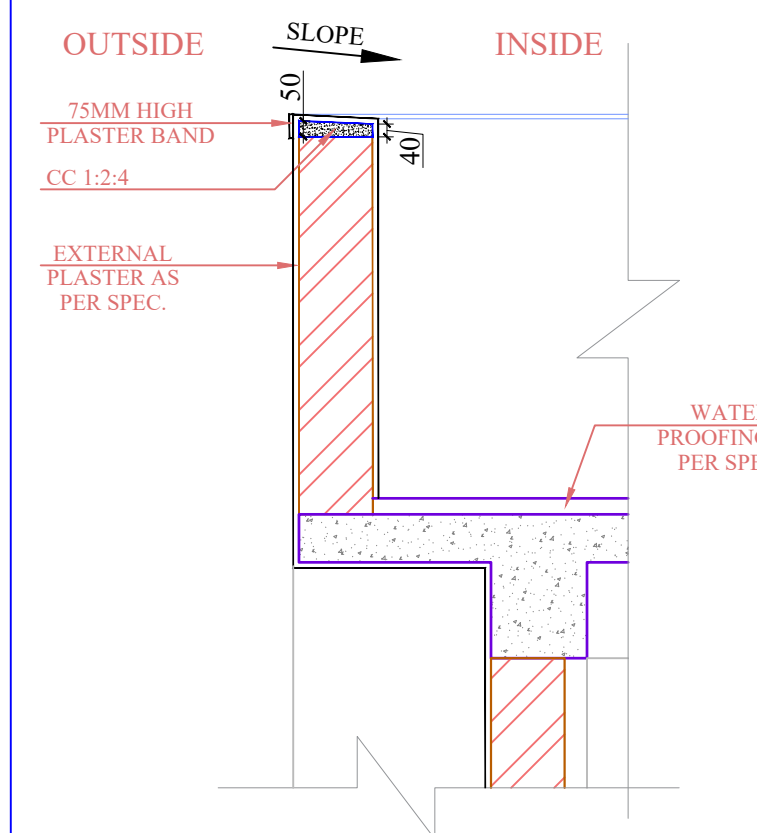
FRONT ELEVATION



SECTIONAL VIEW A-A



TROUGH TYPICAL SECTION



TERRACE PARAPET WALL TYPICAL COPING DETAIL

N.K.
(NARENDRA KUMAR)
p.k. Approval 10.3.23
(Pranod Approval)
13/3/23
(R.K. Gang)
8-11-23
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : GIRLS HOSTEL

DRAWING TITLE : SECTION & PORCH DETAIL

DWG. NO.- EMRS NAME/GH/AR_06

DATE - 09 MARCH 2023

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



NOTES -

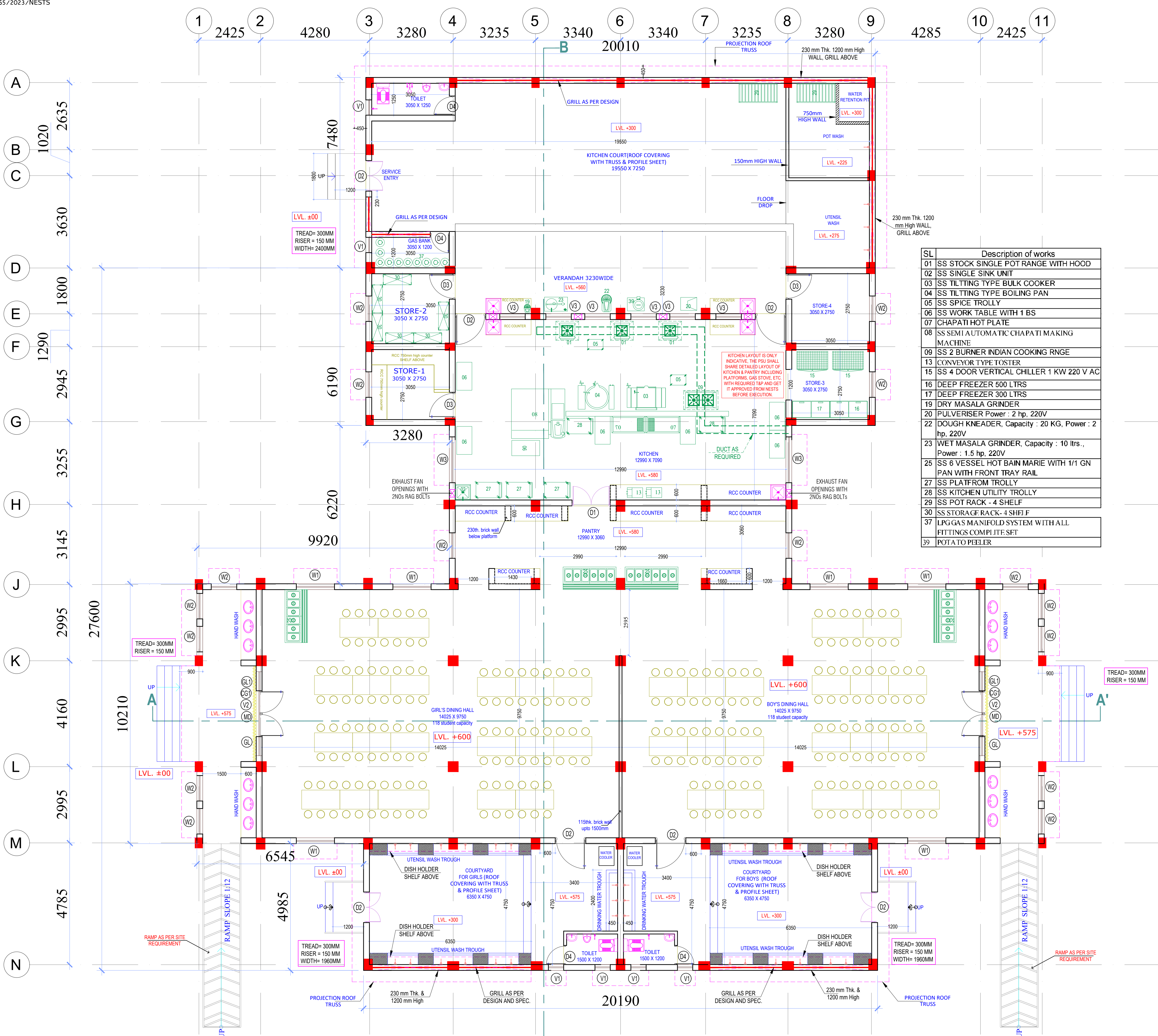
FRONT ENTRANCE RAMP SHALL BE AS PER SITE

EXHAUST FAN OPENINGS WITH 2NOs RAG BOLTS

Area - 550 Sq. Mt.

KITCHEN AND DINING BLOCK DOOR, WINDOW, VENTILATOR, FIXED GLAZING SCHEDULE

TAG	CLEAR OPENING SIZE	SILL	UNTEL	GF	LOCATION	MATERIAL	COMMENTS
MD	1800 X 2100	0	2100	2	MAIN ENTRANCE	ALUMINIUM	DOUBLE SHUTTER
D1	1500 X 2100	0	2100	1	PANTRY	FLUSH DOOR	DOUBLE SHUTTER
D2	1200 X 2100	0	2100	2	FRONT UTENSILS WASH AREA	FACTORY PRESSED LAMINATED DOOR	DOUBLE SHUTTER
D2	1200 X 2100	0	2100	1	REAR KITCHEN COURTYARD	GRILL DOOR	DOUBLE SHUTTER
D2	1200 X 2100	0	2100	4	KITCHEN, DINING HALL	FLUSH DOOR	SINGLE SHUTTER
D3	1000 X 2100	0	2100	3	STORE ROOM	FLUSH DOOR	SINGLE SHUTTER
D4	750 X 2100	0	2100	3	WC DOOR	PRELAMINATED DOOR	SINGLE SHUTTER
D4	750 X 2100	0	2100	1	GAS BANK	GRILL DOOR	SINGLE SHUTTER
CG1	3760 X 2100	0	2100	2	MAIN ENTRANCE		COLLAPSIBLE GATE
W1	1500 X 1800	750	2550	10	DINING HALL	STEEL GLAZED WINDOW	
W2	1000 X 1800	750	2550	16	ENTRANCE LOBBY, PANTRY, STORE	STEEL GLAZED WINDOW	
W3	1600 X 1650	900	2550	2	KITCHEN	STEEL GLAZED WINDOW	
GL1	750 X 2250	300	2550	4	MAIN ENTRANCE	ALUMINIUM	FIXED GLAZING
V1	600 X 900	1650	2550	6	TOILET	STEEL SECTION	
V2	1800 X 450	2100	2550	2	MAIN ENTRANCE	ALUMINIUM	
V3	1000 X 900	2100	BOB	6	KITCHEN	STEEL SECTION	FIXED GLAZING



SL	Description of works
01	SS STOCK SINGLE POT RANGE WITH HOOD
02	SS SINGLE SINK UNIT
03	SS TILTING TYPE BULK COOKER
04	SS TILTING TYPE BOILING PAN
05	SS SPICE TROLLEY
06	SS WORK TABLE WITH 1 BS
07	CHAPATI HOT PLATE
08	SS SEMI AUTOMATIC CHAPATI MAKING MACHINE
09	SS 2 BURNER INDIAN COOKING RANGE
13	CONVEYOR TYPE TOSTER
15	SS 4 DOOR VERTICAL CHILLER 1 KW 220 V AC
16	DEEP FREEZER 500 LTRS
17	DEEP FREEZER 300 LTRS
19	DRY MASALA GRINDER
20	PULVERISER Power : 2 hp, 220V
22	DOUGH KNEADER, Capacity : 20 KG, Power : 2 hp, 220V
23	WET MASALA GRINDER, Capacity : 10 Ltrs., Power : 1.5 hp, 220V
25	SS 6 VESSEL HOT BAIN MARIE WITH 1/1 GN PAN WITH FRONT TRAY RAIL
27	SS PLATFORM TROLLEY
28	SS KITCHEN UTILITY TROLLEY
29	SS POT RACK - 4 SHELF
30	SS STORAGE RACK - 4 SHELF
37	LPG GAS MANIFOLD SYSTEM WITH ALL FITTINGS COMPLETE SET
39	POTATO PEELER

(NARENDRA KUMAR)
plg approved 10.3.23 (Prasad Approval)
locmt 13/4/23 (Pk Gang)
2nd ss 13/3/2023 (SANDEEP SOOD)

A.P. Keshri
A D P Keshri
Chief Technical Consultant

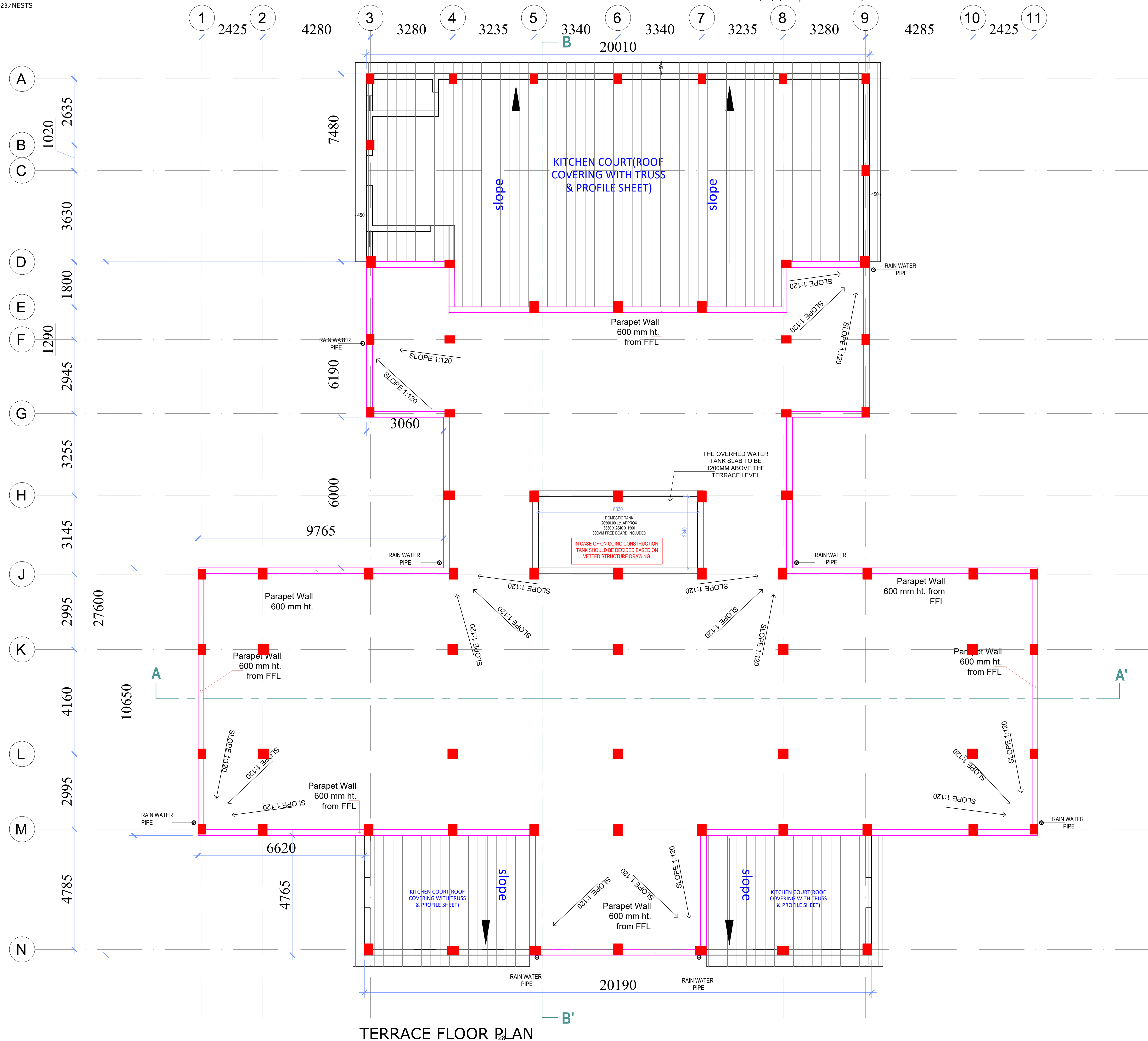
GROUND FLOOR PLAN

CATEGORY : KITCHEN & DINING BLOCK

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO. - EMRS NAME/K&D/AR_01

DATE - 09 MARCH 2023



TERRACE FLOOR PLAN

N.K.
(NARENDRA KUMAR)

pk Approved 10.3.23
(Prasad Approved)

Count 13/1/23
(R.K. Gang)

2nd SS 13/3/2023.
(SANDEEP SOOD)

A.P.K.

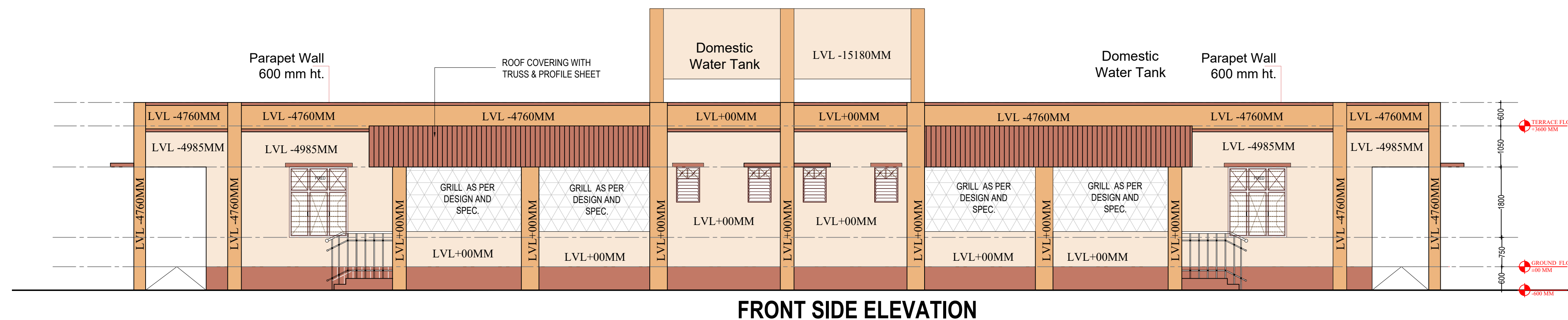
A D P Keshri
Chief Technical Consultant

CATEGORY : KITCHEN & DINING BLOCK

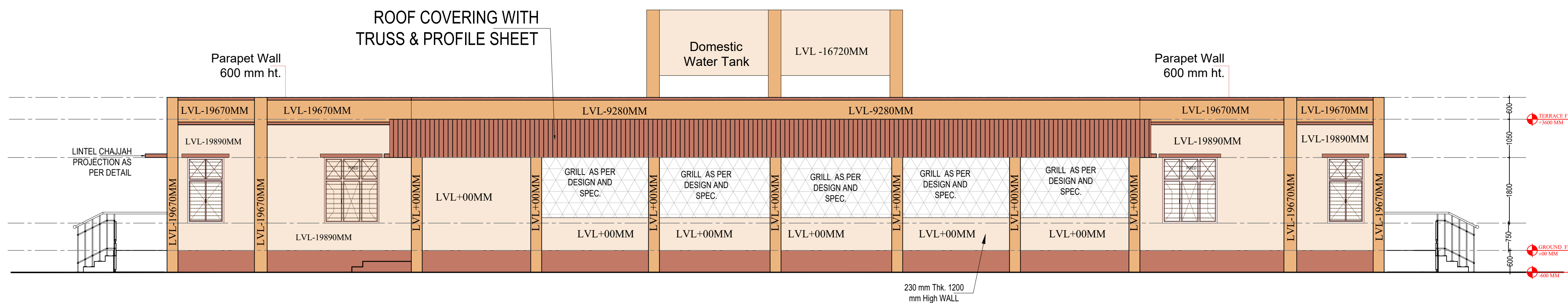
DRAWING TITLE : TERRACE FLOOR PLAN

DWG. NO.-
EMRS NAME/K&D/AR_02

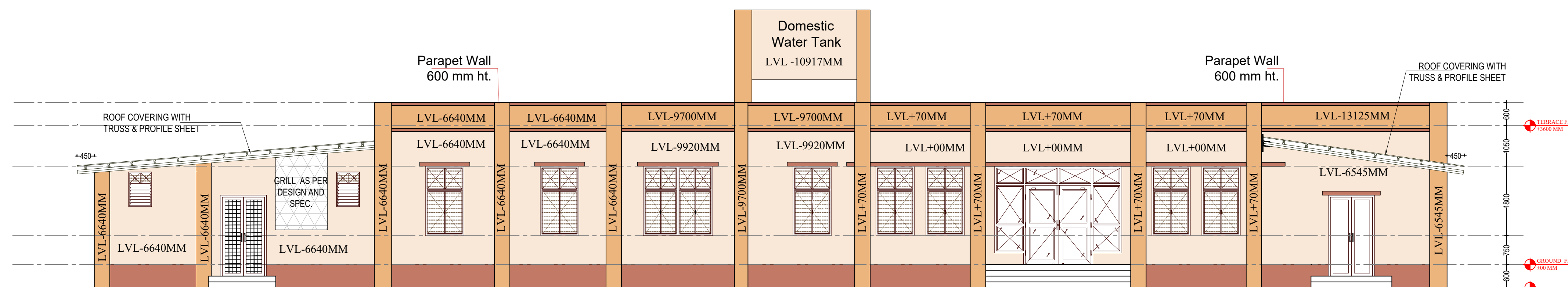
DATE - 09 MARCH 2023



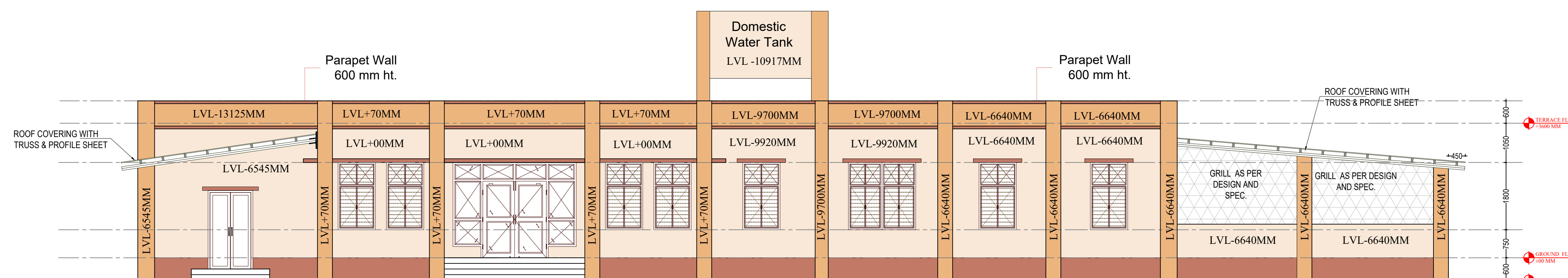
FRONT SIDE ELEVATION



REAR SIDE ELEVATION



GIRLS ENTRY SIDE ELEVATION



BOYS ENTRY SIDE ELEVATION

N.K.
(NARENDRA KUMAR)
pk approval 10.3.23
(Pranod Approval)
Count 13/1/23
(R.K. Gang)
2nd SS 13/3/2023.
(SANDEEP SOOD)

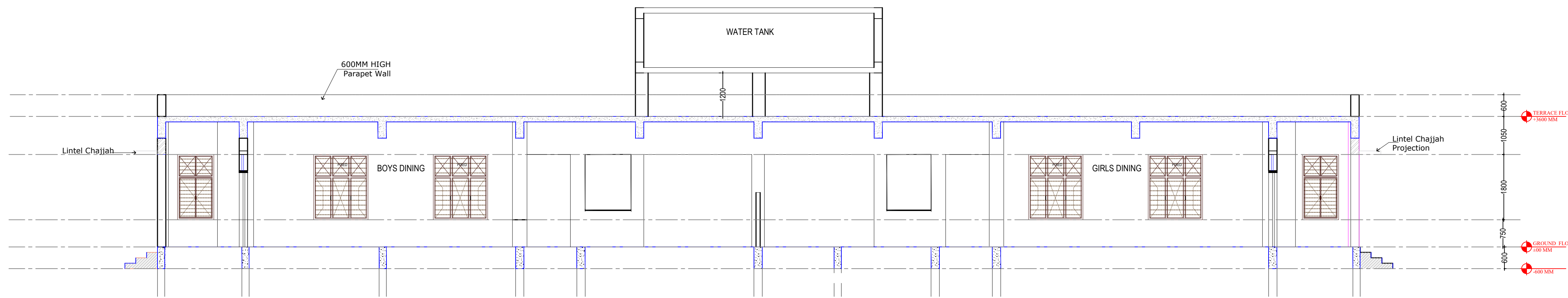
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : KITCHEN & DINING BLOCK

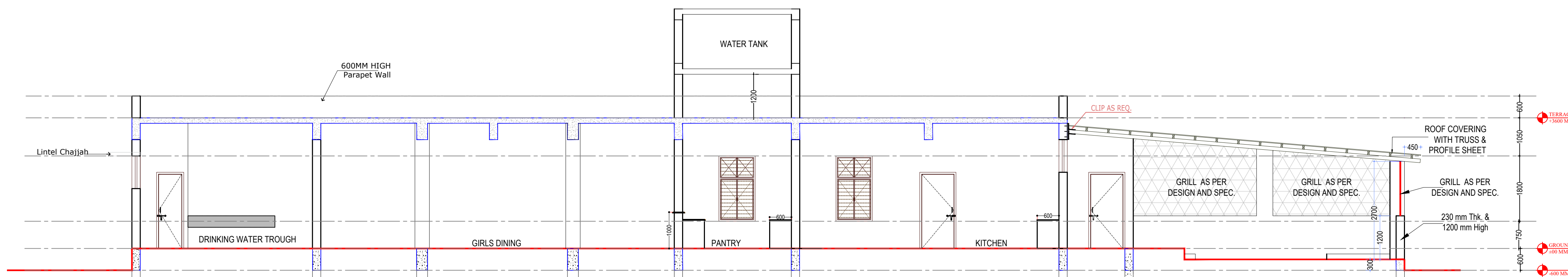
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DWG. NO.-
EMRS NAME/K&D/AR_03

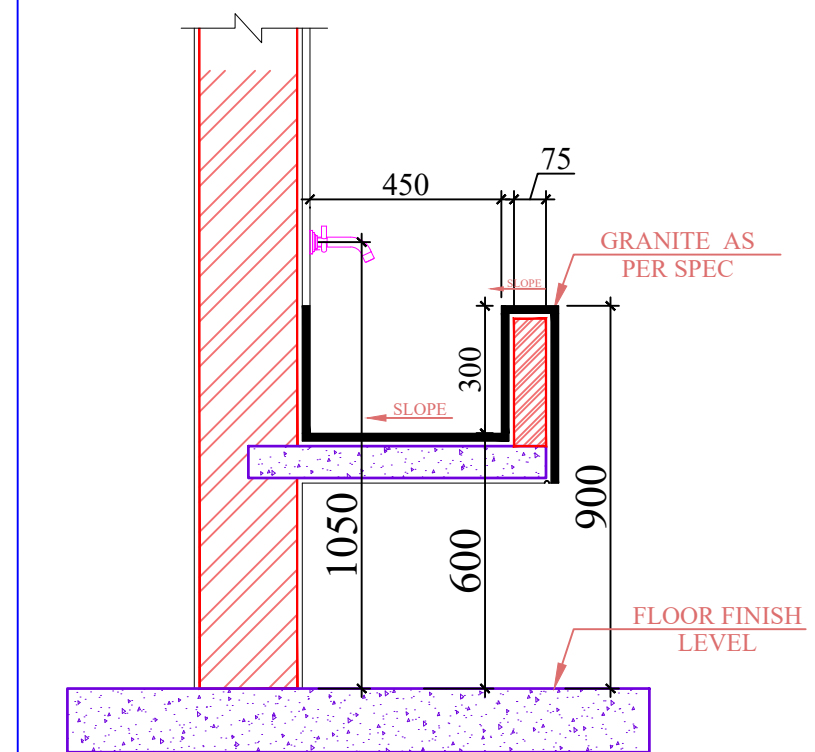
DATE - 09 MARCH 2023



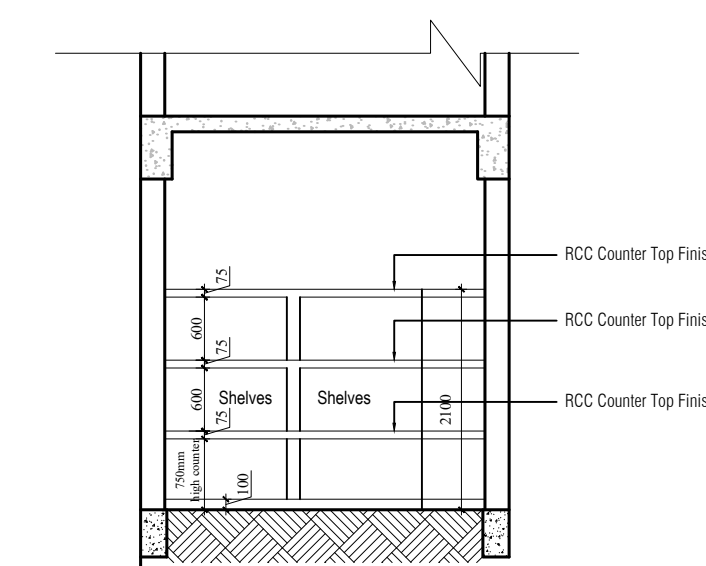
SECTION - AA



SECTION - BB



TROUGH TYPICAL SECTION



Store RCC 850mm high counter SHELF ABOVE

N.K.
(NARENDRA KUMAR)
P.K. Agrawal
(Pranav Agrawal)
10.3.23
(R.K. Gang)
13/3/2023
(SANDEEP SOOD)

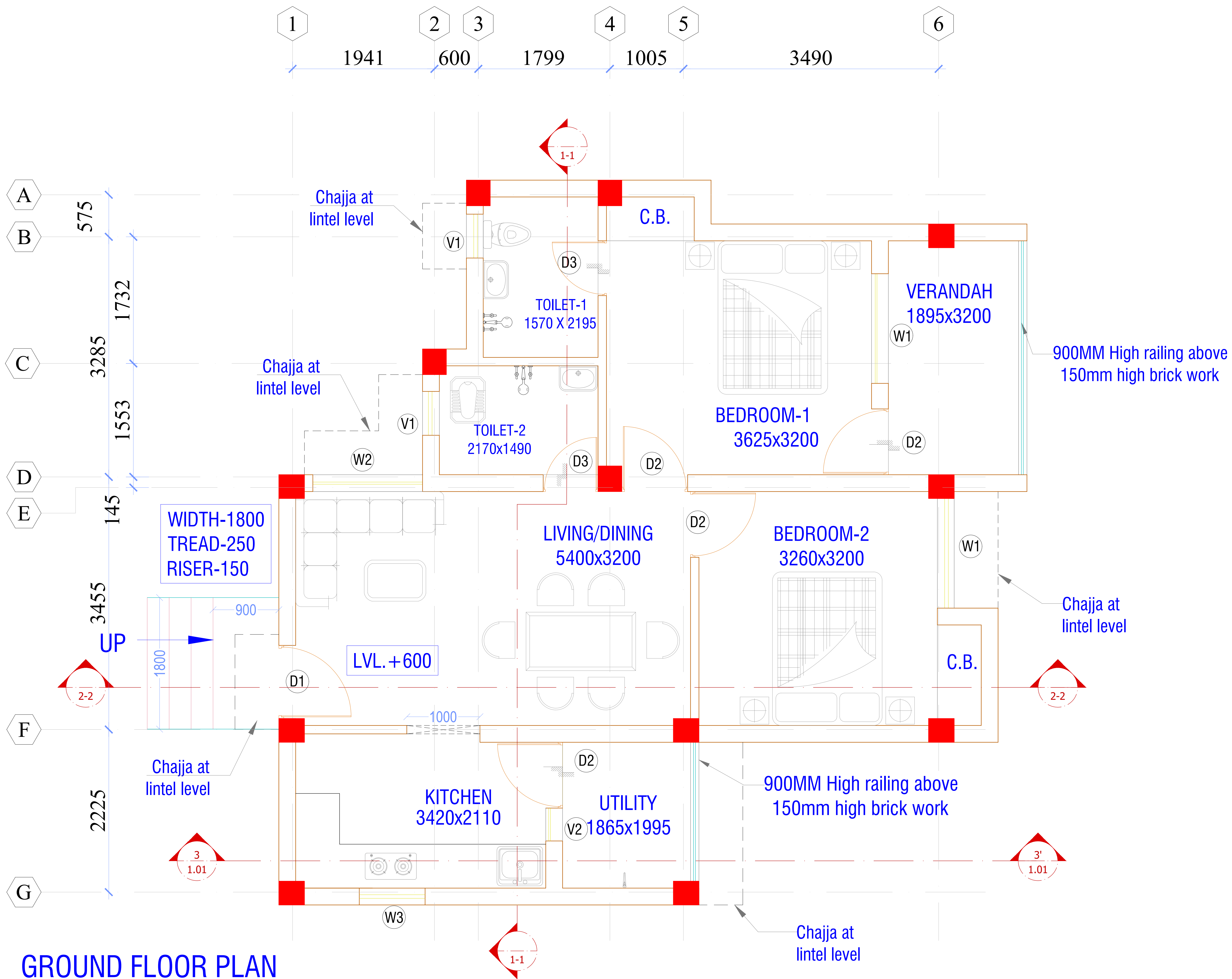
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : KITCHEN & DINING BLOCK

DRAWING TITLE : SECTION AA/BB


DWG. NO.-
EMRS NAME/K&D/AR_04

DATE - 09 MARCH 2023



GROUND FLOOR PLAN

PROJECT - EMRS
 CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)
 CLIENT -
GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



WARDEN RESIDENCE						
DOOR	WINDOW	VENTILATOR	FIXED GLAZING	GRILL	SCHEDULE	
TAG	CLEAR OPENING SIZE	SILL	LINTEL	GF	LOCATION	COMMENTS
D1	1000 X 2100	0	2100	1	MAIN ENTRANCE	FLUSH DOOR SINGLE LEAF
D2	900 X 2100	0	2100	4	BEDROOM BALCONY UTILITY	FLUSH DOOR SINGLE LEAF
D3	750 X 2100	0	2100	2	TOILET	FACTORY PRESSED LAMINATED DOOR SINGLE LEAF
W1	1500 X 1350	750	2100	2	BEDROOM	STEEL GLAZED WINDOW
W2	1500 X 1200	900	2100	1	LIVING ROOM	STEEL GLAZED WINDOW
W3	900 X 1050	1050	2100	1	KITCHEN	STEEL GLAZED WINDOW
V1	600 X 750	1350	2100	2	TOILET	STANDARD STEEL SECTION
V2	450 X 1050	1050	2100	1	KITCHEN	STEEL GLAZED WINDOW

UNIT AREA - 77.25 Sq. Mt.

N.K.
 (NARENDRA KUMAR)
 p.k. Approval 10.12.23
 (Prasad Approval)
 (Kant 13/1/23
 (K. Gang)
 8.11.23
 15/3/2023.
 (SANDEEP SOOD)

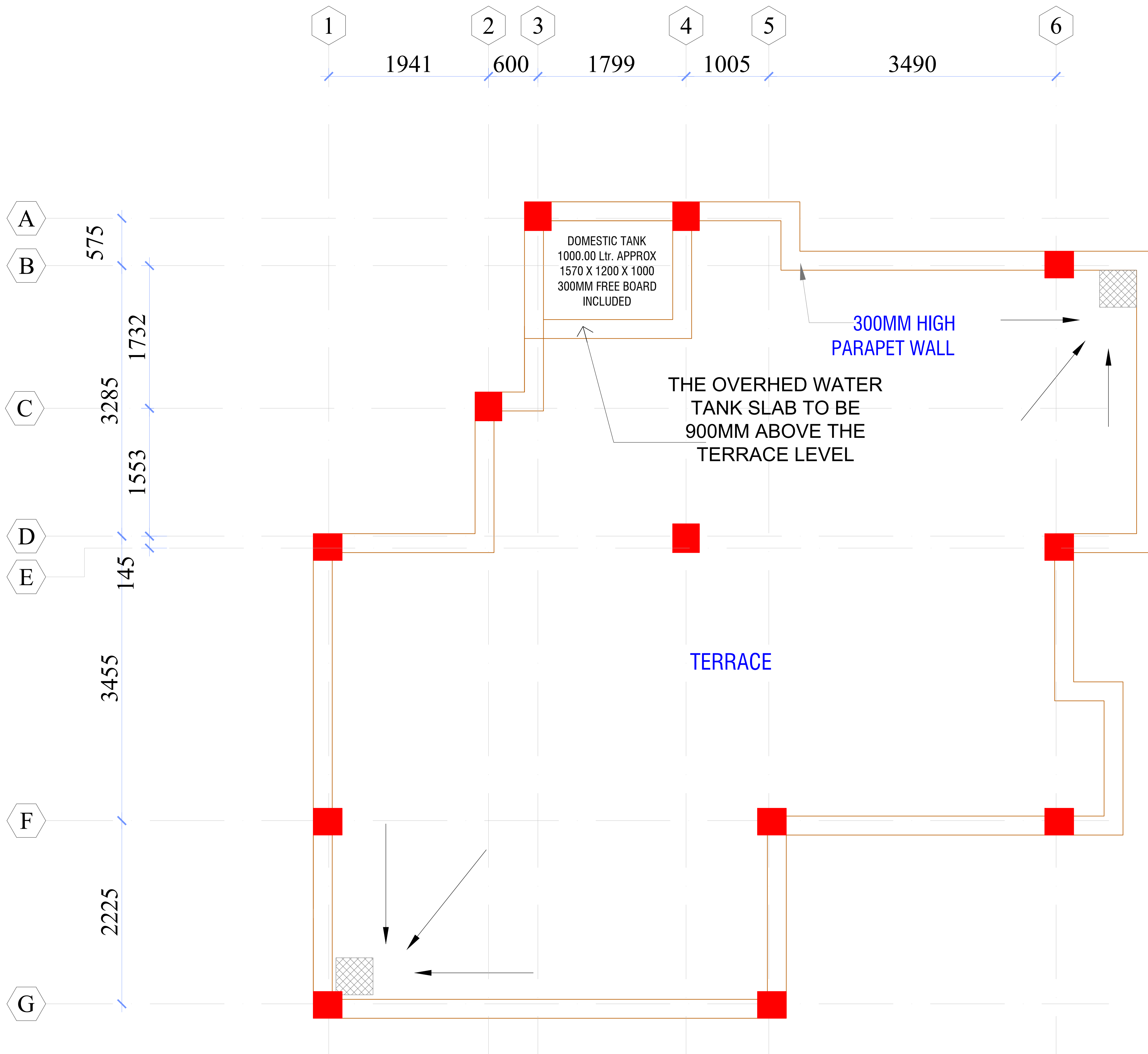
A.P.K.
A D P Keshri
 Chief Technical Consultant

CATEGORY : WARDEN RESIDENCE

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.- EMRS NAME/WR/AR_01

DATE - 09 MARCH 2023



TERRACE FLOOR PLAN

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING
FOR EKLAVYA MODEL RESIDENTIAL
SCHOOL (EMRS)

CLIENT -

**GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION
SOCIETY FOR TRIBAL STUDENTS**

N.K.
(NARENDRA KUMAR)

pk Agrawal 10.3.23
(Approved)

kanu 13/3/23
(K Gang)

S.S. 13/3/23.
(SANDEEP SOOD)

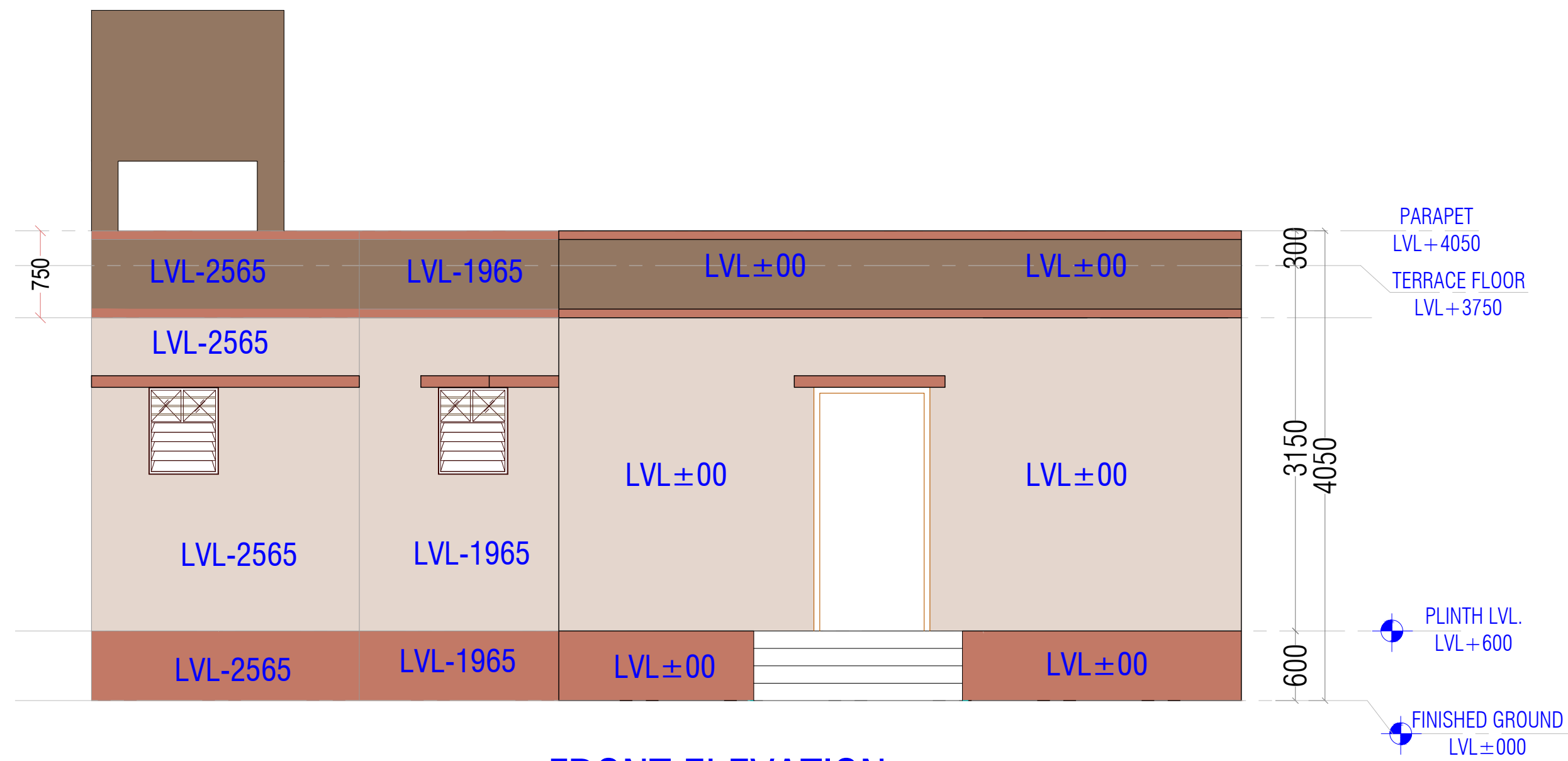
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : WARDEN RESIDENCE

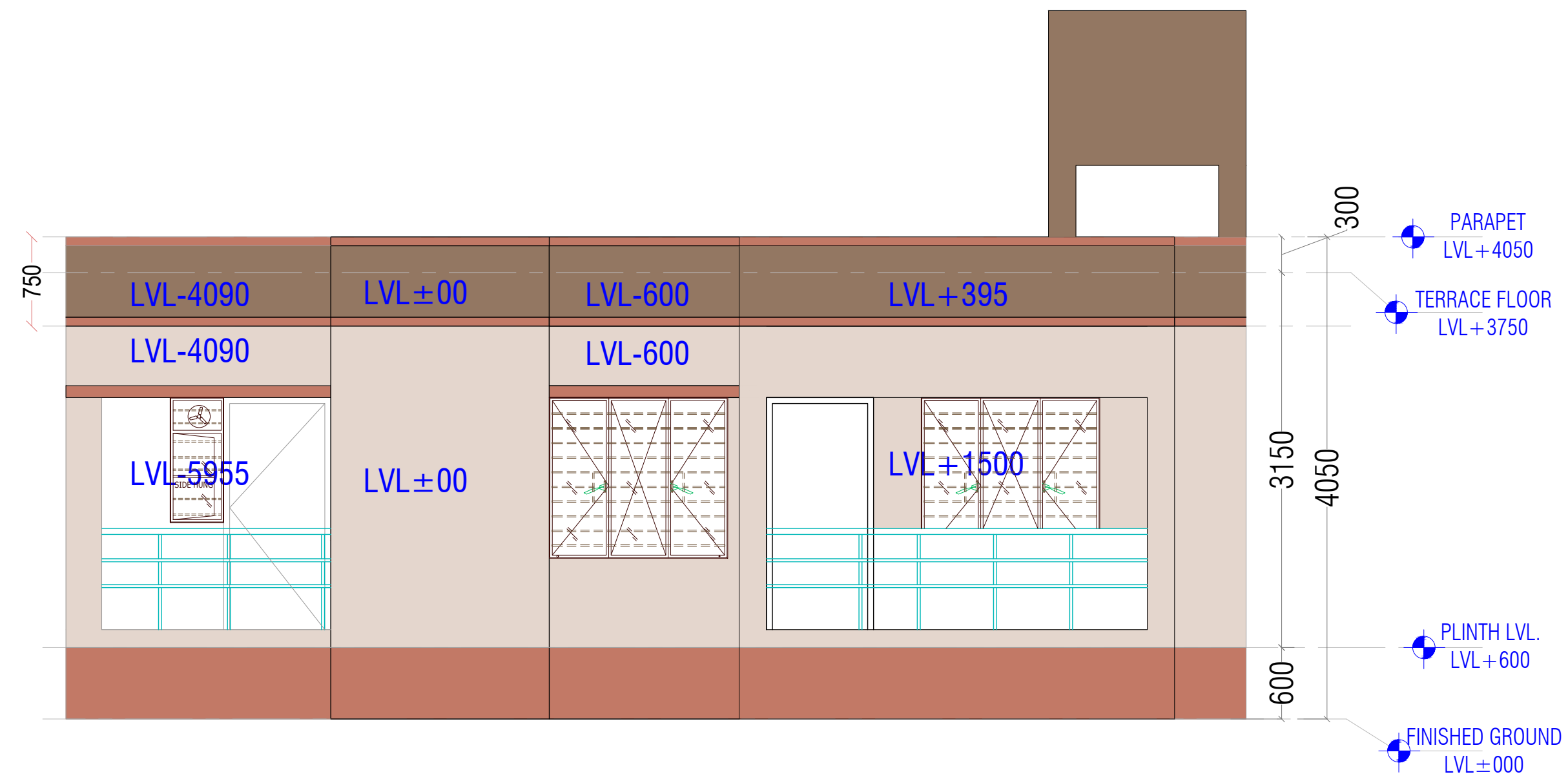
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DWG. NO.-
EMRS NAME/WR/AR_02

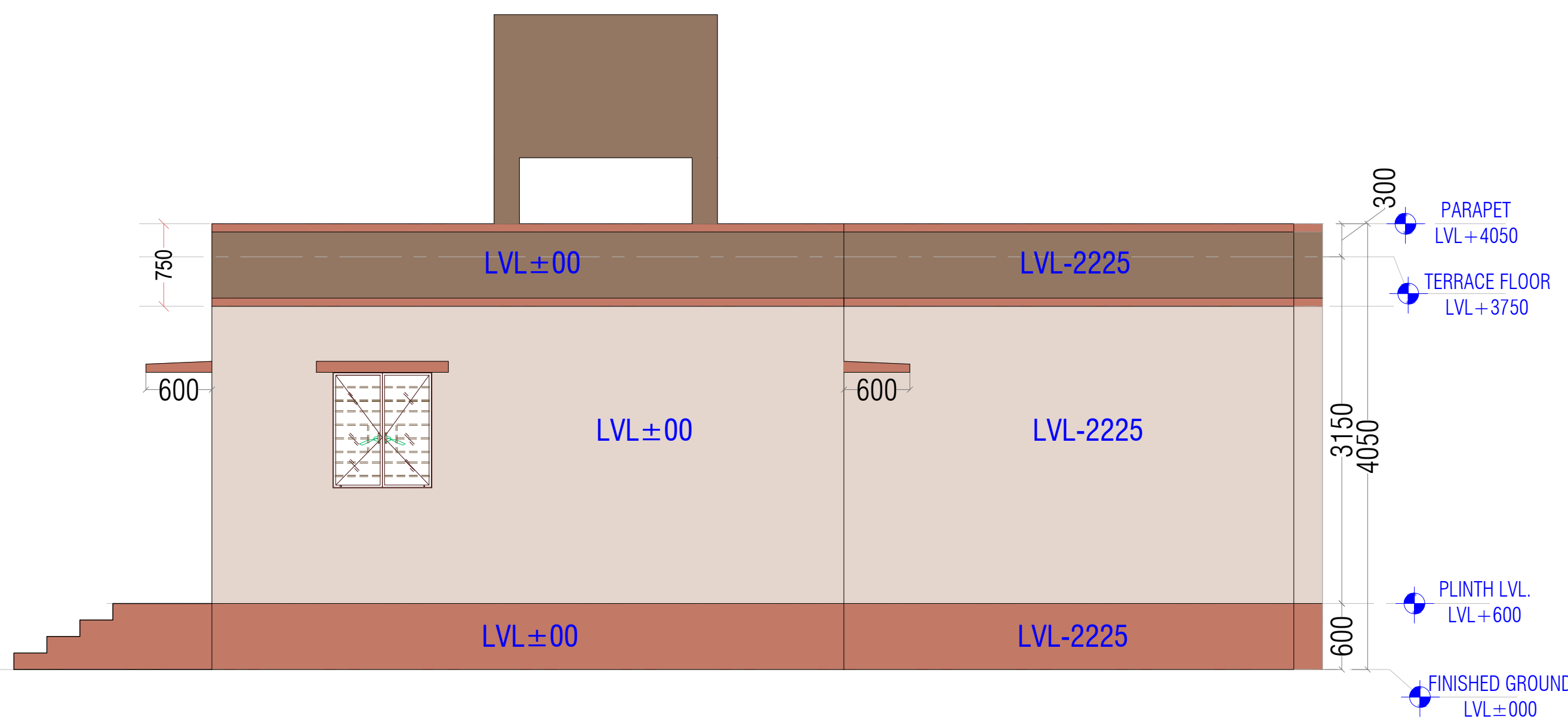
DATE - 09 MARCH 2023



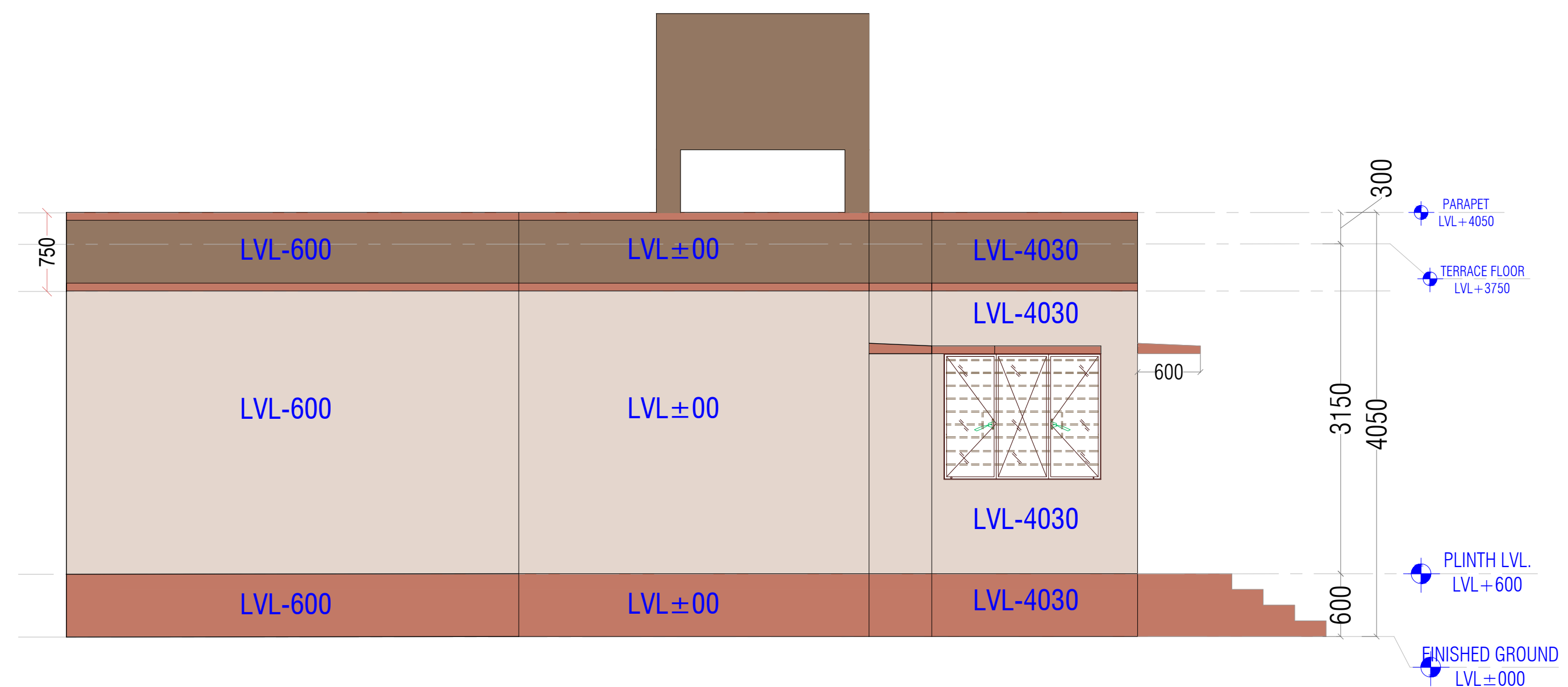
FRONT ELEVATION



BACKSIDE ELEVATION



KITCHEN AND UTILITY SIDE ELEVATION



BEDROOM SIDE ELEVATION

N.K.
(NARENDRA KUMAR)

pk approval 10.3.23
(Approved Approval)

Count 13/3/23
(R.K. Gang)

2nd SS 13/3/2023.
(SANDEEP SOOD)

A.P.K.

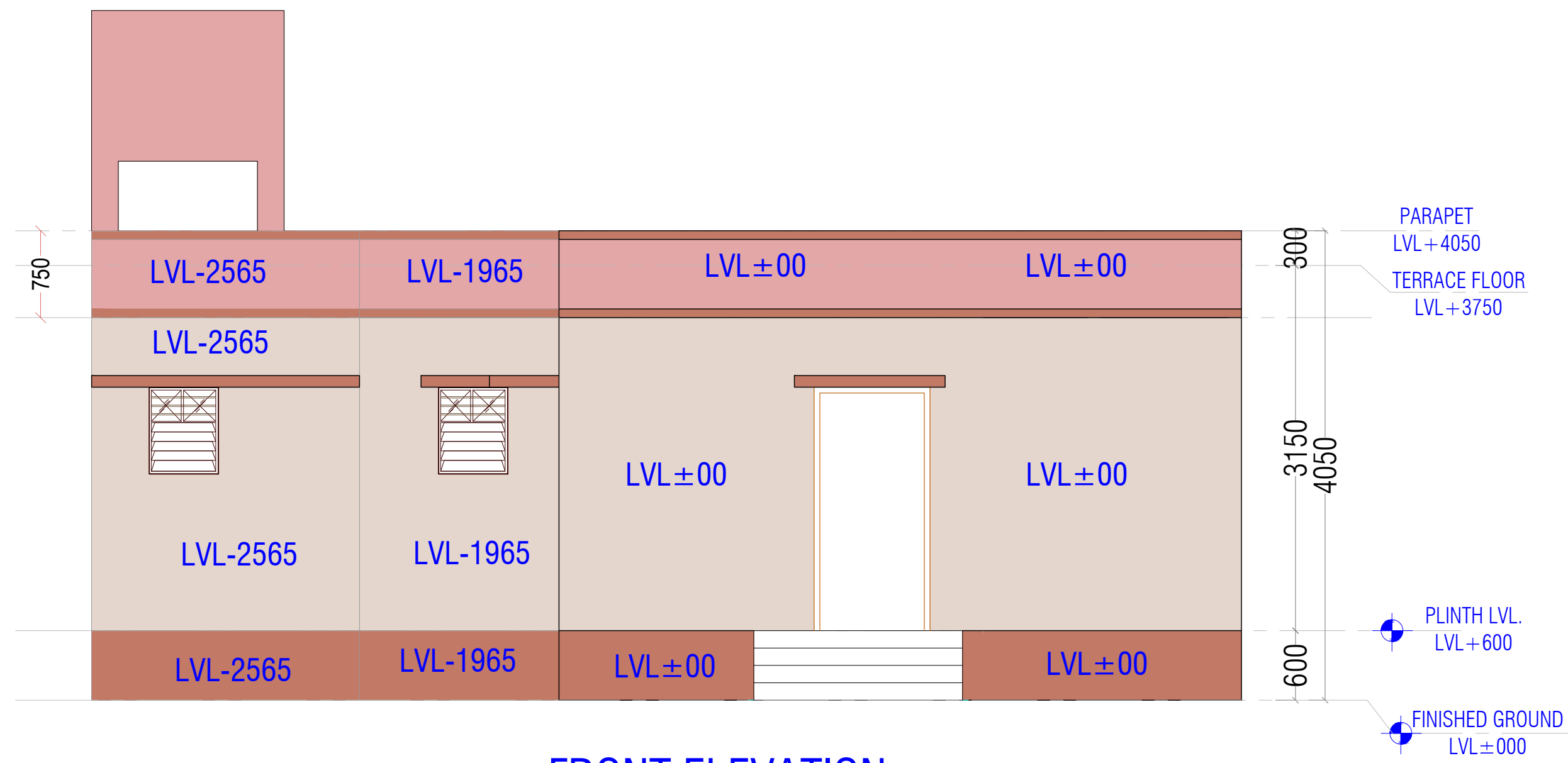
A D P Keshri
Chief Technical Consultant

CATEGORY : BOYS WARDEN RESIDENCE

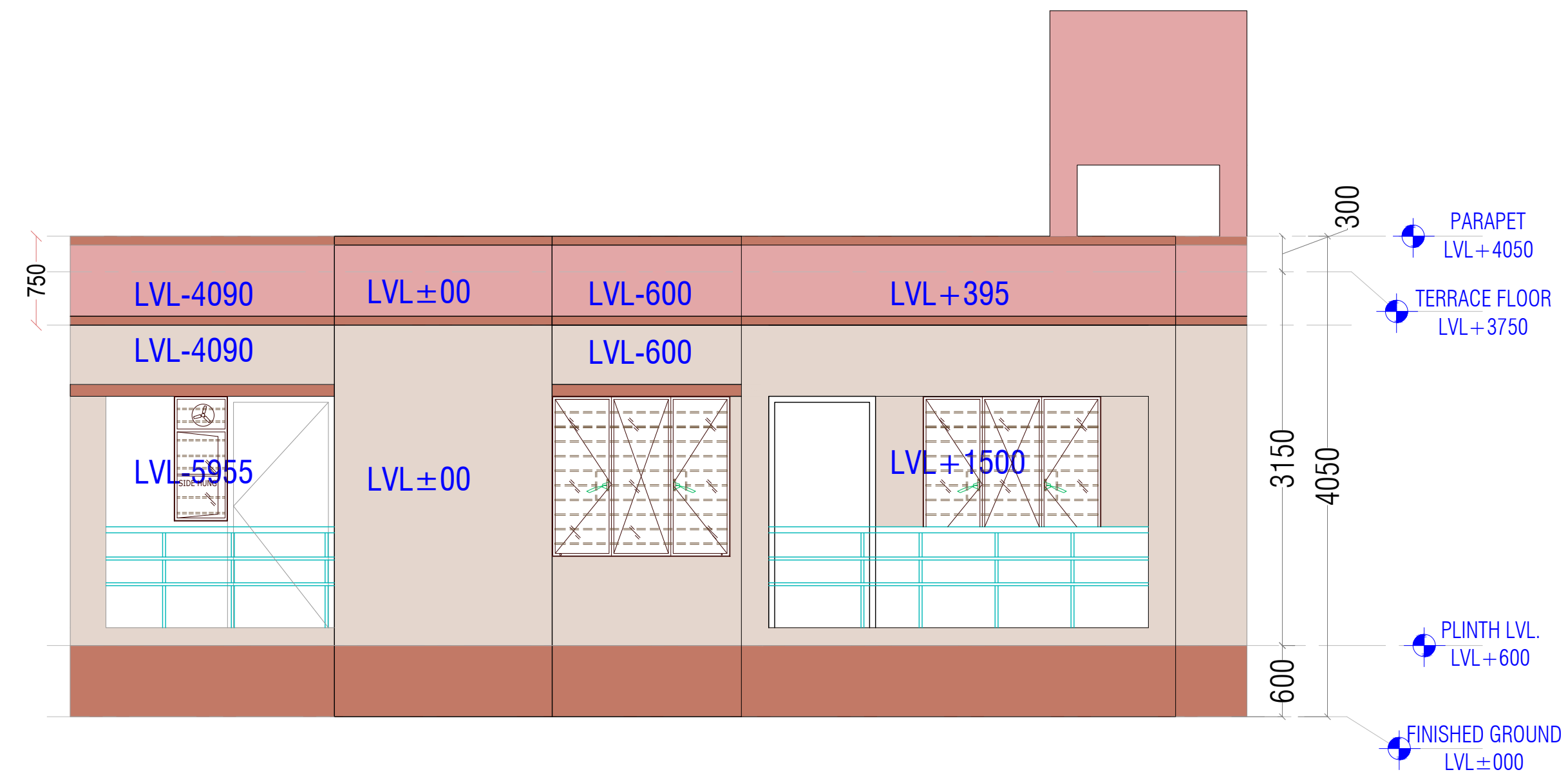
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DWG. NO.-
EMRS NAME/BWR/AR_03

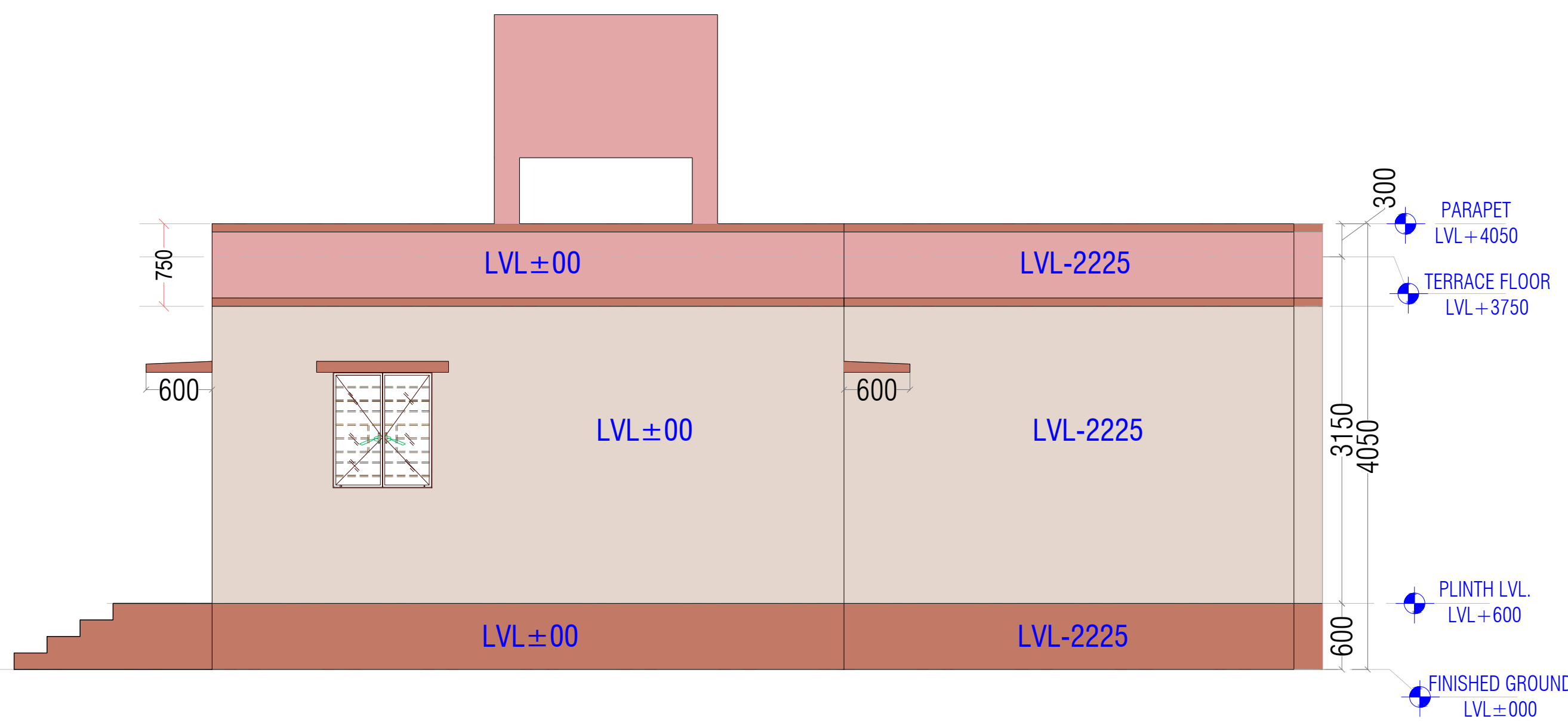
DATE - 09 MARCH 2023



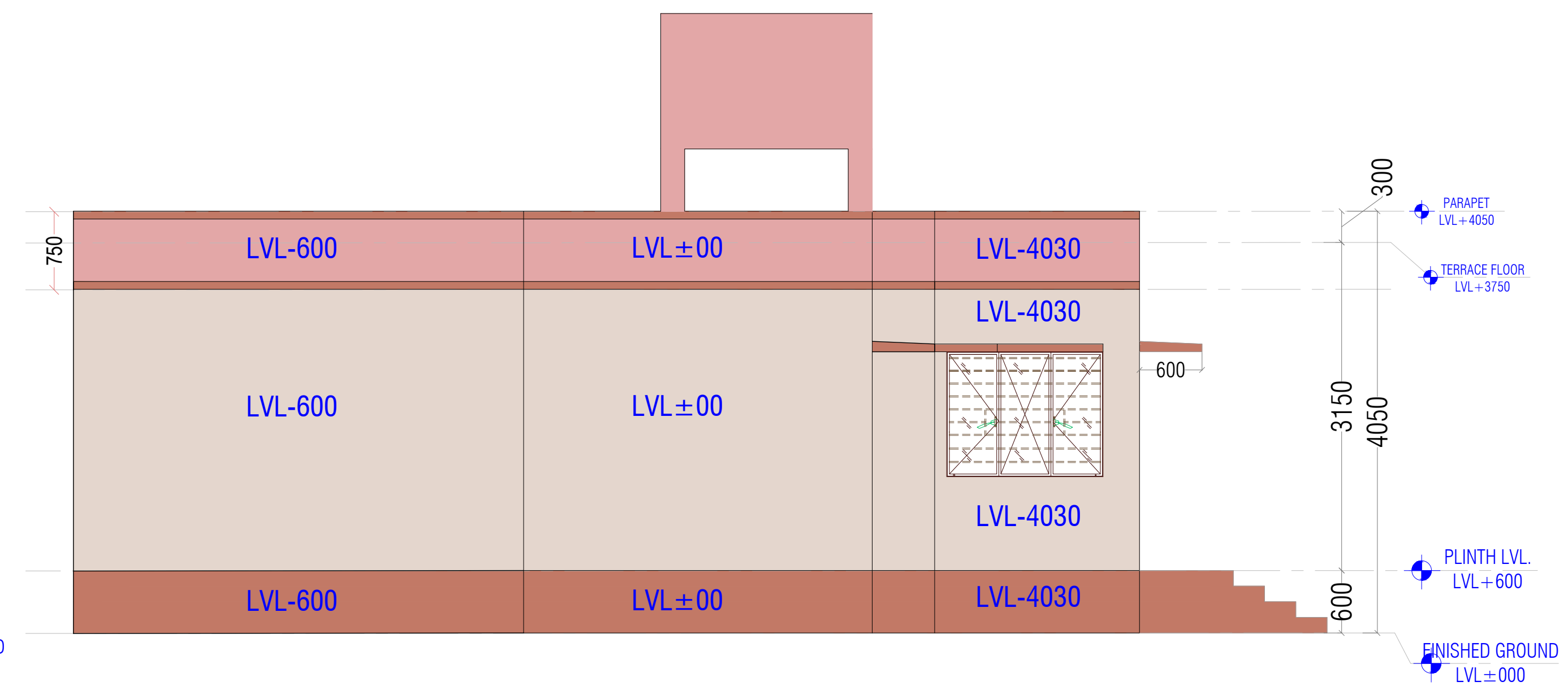
FRONT ELEVATION



BACKSIDE ELEVATION



KITCHEN AND UTILITY SIDE ELEVATION



BEDROOM SIDE ELEVATION

N.K.
(NARENDRA KUMAR)

pk Approval 10.12.23
(Approved Approval)

Count 13/1/23
(R.K. Gang)

2nd SS 15/3/2023.
(SANDEEP SOOD)

A.P.K.

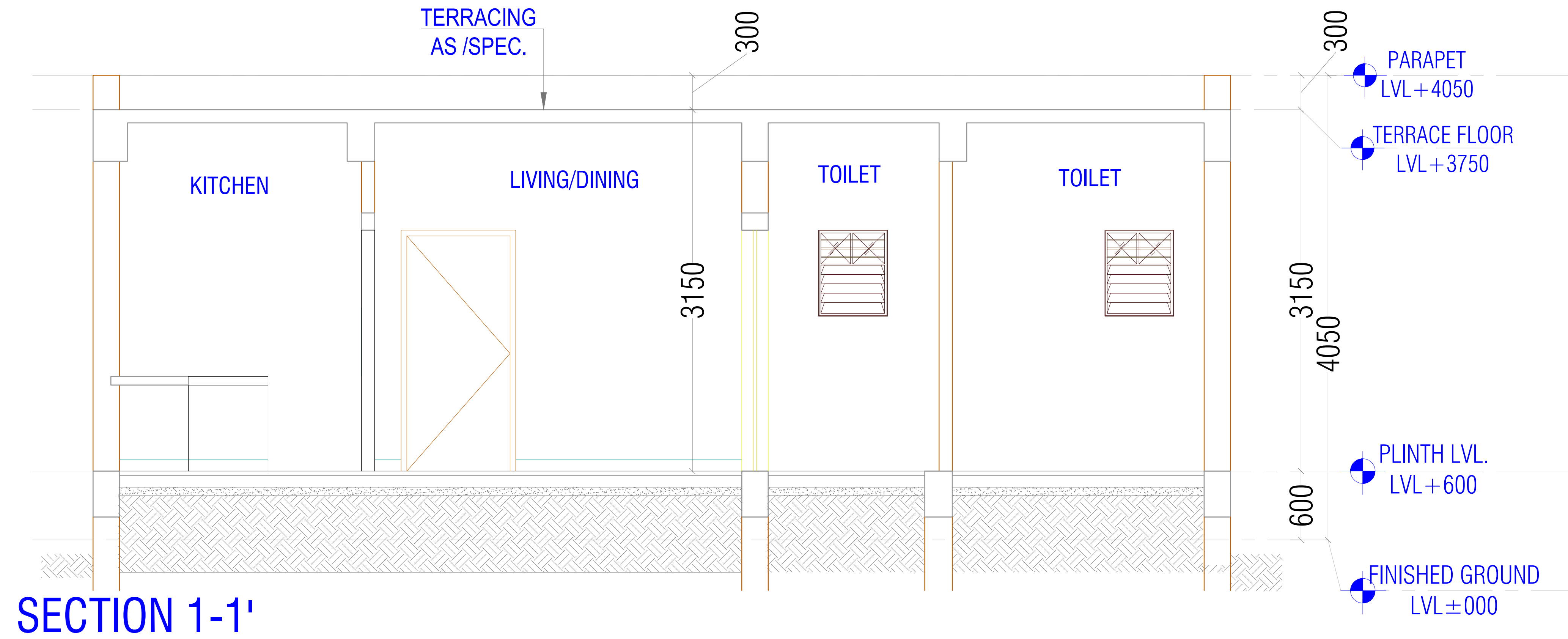
A D P Keshri
Chief Technical Consultant

CATEGORY : GIRLS WARDEN RESIDENCE

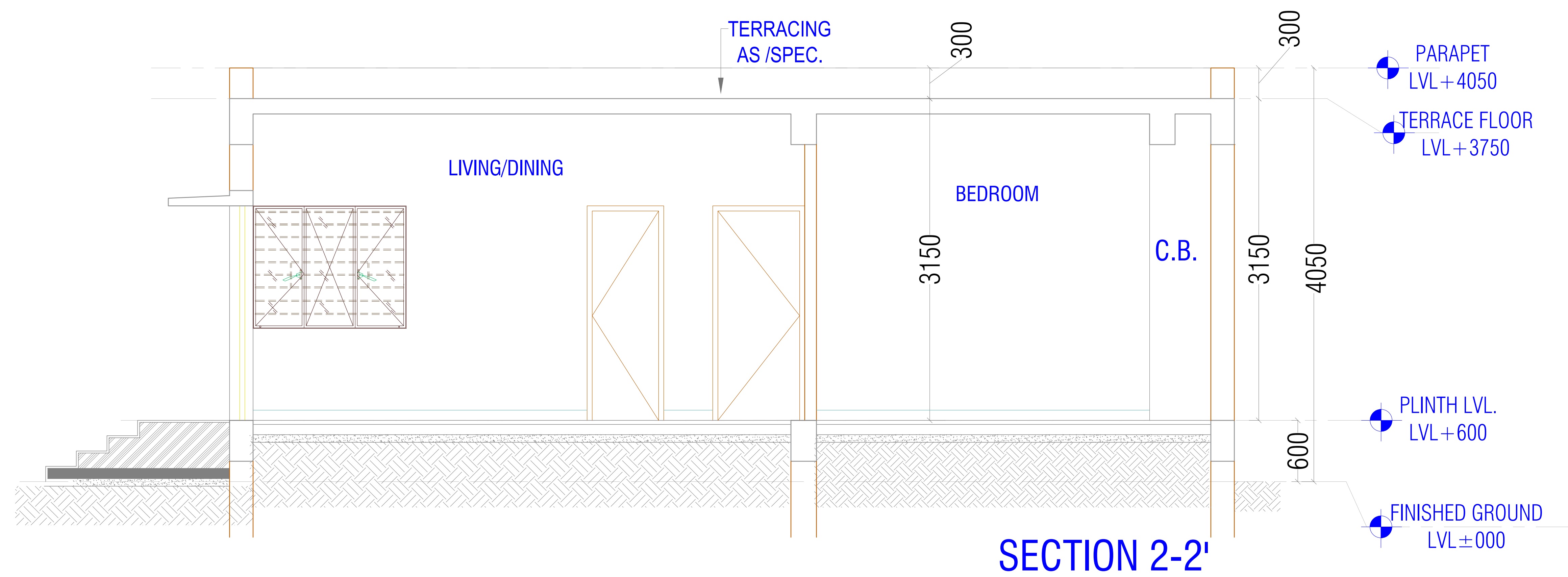
DRAWING TITLE : ELEVATIONS

DWG. NO.-
EMRS NAME/GWR/AR_03

DATE - 09 MARCH 2023



SECTION 1-1'



SECTION 2-2'

N.K.
(NARENDRA KUMAR)
pk approval 10.1.23
(Approved Approval)
Count 13/1/23
(R.K. Gang)
2nd SS 13/3/2023.
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : WARDEN RESIDENCE

DRAWING TITLE : SECTION

DWG. NO.-
EMRS NAME/WR/AR_04

DATE - 09 MARCH 2023



PER UNIT AREA INCLUDING CORRIDOR - 70 SQMT

TYPE 2										
DOOR	WINDOW	VENTILATOR	FIXED GLAZING	GRILL	SCHEDULE FOR TYPE I QUARTER					
TAG	CLEAR OPENING SIZE	SILL	LINTEL	No. of nos. of	TOTAL	LOCATION	MATERIAL	COMMENTS		
D1	1000 X 2100	0	2100	1	10	10	MAIN ENTRANCE DOOR	FLUSH DOOR	SINGLE LEAF	
D1	1000 X 2100	0	2100	4	4	4	TERRACE DOOR	M/S SHEET DOOR	SINGLE LEAF	
D2	900 X 2100	0	2100	2	10	20	BEDROOM DOOR	FLUSH DOOR	SINGLE LEAF	
D2	900 X 2100	0	2100	2	10	20	BALCONY, UTILITY	LAMINATED DOOR WITH WIRE MESH	SINGLE LEAF	
D3	750 X 2100	0	2100	2	10	20	TOILET DOOR	PRESSED LAMINATED DOOR	SINGLE LEAF	
W1	1500 X 1350	750	2100	2	10	20	BEDROOM-1, BEDROOM-2	STEEL GLAZED WINDOW		
W2	1500 X 1200	900	2100	1	10	10	LIVING / DINING HALL	STEEL GLAZED WINDOW		
W3	900 X 1200	900	2100	1	10	10	LIVING / DINING HALL	STEEL GLAZED WINDOW		
W4	900 X 1050	1050	2100	1	10	10	KITCHEN	STEEL GLAZED WINDOW		
V1	600 X 600	1500	2100	2	10	20	TOILET	STANDARD STEEL SECTION		
CG-1	2250 X 2100	0	2100	1	1	1	BLOCK FRONT ENTRY GATE	STANDARD STEEL SECTION	COLLAPSE LE GATE	

N.K.

(NARENDRA KUMAR)

pk approval 10.3.23
(Pranod Approval)

Count 13/1/23

(R.K. Gang)

2nd SS 15/3/2023.
(SANDEEP SOOD)

A.P.K.

A D P Keshri
Chief Technical Consultant

CATEGORY : TYPE II QUARTER

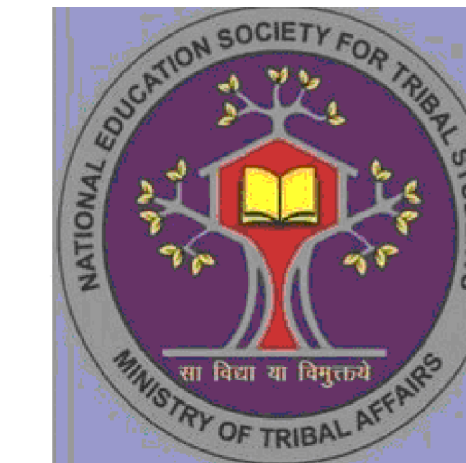
DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.-
EMRS NAME/TYPE-II/AR_01

DATE - 09 MARCH 2023



GROUND FLOOR PLAN.



FIRST FLOOR PLAN.

N.K.
 (NARENDRA KUMAR)
 p.k. approval 10.3.23
 (Prasad Approval)
 (CAUT 13/3/23
 (R.K. Gang)
 8.3.23 13/3/23.
 (SANDEEP SOOD)

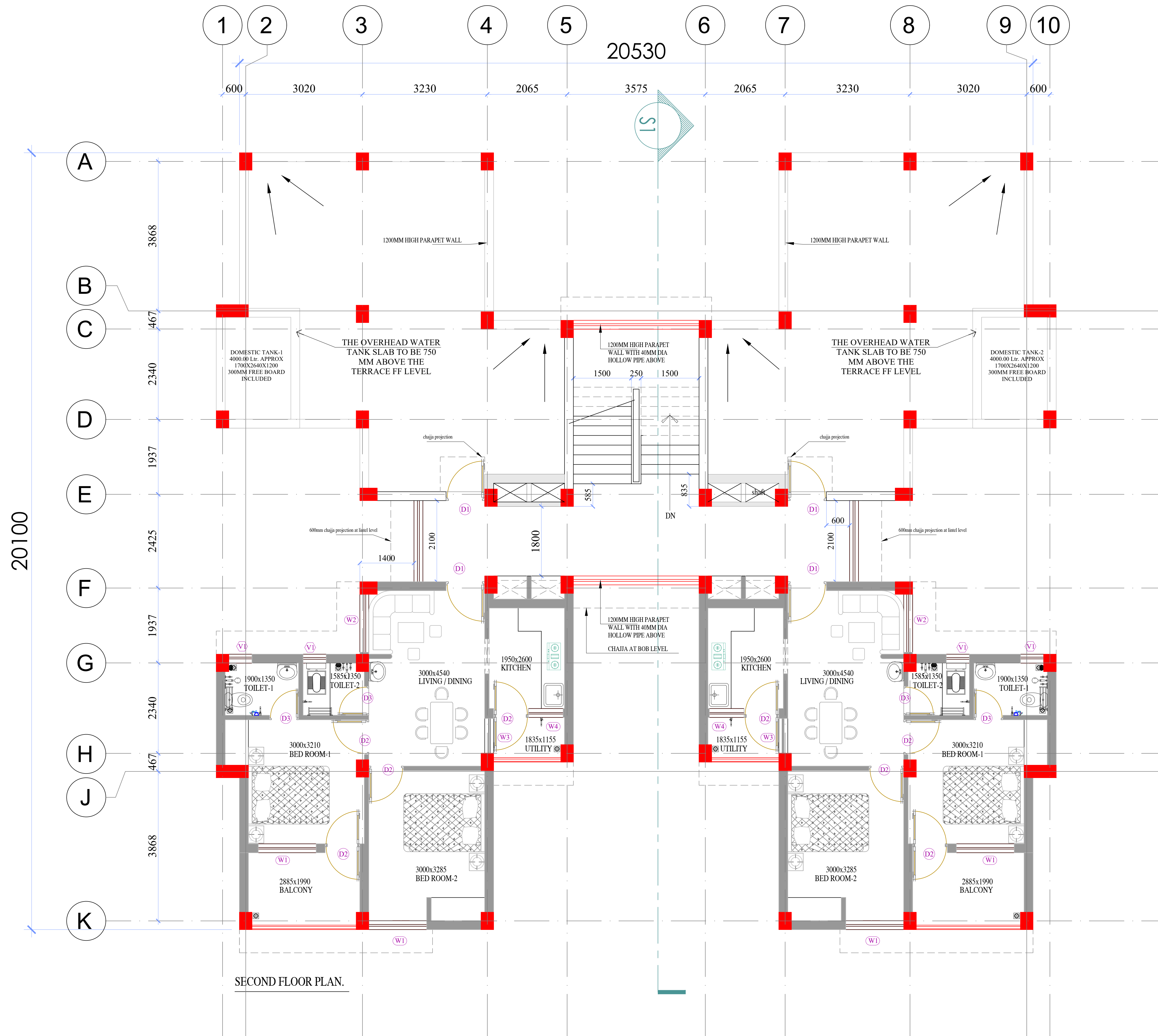
A.P.K.
 A D P Keshri
 Chief Technical Consultant

CATEGORY : TYPE II QUARTER

DRAWING TITLE : FIRST FLOOR PLAN

DWG. NO.-
EMRS NAME/TYPE-II/AR_02

DATE - 09 MARCH 2023



SECOND FLOOR PLAN.

N.K.
 (NARENDRA KUMAR)
 p.k. approval 10.12.23
 (Sharma approval)
 (CAUTION) 13/1/23
 (R.K. Gang)
 8th 95 13/3/2023.
 (SANDEEP SOOD)

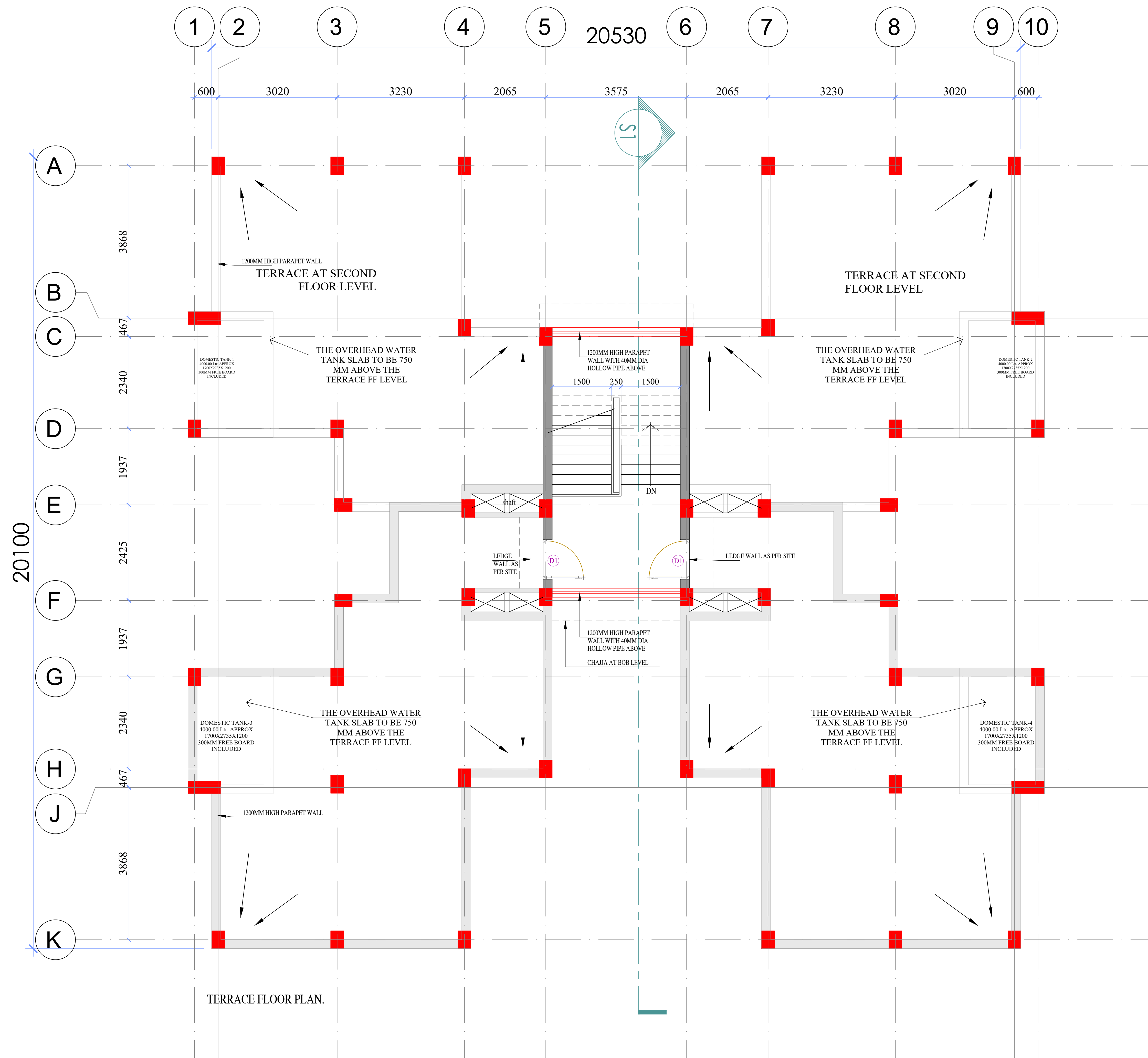
A.P.K.
A D P Keshri
 Chief Technical Consultant

CATEGORY : TYPE II QUARTER

DRAWING TITLE : SECOND FLOOR PLAN

DWG. NO.-
EMRS NAME/TYPE-II/AR_03

DATE - 09 MARCH 2023



N.K.
 (NARENDRA KUMAR)
 p.k. approval 10.3.23
 (Pranod Approval)
 (can't 13/3/23
 (R.K. Gang)
 8.3.23
 13/3/2023.
 (SANDEEP SOOD)

A.P.K.
 A D P Keshri
 Chief Technical Consultant

CATEGORY : TYPE II QUARTER

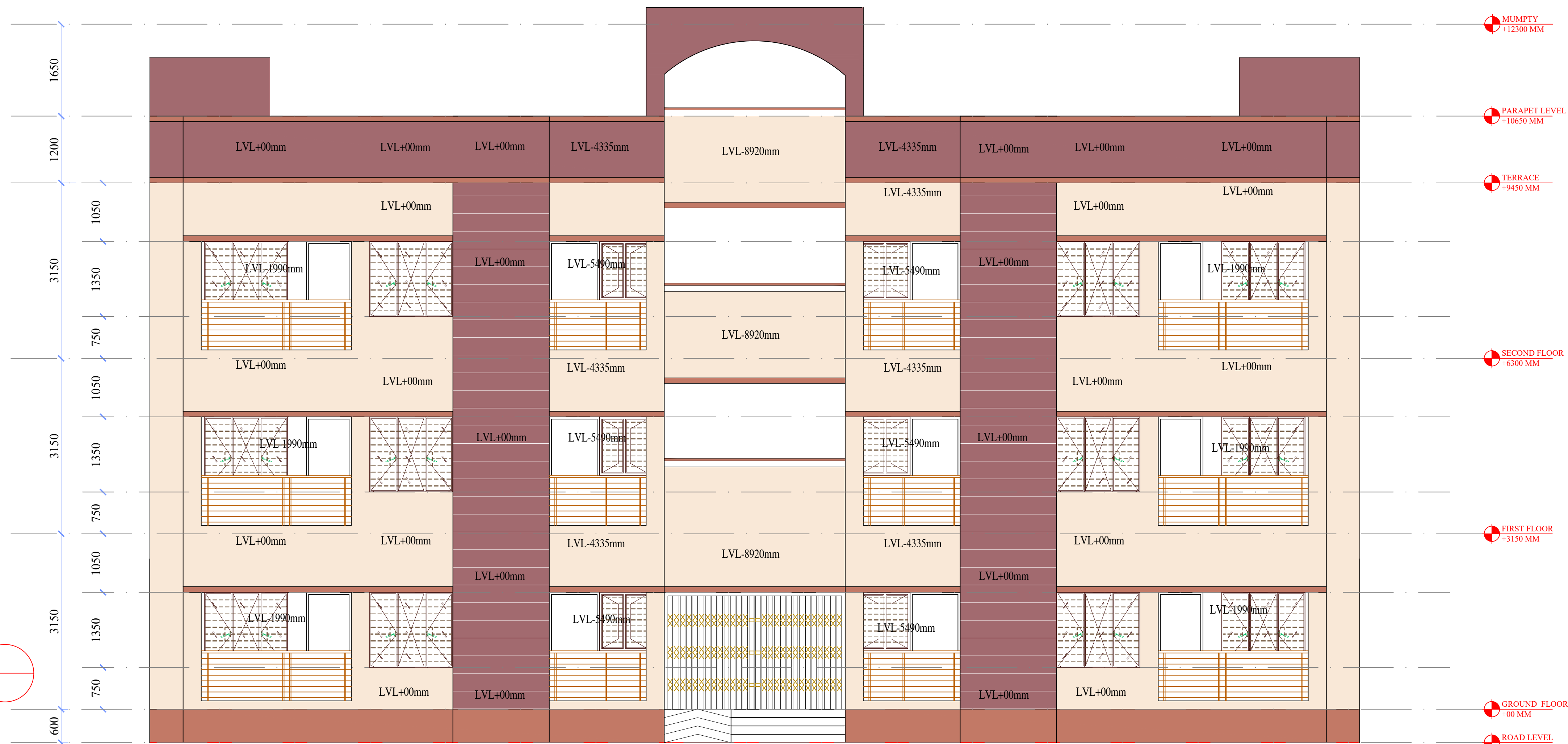
DRAWING TITLE : TERRACE FLOOR PLAN

DWG. NO.- EMRS NAME/TYPE-II/AR_04

DATE - 09 MARCH 2023



FRONT ELVATION



SIDE ELVATION



N.K.
 (NARENDRA KUMAR)
 pk approval 10.3.23
 (Approved Approval)
 Count 13/3/23
 (Rk Gang)
 8.3.23
 15/3/2023.
 (SANDEEP SOOD)

A.P.K.
 A D P Keshri
 Chief Technical Consultant

CATEGORY : TYPE II QUARTER

DRAWING TITLE : ELEVATION

DWG. NO.- EMRS NAME/TYPE-II/AR_05

DATE - 09 MARCH 2023

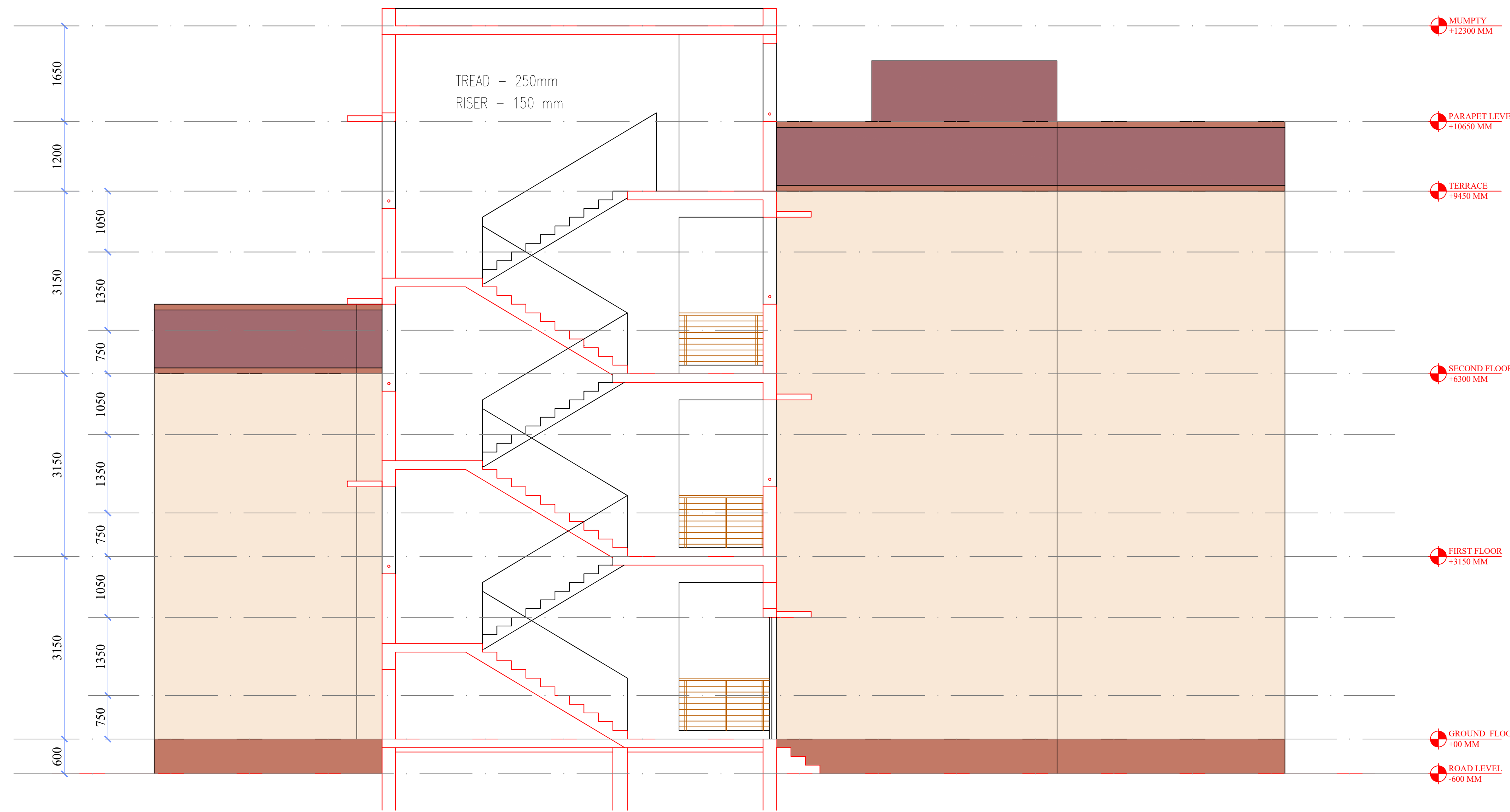
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



SECTION : S1



REAR ELVATION



N.K.
(NARENDRA KUMAR)
pk Approval 10.3.23
(Prasad Approval)
Count 13/3/23
(Rk Gang)
2nd SS 15/3/2023.
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : TYPE II QUARTER

DRAWING TITLE : ELEVATION & SECTION

DWG. NO.- EMRS NAME/TYPE-II/AR_06

DATE - 09 MARCH 2023



PER UNIT AREA INCLUDING CORRIDOR - 80 SQMT

TYPE III QUARTER									
DOOR TAG	DOOR CLEAR OPENING SIZE	VENTILATOR SILL LINTEL	FIXED GLAZING AREA	GRILL AREA	SCHEDULE FOR TYPE III QUARTER	MATERIAL	COMMENTS		
D1	1000 X 2100	0	2100	1	16	ENTRANCE DOOR	FLUSH DOOR	SINGLE LEAF	
D1	1000 X 2100	0	2100	2	2	TERRACE DOOR	MS SHEET DOOR	SINGLE LEAF	
D2	900 X 2100	0	2100	2	16	BEDROOM DOOR	FLUSH DOOR	SINGLE LEAF	
D2	900 X 2100	0	2100	2	16	UTILITY BALCONY	PRGLAMATED DOOR WITH WIRE MESH FACTORY PRESSED LAMINATED DOOR	SINGLE LEAF	
D3	750 X 2100	0	2100	2	16	TOILET DOOR	FLUSH DOOR	SINGLE LEAF	
W1	1500 X 1350	750	2100	2	16	BEDROOM-1 WINDOW	STEEL GLAZED WINDOW		
W2	1500 X 1200	600	2100	1	16	LIVING / DINING WINDOW	STEEL GLAZED WINDOW		
W3	900 X 1200	900	2100	1	16	LIVING / DINING WINDOW	STEEL GLAZED WINDOW		
W4	900 X 1050	1050	2100	1	16	KITCHEN WINDOW	STEEL GLAZED WINDOW		
V1	600 X 900	1500	2100	2	16	TOILET	STANDARD STEEL SECTION		
CG-1	3250 X 2100	0	2100	1	2	BLOCK FRONT ENTRY GATE	STANDARD STEEL SECTION	COLLAPSIBLE GATE	

N.K.
 (NARENDRA KUMAR)
 p.k. approval 10.3.23
 (Pranod approval)
 Count 13/3/23
 (R.K. Gang)
 8.03.23
 13/3/2023.
 (SANDEEP SOOD)

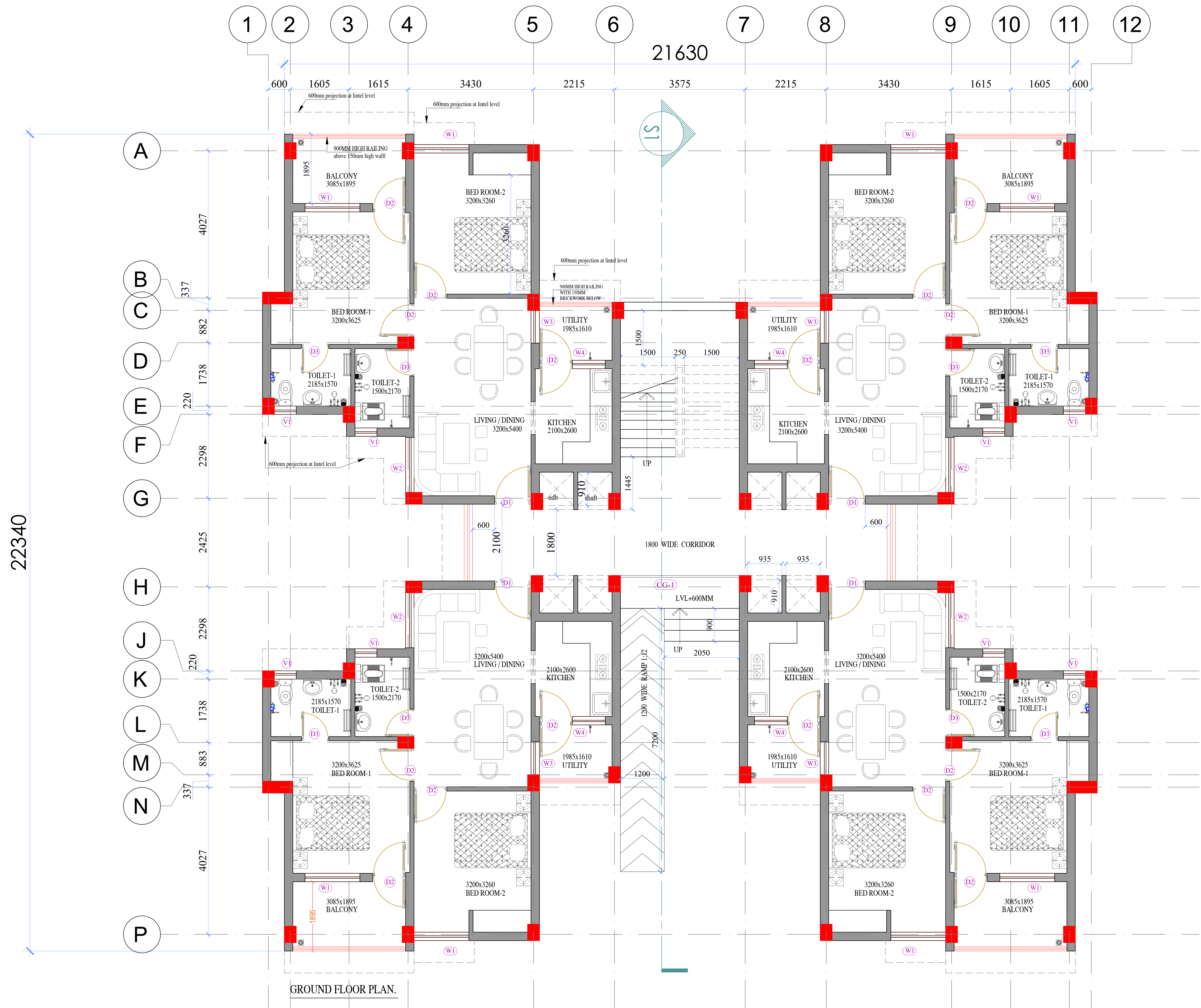
A.P.K.
A D P Keshri
 Chief Technical Consultant

CATEGORY : TYPE III QUARTER

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.- EMRS NAME/TYPE-III/AR_01

DATE - 09 MARCH 2023



GROUND FLOOR PLAN.



FIRST FLOOR PLAN.

N.K.
(NARENDRA KUMAR)
pk approval 10.3.23
(Prasad Approval)
10/3/23
(R.K. Gang)
21/3/23
(SANDEEP SOOD)

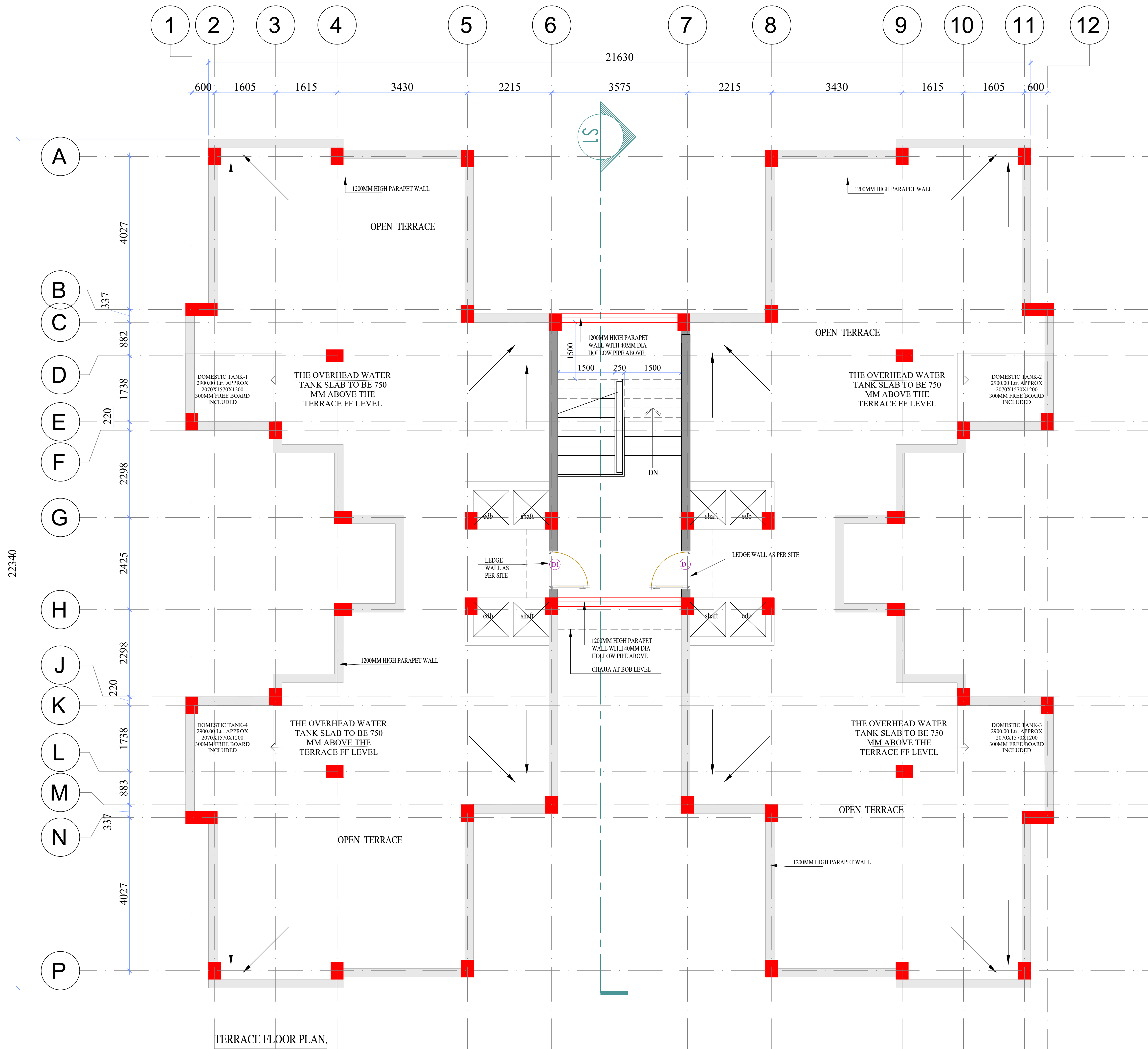
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : TYPE III QUARTER

DRAWING TITLE : FIRST FLOOR PLAN

DWG. NO.- EMRS NAME/TYPE-III/AR_02

DATE - 09 MARCH 2023



N.K.
 (NARENDRA KUMAR)
 p.k. approval 10.3.23
 (Pranod Approval)
 (can't 13/3/23
 (R.K. Gang)
 8.3.23
 13/3/2023.
 (SANDEEP SOOD)

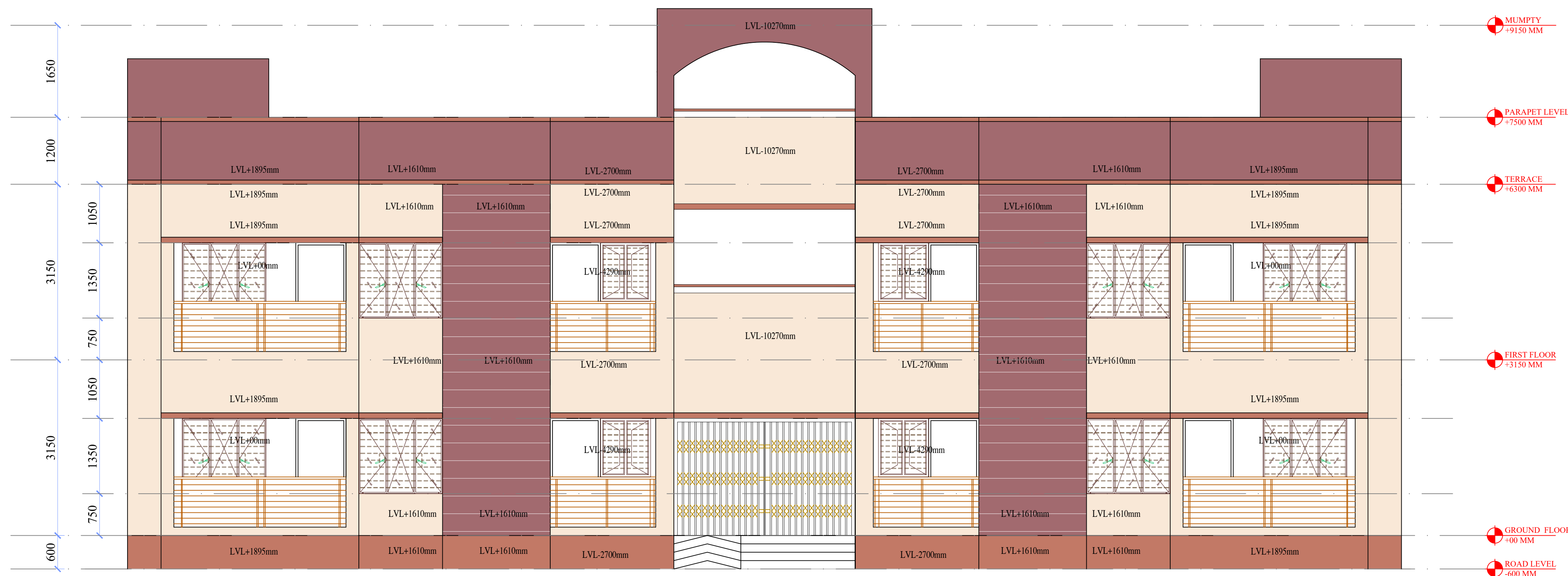
A.P.K.
A D P Keshri
 Chief Technical Consultant

CATEGORY : TYPE III QUARTER

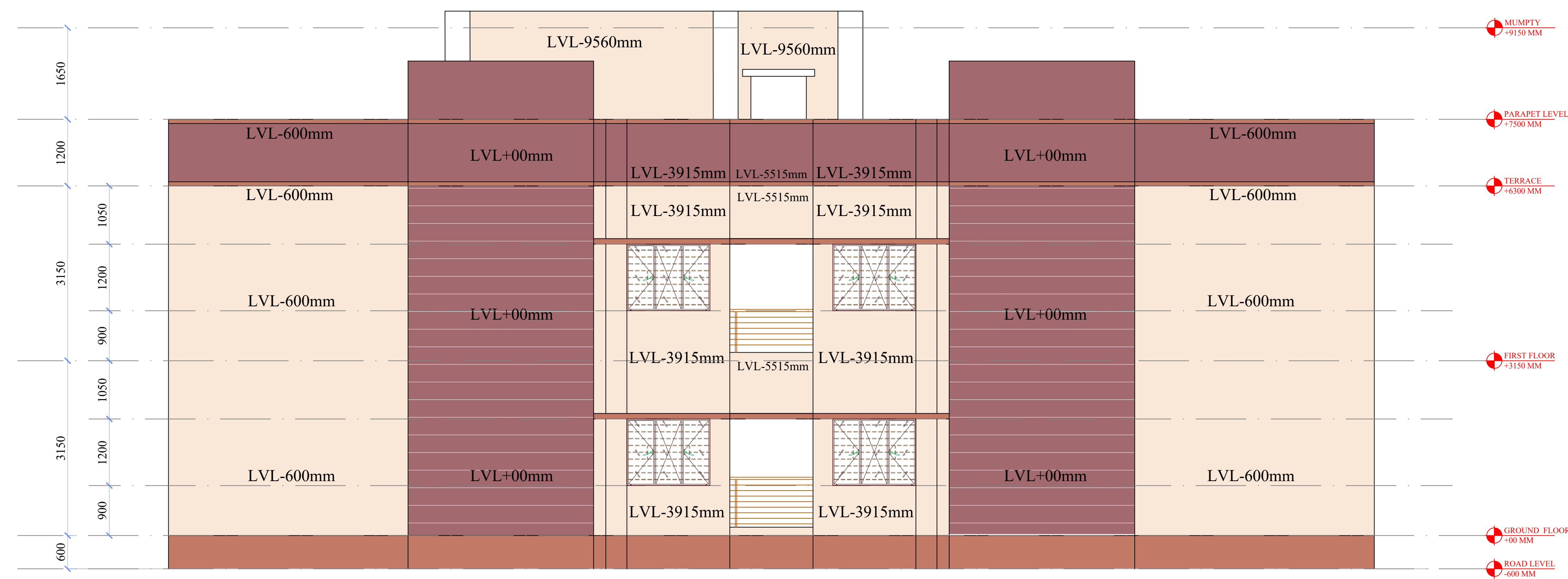
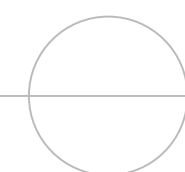
DRAWING TITLE : TERRACE FLOOR PLAN

DWG. NO.- EMRS NAME/TYPE-III/AR_03

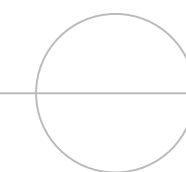
DATE - 09 MARCH 2023



FRONT ELVATION



SIDE ELVATION



N.K.
NARENDRA KUMAR
pk approval 10.12.23
(Approved Approval)
Count 13/1/23
(Rk Gang)
2nd SS 15/3/2023.
(SANDEEP SOOD)

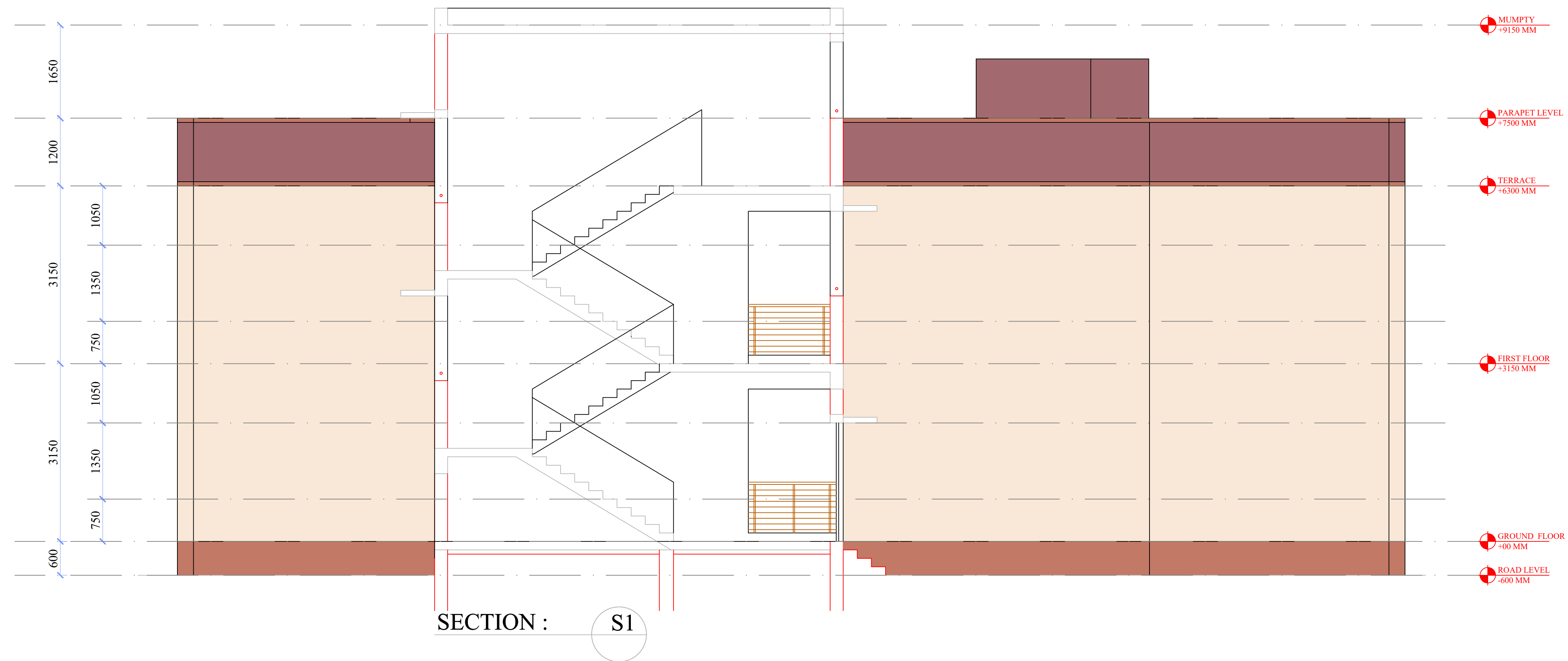
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : TYPE III QUARTER

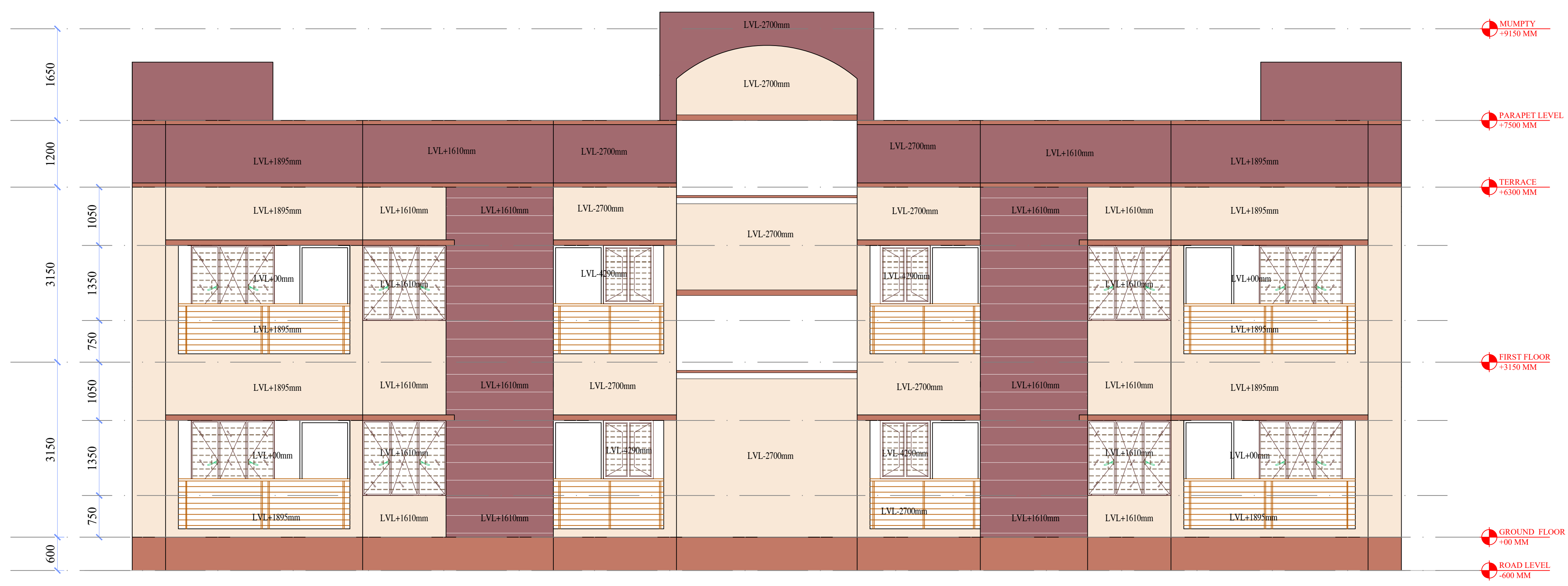
DRAWING TITLE : ELEVATION

DWG. NO.-
EMRS NAME/TYPE-III/AR_04

DATE - 09 MARCH 2023



SECTION : S1



REAR ELEVATION

N.K.
 (NARENDRA KUMAR)
 p.k. Approval 10.12.23
 (Prasad Approval)
 Count 13/1/23
 (R.K. Gang)
 8-11-23
 15/3/2023.
 (SANDEEP SOOD)

A.P.K.
 A D P Keshri
 Chief Technical Consultant

CATEGORY : TYPE III QUARTER

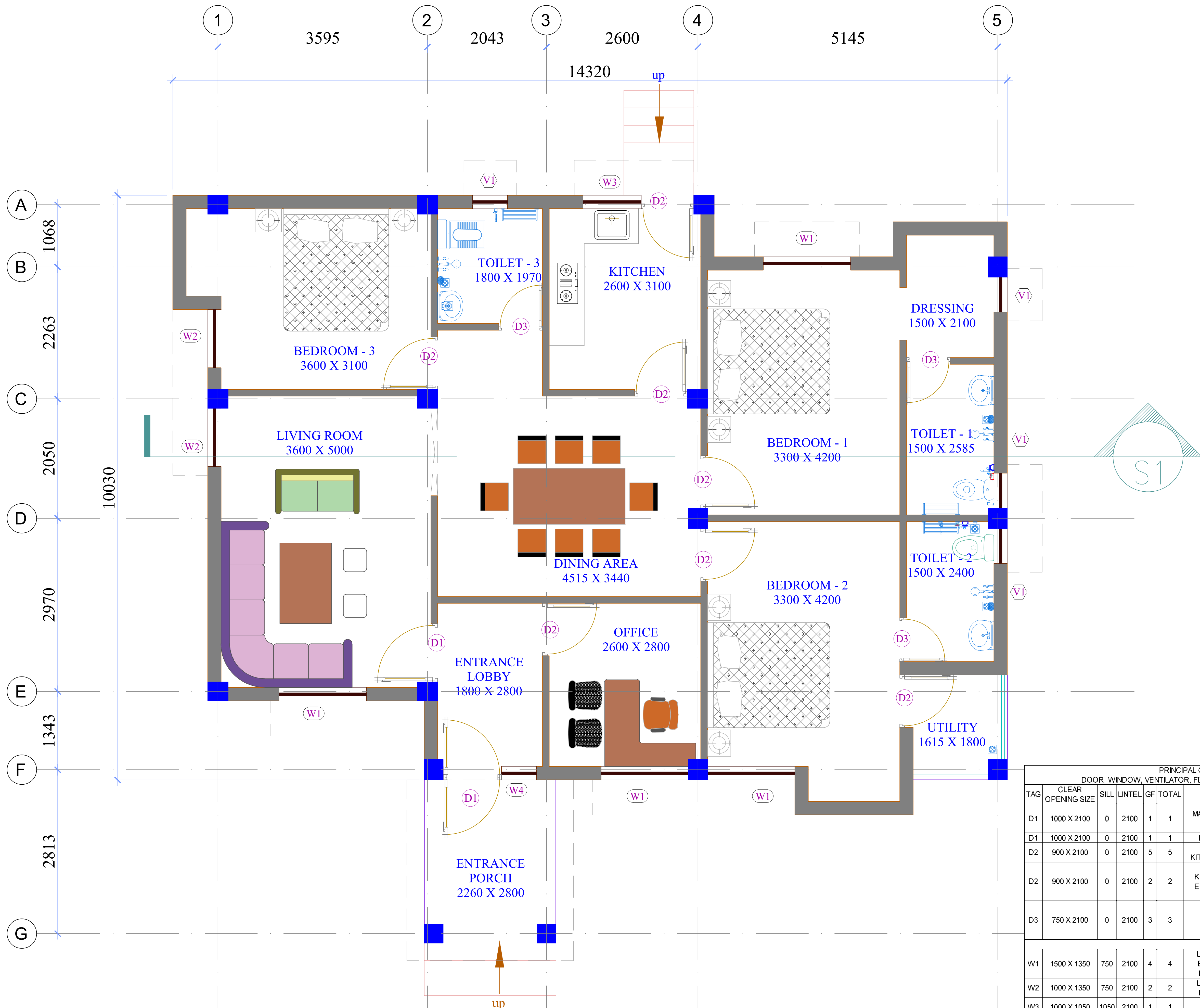
DRAWING TITLE : SECTION

DWG. NO.-
EMRS NAME/TYPE-III/AR_05

DATE - 09 MARCH 2023



UNIT AREA - 130 Sq. Mt.



PRINCIPAL QUARTER								
DOOR, WINDOW, VENTILATOR, FIXED GLAZING, GRILL SCHEDULE								
TAG	CLEAR OPENING SIZE	SILL	LINTEL	GF	TOTAL	LOCATION	MATERIAL	COMMENTS
D1	1000 X 2100	0	2100	1	1	MAIN ENTRANCE DOOR	FLUSH DOOR	SINGLE LEAF WITH WIRE MESH
D1	1000 X 2100	0	2100	1	1	LIVING ROOM	FLUSH DOOR	SINGLE LEAF
D2	900 X 2100	0	2100	5	5	BEDROOM, KITCHEN, OFFICE	FLUSH DOOR	SINGLE LEAF
D2	900 X 2100	0	2100	2	2	KITCHEN REAR ENTRY, UTILITY	FACTORY PRESSED LAMINATED DOOR	SINGLE LEAF
D3	750 X 2100	0	2100	3	3	TOILET	FACTORY PRESSED LAMINATED DOOR	SINGLE LEAF
W1	1500 X 1350	750	2100	4	4	LIVING ROOM, BEDROOM-1, BEDROOM-2	STEEL GLAZED WINDOW	
W2	1000 X 1350	750	2100	2	2	LIVING ROOM, BEDROOM-3	STEEL GLAZED WINDOW	
W3	1000 X 1050	1050	2100	1	1	KITCHEN	STEEL GLAZED WINDOW	
W4	600 X 1800	300	2100	1	1	ENTRANCE LOBBY	STEEL GLAZED WINDOW	
V1	600 X 750	1350	2100	4	4	TOILET	STANDARD STEEL SECTION	

N.K.
(NARENDRA KUMAR)
pk approval 10.12.23
(Prasad Approval)
Count 13/1/23
(R.K. Gang)
Em SS 15/3/2023.
(SANDEEP SOOD)

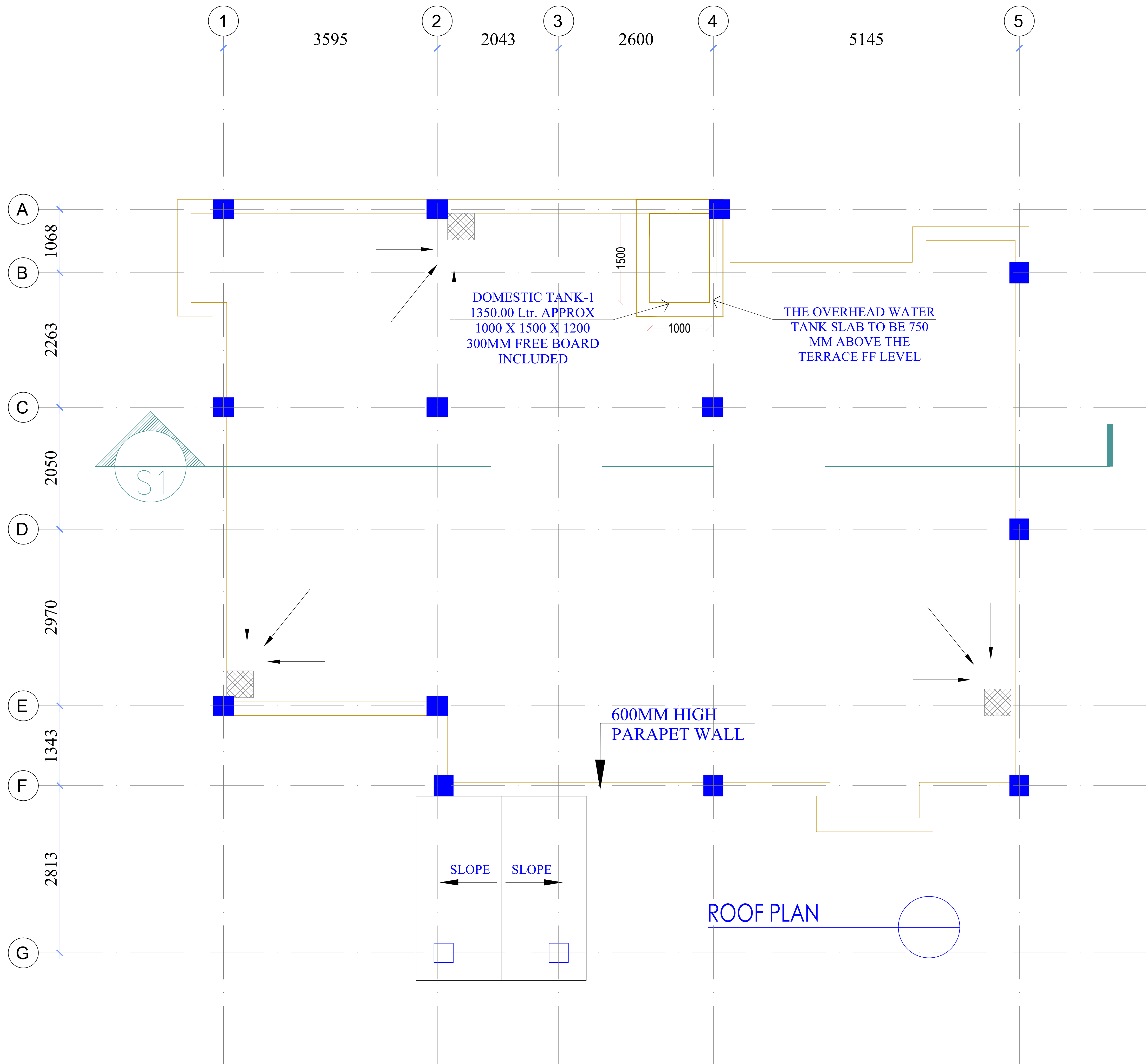
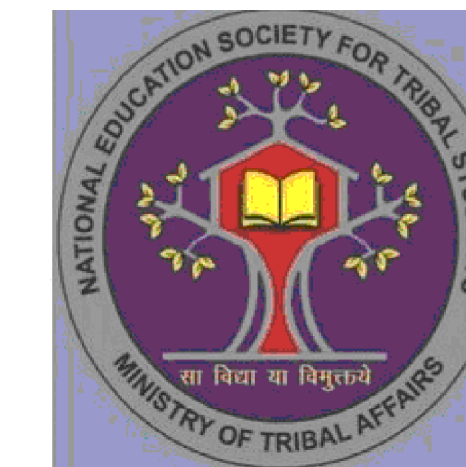
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : PRINCIPAL QUARTER
DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.- EMRS NAME/PQ/AR_01

DATE - 09 MARCH 2023

GROUND FLOOR PLAN



N.K.
(NARENDRA KUMAR)

pk Agrawal 10.3.23
(Approved)

Count 13/3/23
(R.K. Gang)

2nd SS 13/3/2023.
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : PRINCIPAL QUARTER

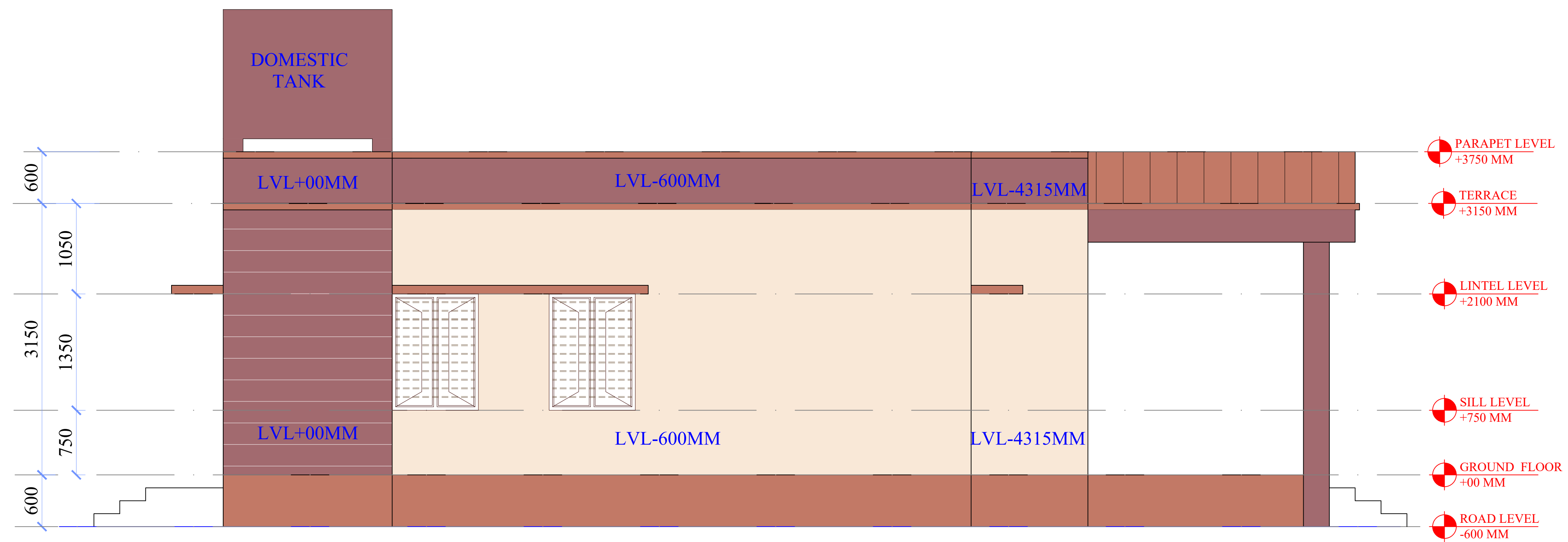
DRAWING TITLE : TERRACE FLOOR PLAN

DWG. NO.-
EMRS NAME/PQ/AR_02

DATE - 09 MARCH 2023



FRONT ELEVATION E-01



LEFT SIDE ELEVATION E-02

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING
FOR EKLAVYA MODEL RESIDENTIAL
SCHOOL (EMRS)

CLIENT -

GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION
SOCIETY FOR TRIBAL STUDENTS



N.K.
(NARENDRA KUMAR)
pk Approval 10.12.23
(Approved Approval)
Count 13/1/23
(R.K. Gang)
2nd SS 15/3/2023.
(SANDEEP SOOD)

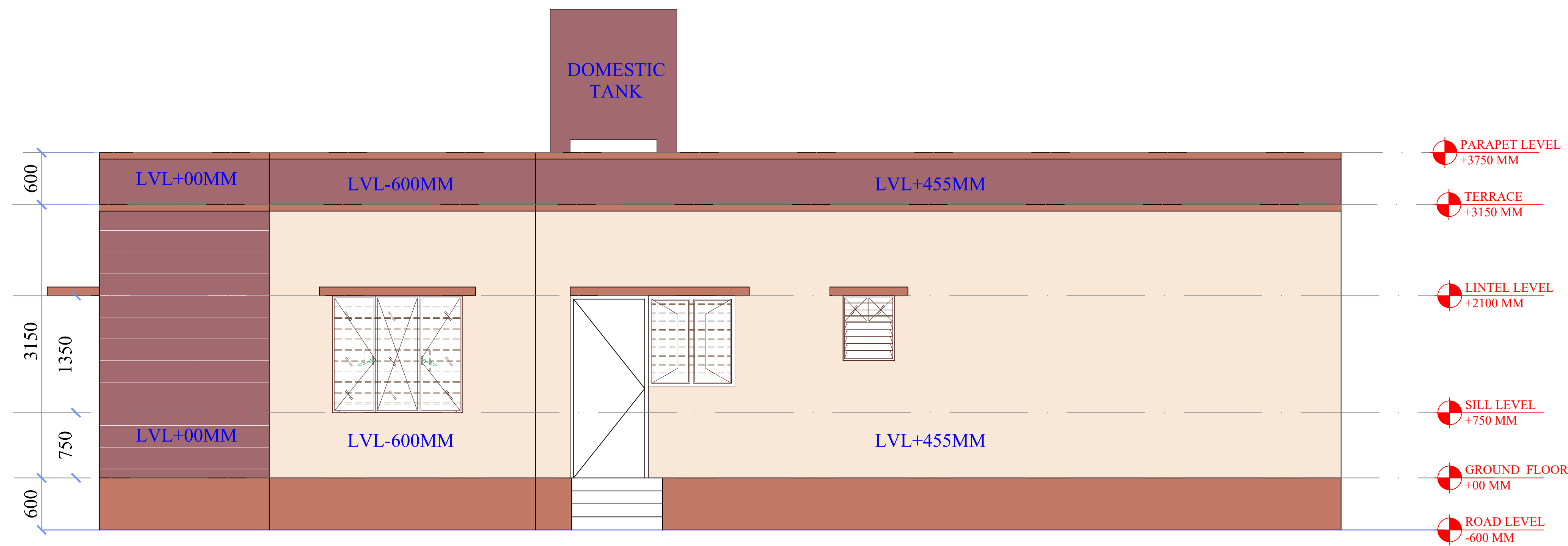
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : PRINCIPAL QUARTER

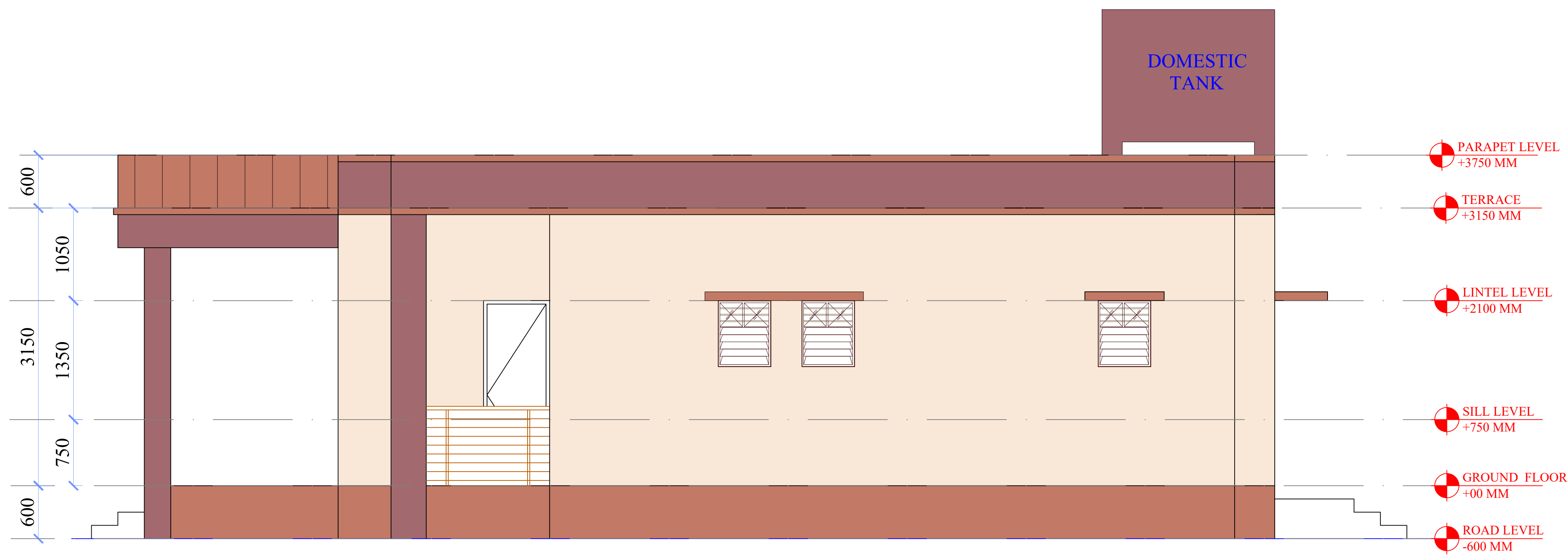
DRAWING TITLE : ELEVATION

DWG. NO.-
EMRS NAME/PQ/AR_03

DATE - 09 MARCH 2023



REAR SIDE ELEVATION E-03



RIGHT SIDE ELEVATION E-04

N.K.
(NARENDRA KUMAR)

pk Approved 10.3.23
(Approved Approval)

Count 13/3/23
(R.K. Gang)

2nd SS 13/3/2023.
(SANDEEP SOOD)

A.P.K.

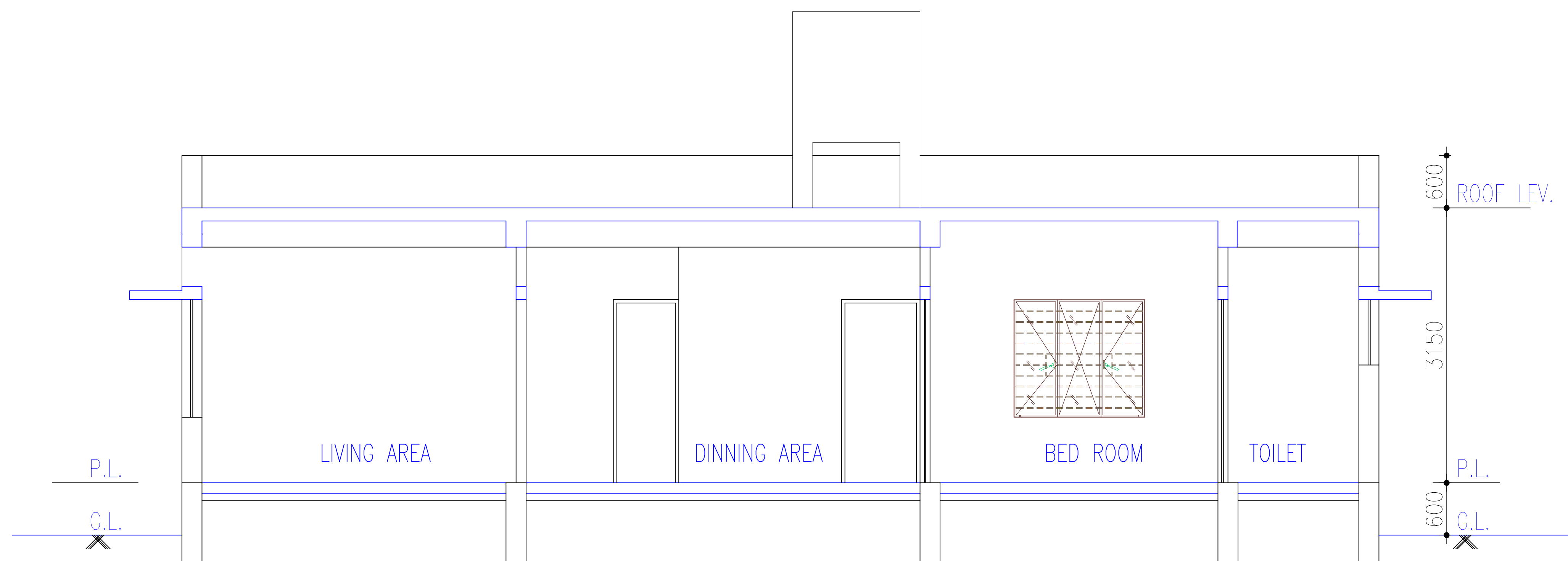
A D P Keshri
Chief Technical Consultant

CATEGORY : PRINCIPAL QUARTER

DRAWING TITLE : ELEVATION

DWG. NO.-
EMRS NAME/PQ/AR_04

DATE - 09 MARCH 2023



SECTION

S1
-

N.K.
(NARENDRA KUMAR)

pk Approved 10.3.23
(Approved Approval)

LC 13/3/23
(L. K. Gang)

SS 13/3/23
(SANDEEP SOOD)

A.P.K.

A D P Keshri
Chief Technical Consultant

CATEGORY : PRINCIPAL QUARTER

DRAWING TITLE : SECTION

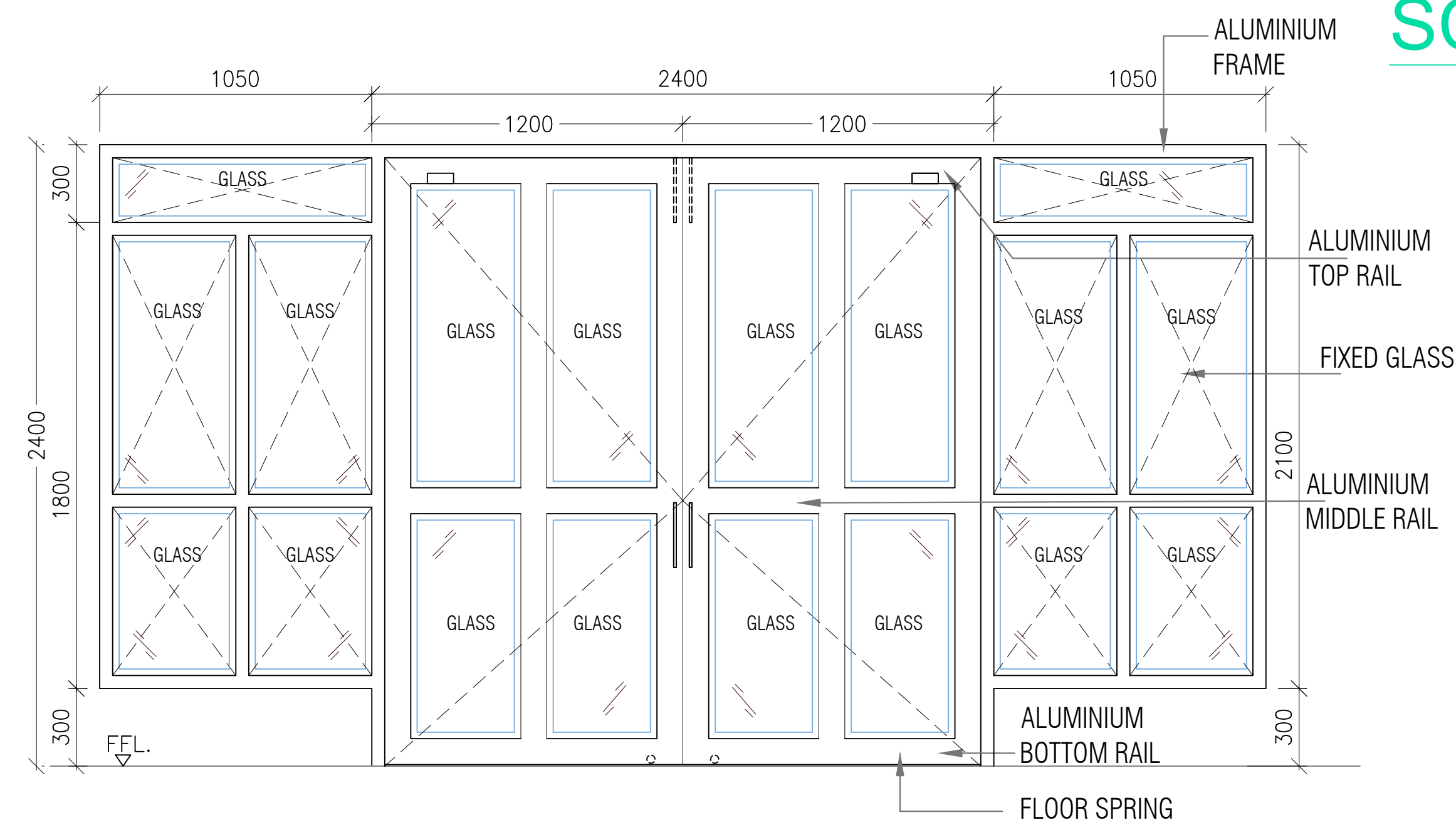
DWG. NO.-
EMRS NAME/PQ/AR_05

DATE - 09 MARCH 2023

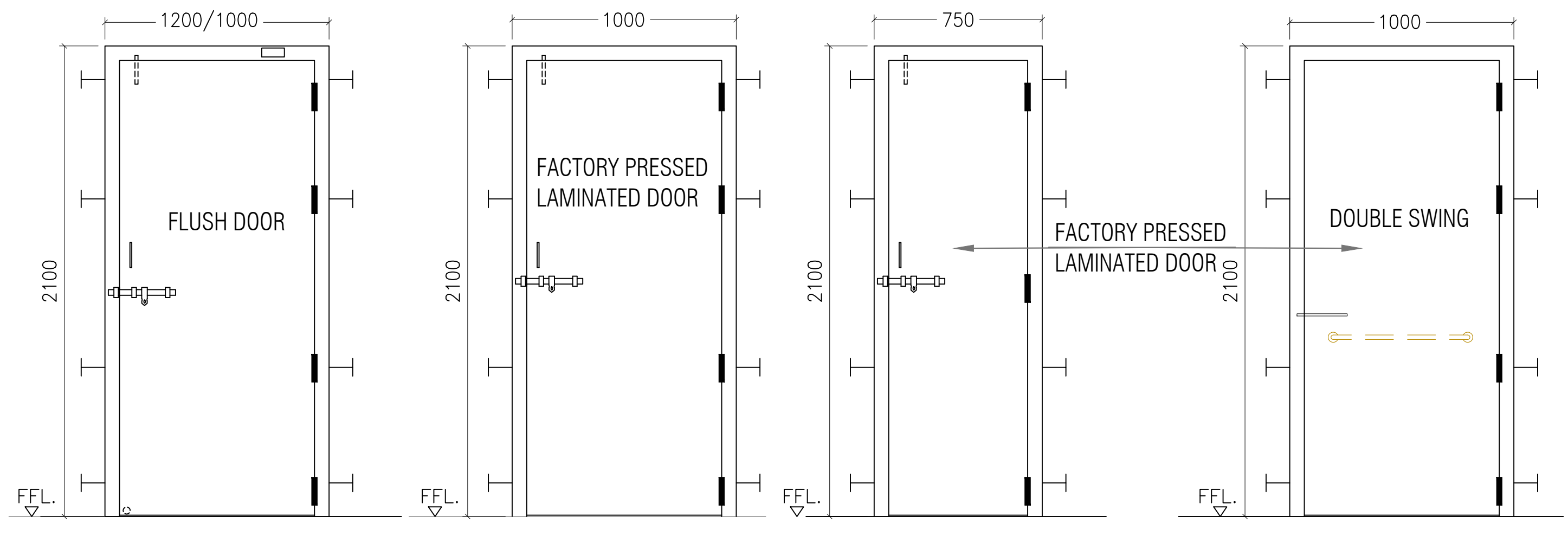
SCHOOL BLOCK - DOOR WINDOW VENTILATOR DETAIL

PROJECT - EMRS
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

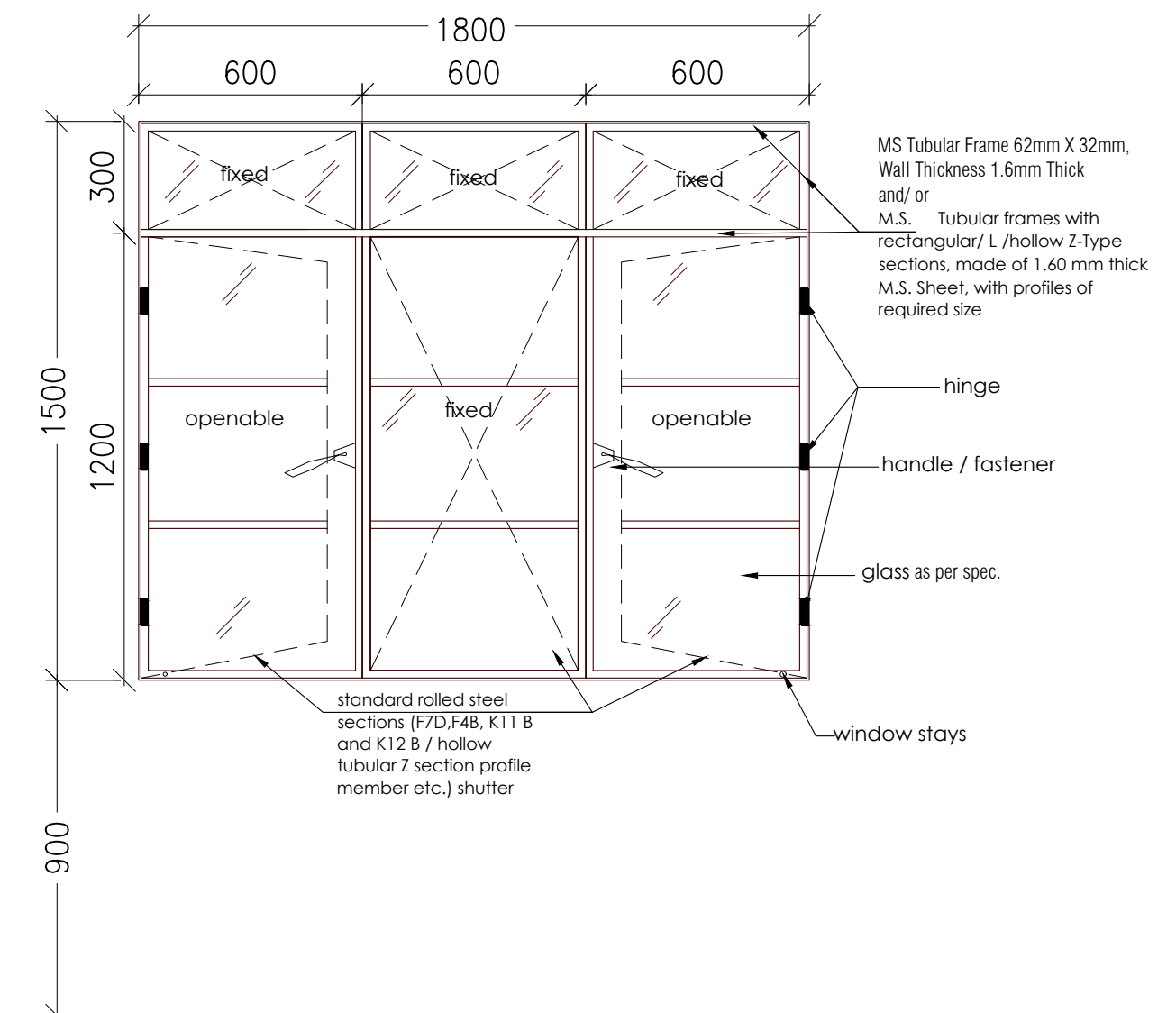
CLIENT -
**GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS**



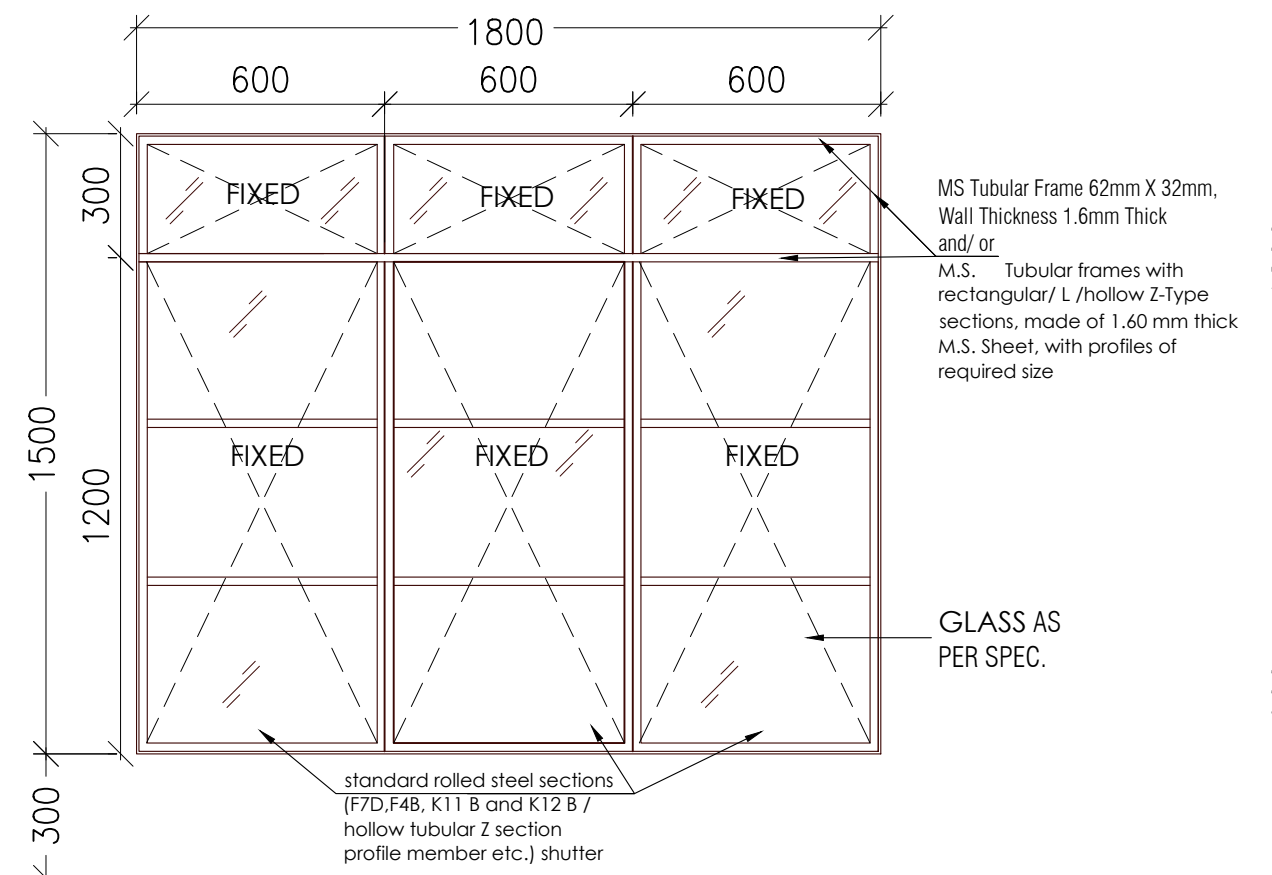
MAIN ENTRANCE DOOR
MD - 2400 x 2400
FGL - 1050X 2100 FIXED GLAZING ON SIDE



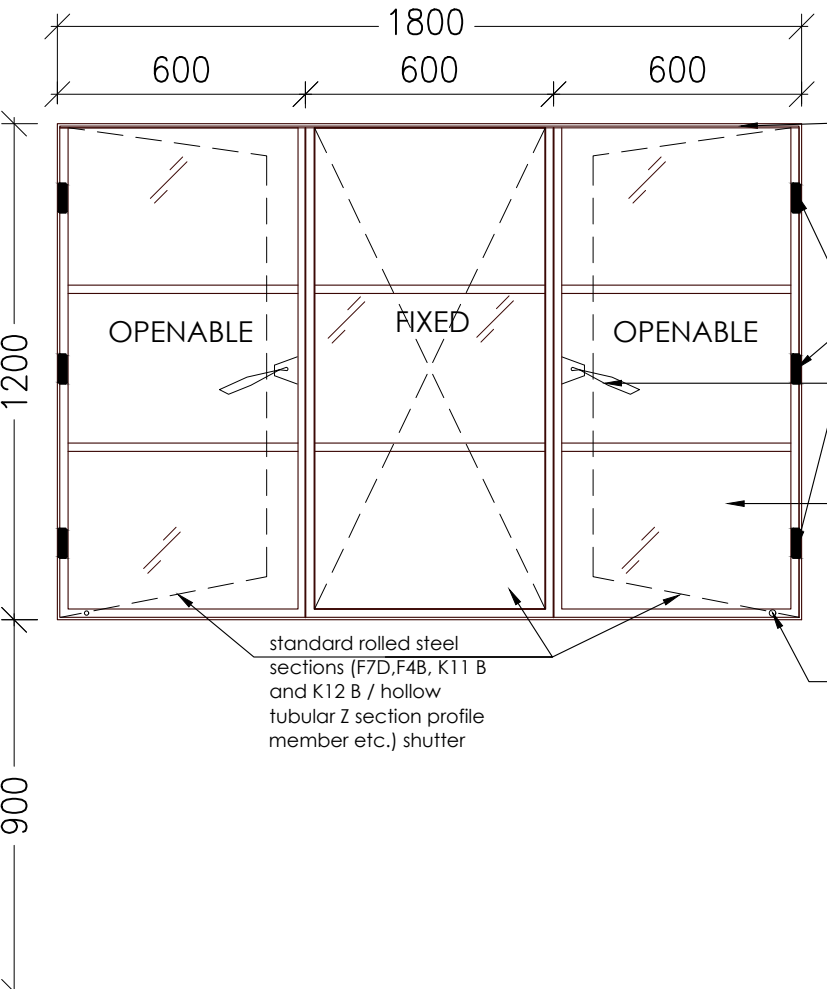
(CLASSROOM, LABS, LIBRARY)
D1 - 1200 X 2100
(LAB STORE, ADMIN AREA, ROOMS BELOW RAMP)
D2 - 1000X2100
TOILET MAIN DOOR
D2 - 1000 X 2100
TOILET INTERNAL DOOR
D3 - 750 X 2100
H. TOILET MAIN DOOR
SD2 - 1000 X 2100



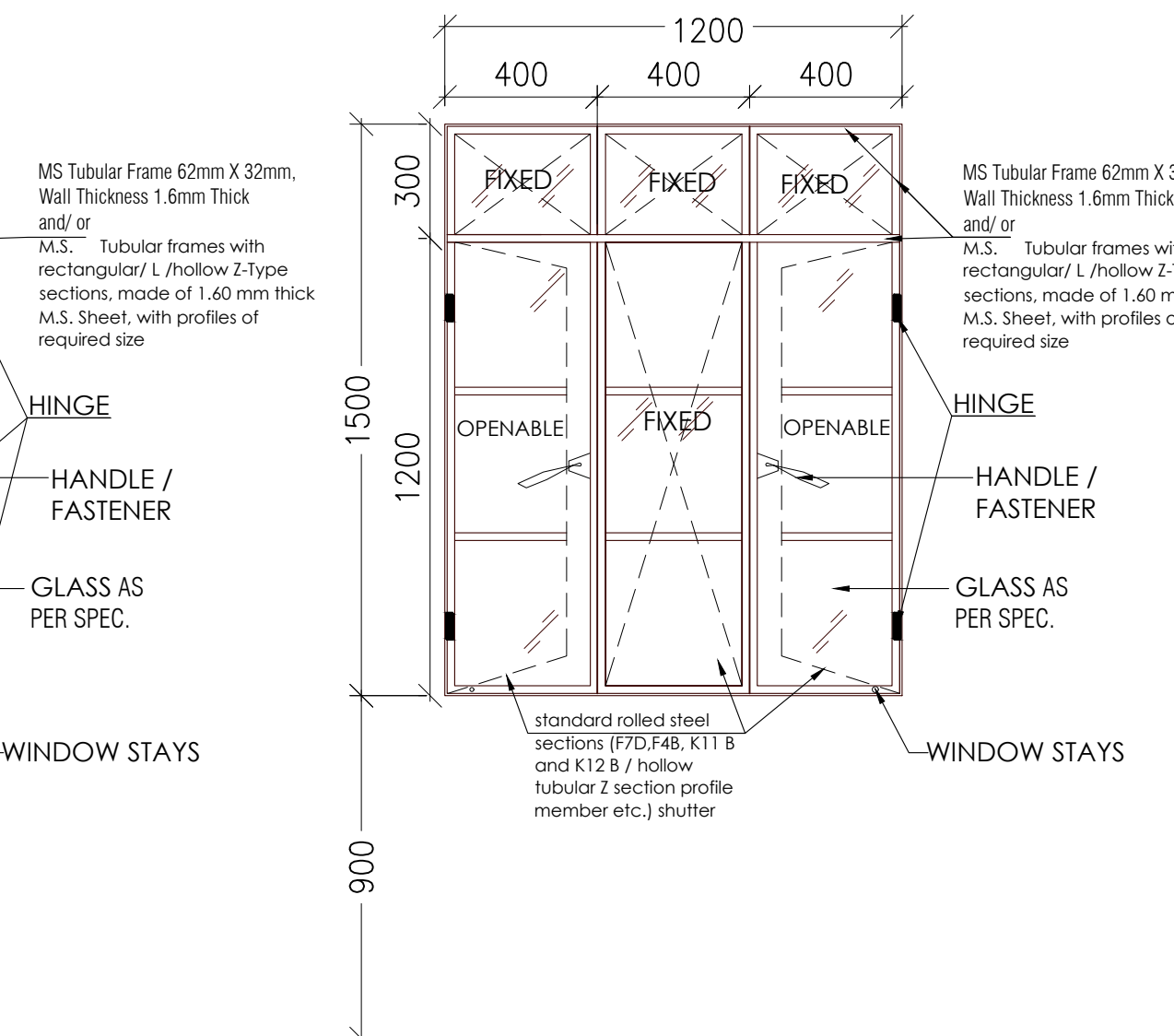
CLASSROOM, ADMIN AREA, LABS, LIBRARY
W1 (1800X1500)



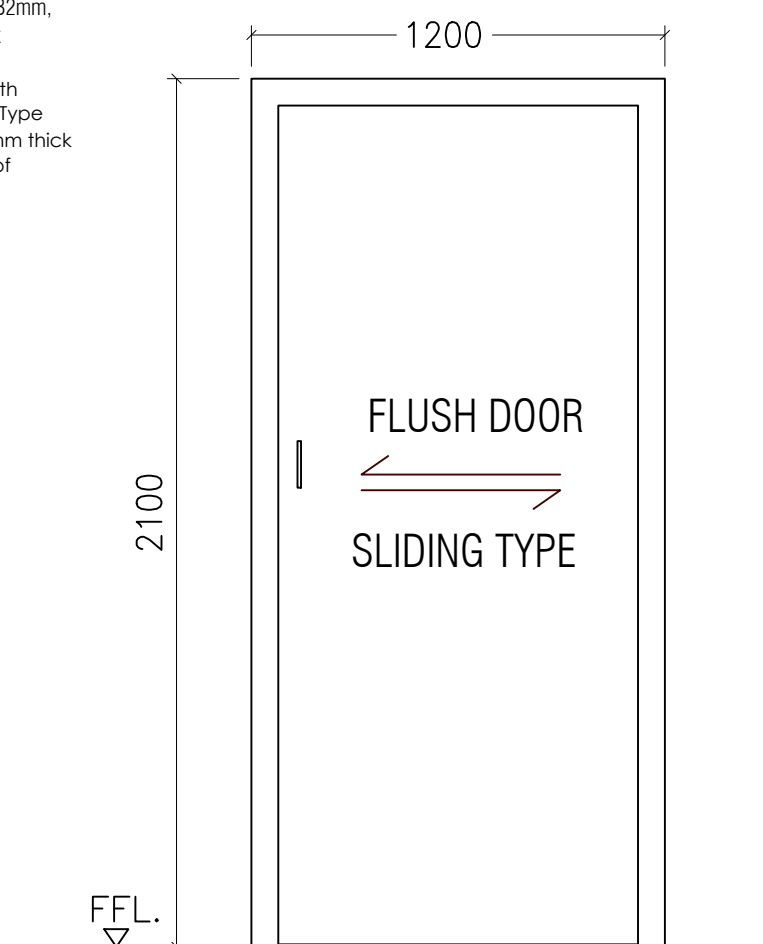
1st FLOOR ENTRANCE PORCH
FIXED WINDOW
W1 (1800X1500)



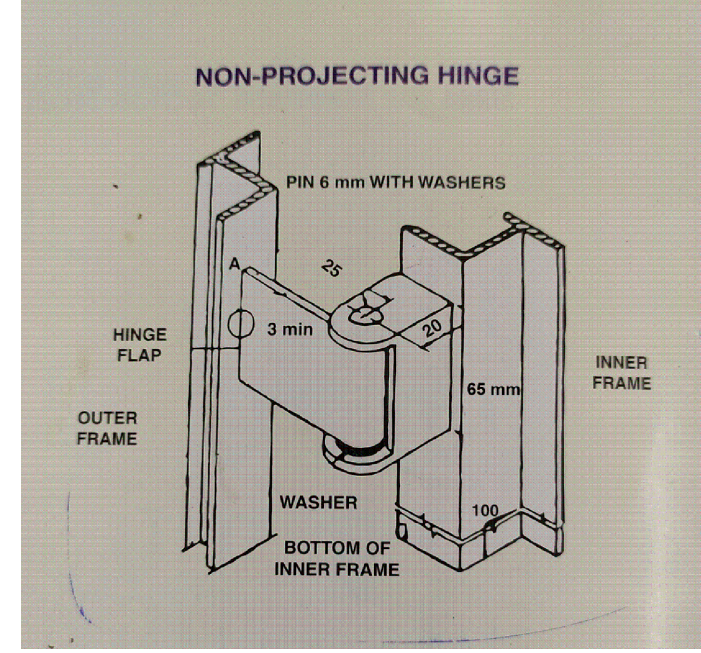
RAMP
W2 (1800X1200)



STORE, PANTRY
W3 (1200X1500)



MEDICAL ROOM
SD1 - 1200 X 2100



TYPICAL HINGE DETAIL

N.K.
(NARENDRA KUMAR)
pl Approved 10.3.23
(Prasad Approval)
Count 13/4/23
(Rk Gangi)
Rev 05 13/3/2023
(SANDEEP SOOD)

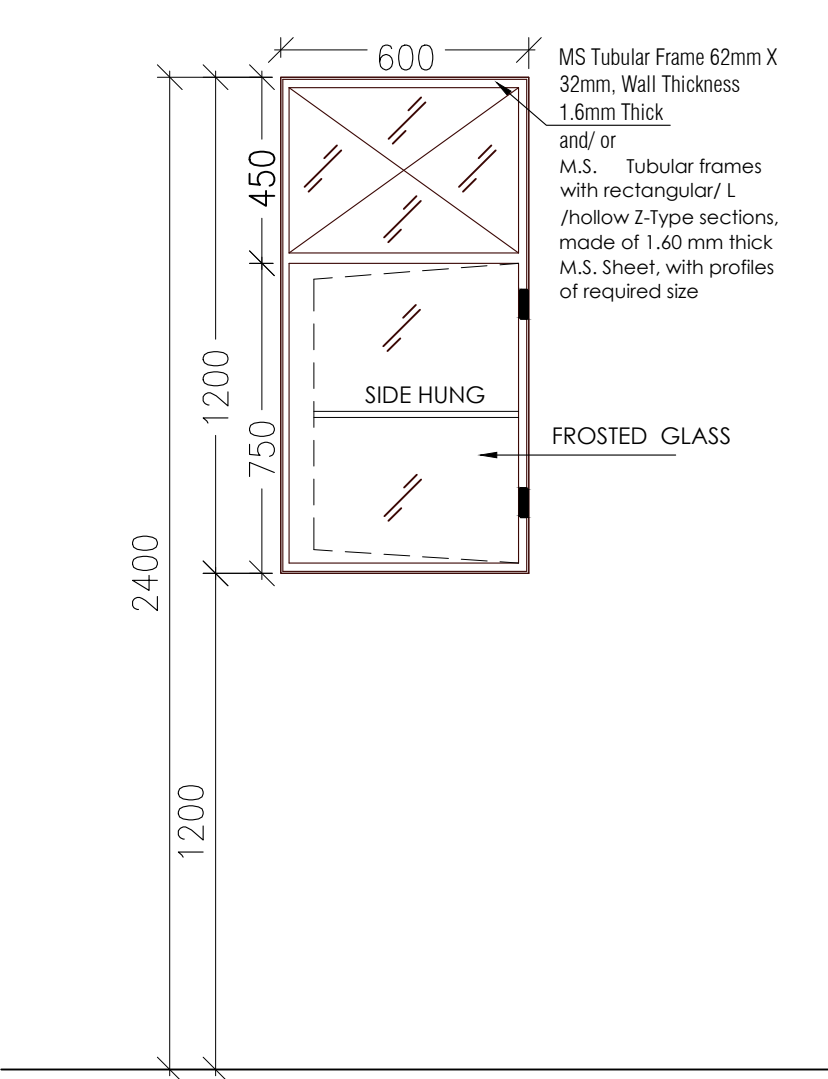
A D P Keshri
Chief Technical Consultant

CATEGORY :
DOOR WINDOW DETAIL

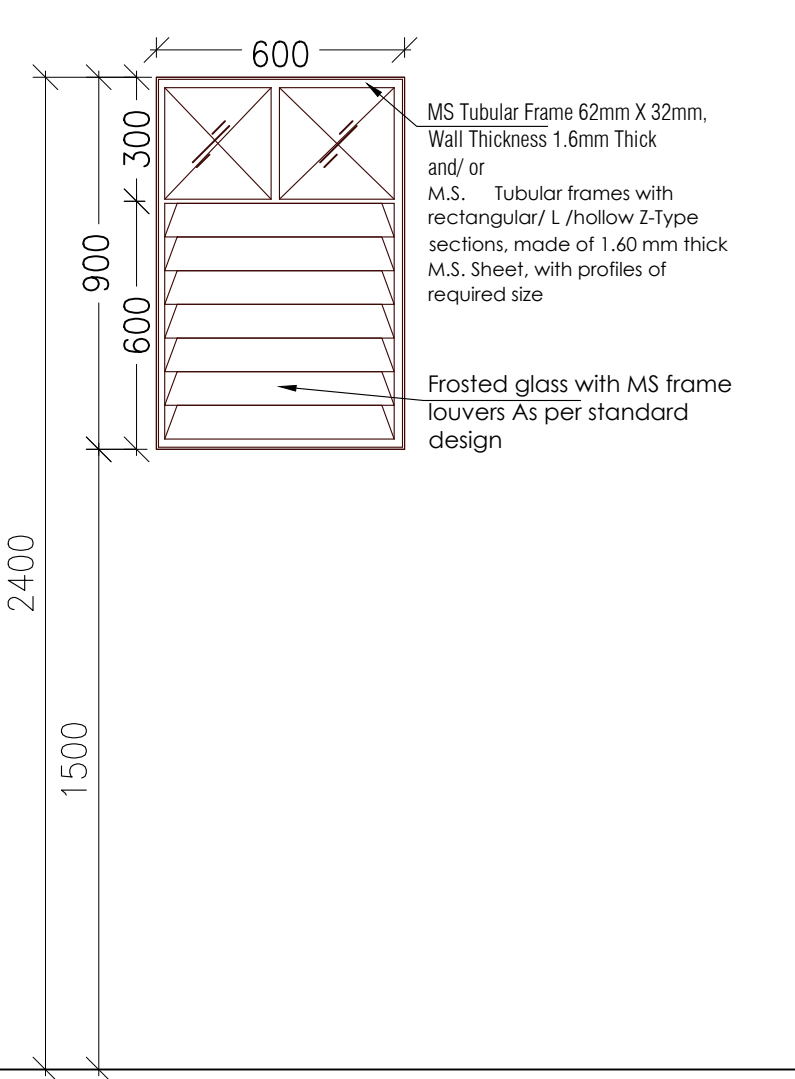
DRAWING TITLE :
SCHOOL DOOR WINDOW DETAIL

DWG. NO.-
EMRS NAME/SCH/DWD/AR_01

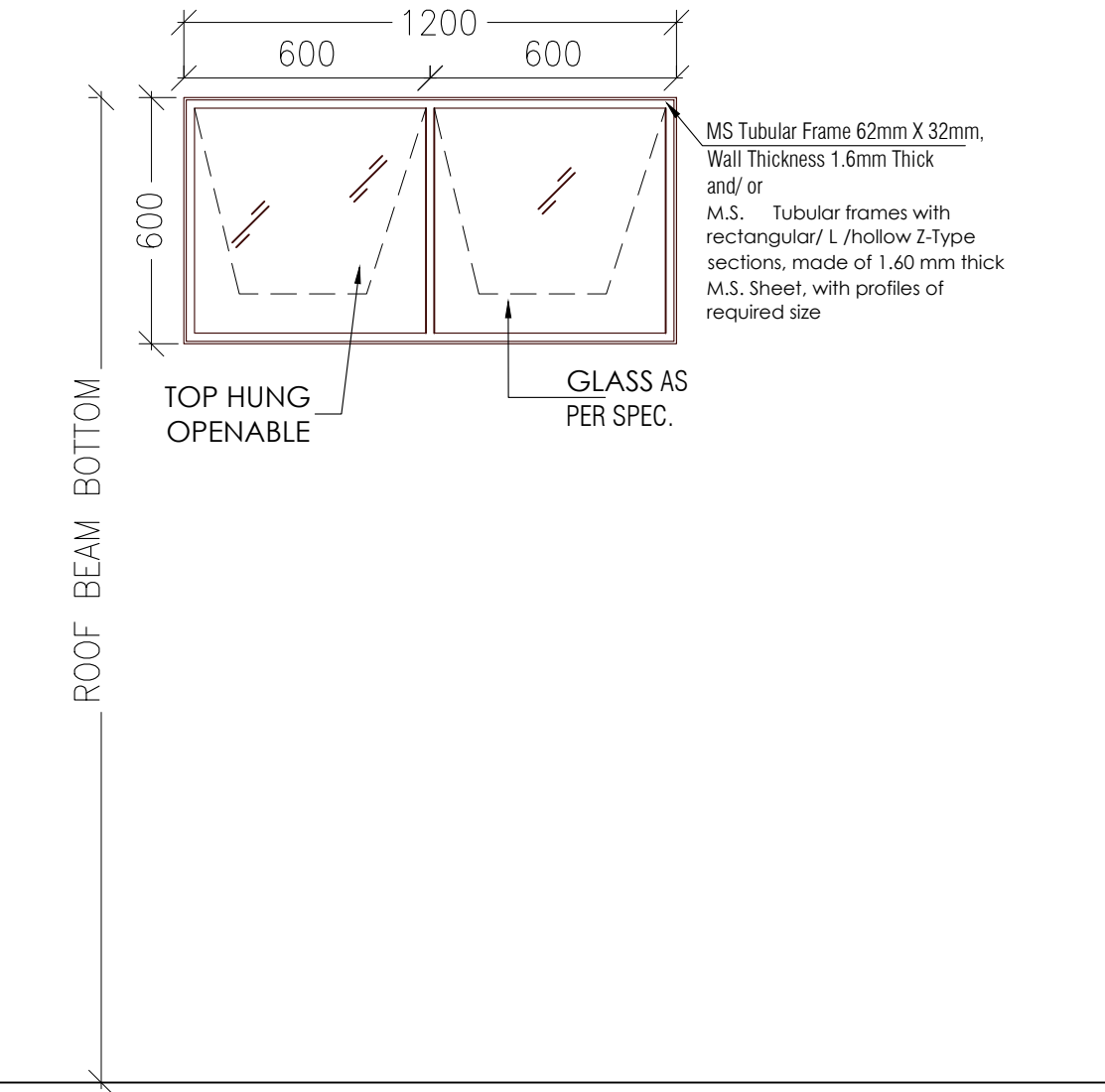
DATE - 09 MARCH 2023



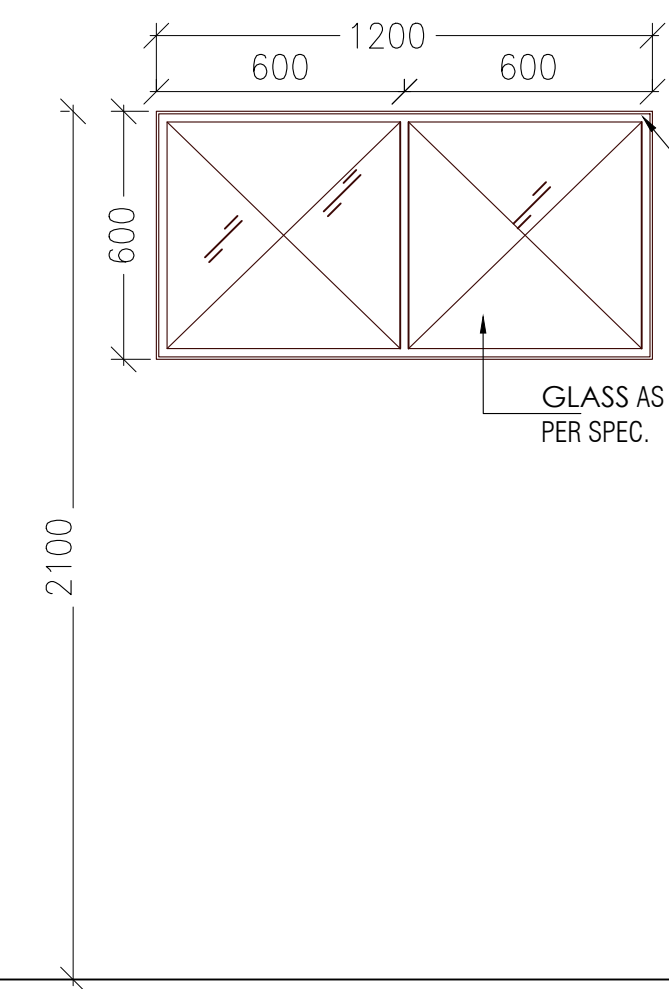
TOILET
V1(600x1200)



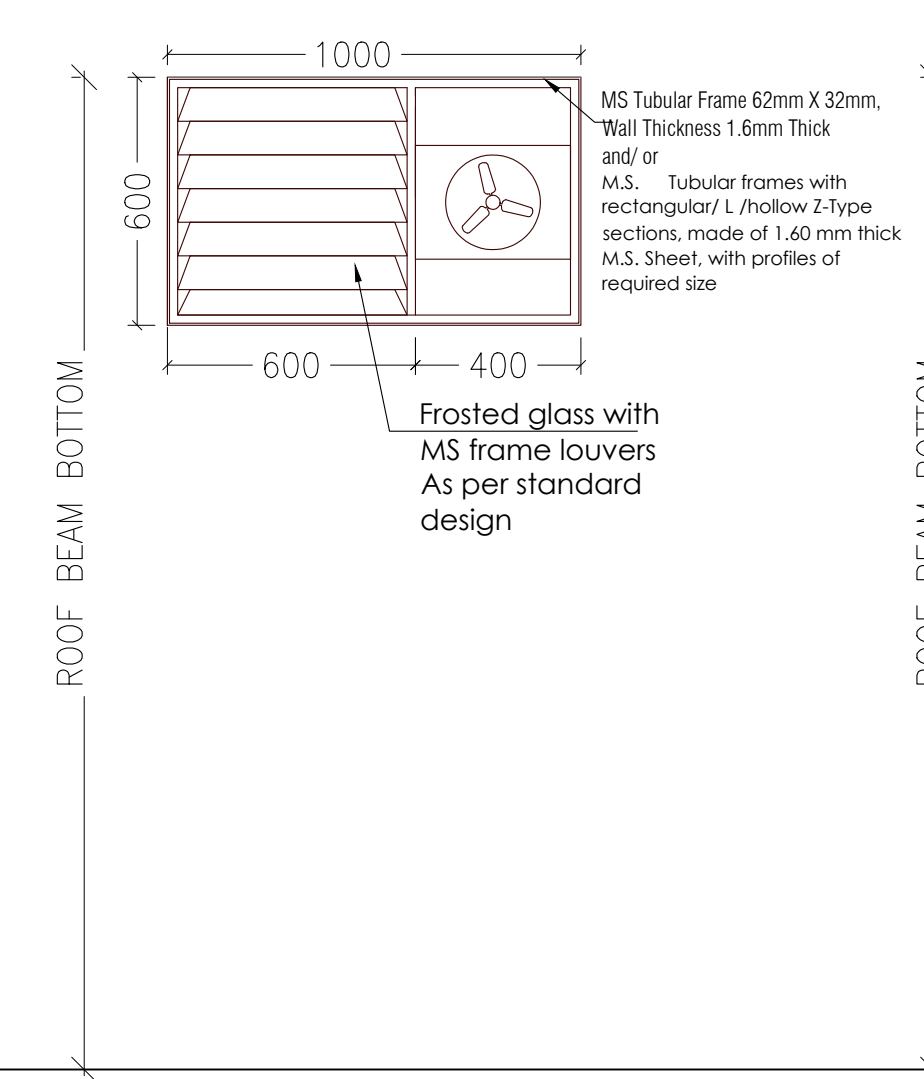
TOILET
V2(600x900)



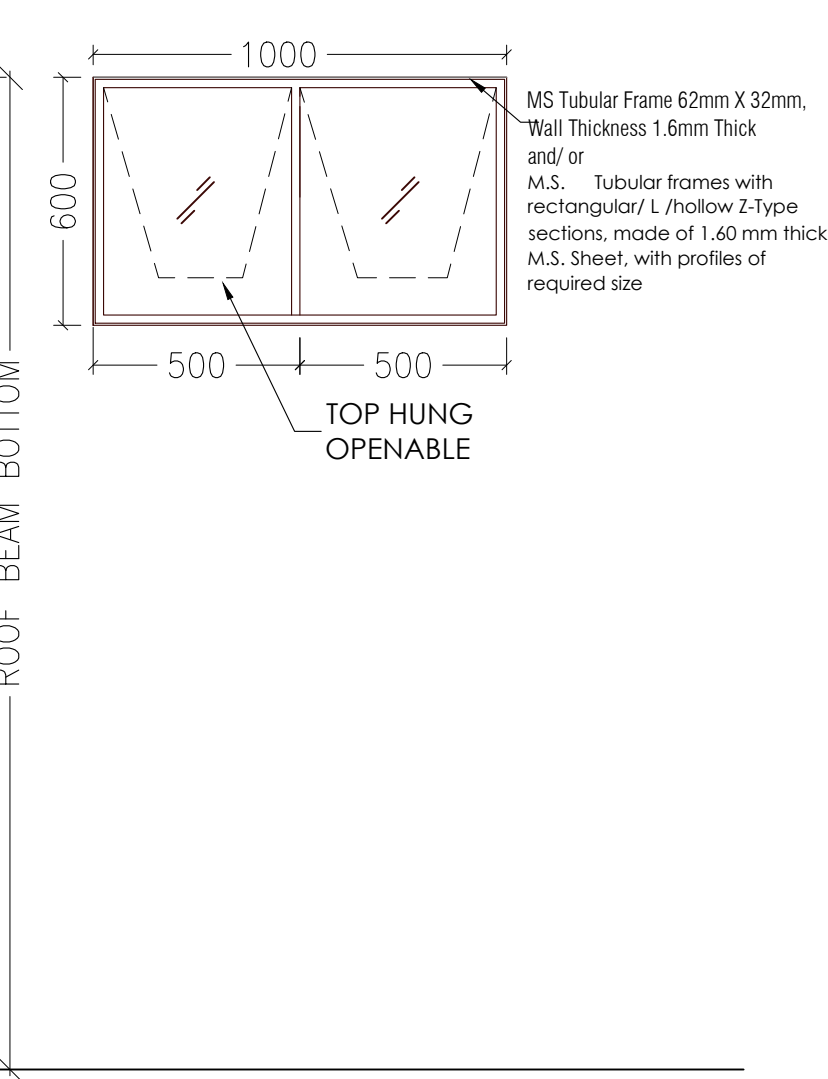
CLASSROOM, ADMIN AREA, LABS, LIBRARY, RAMP
V3(1200x600)



STORE, SERVER, PANTRY, MEDICAL
V3(1200x600)



HANDICAPPED TOILET
V4(1000x600)



STAFF ROOM, OFFICE, V.PRINCIPAL, PRINCIPAL
V4(1000x600)

SCHOOL BLOCK - GRILL AND COLLAPSIBLE DETAIL

PROJECT - EMRS

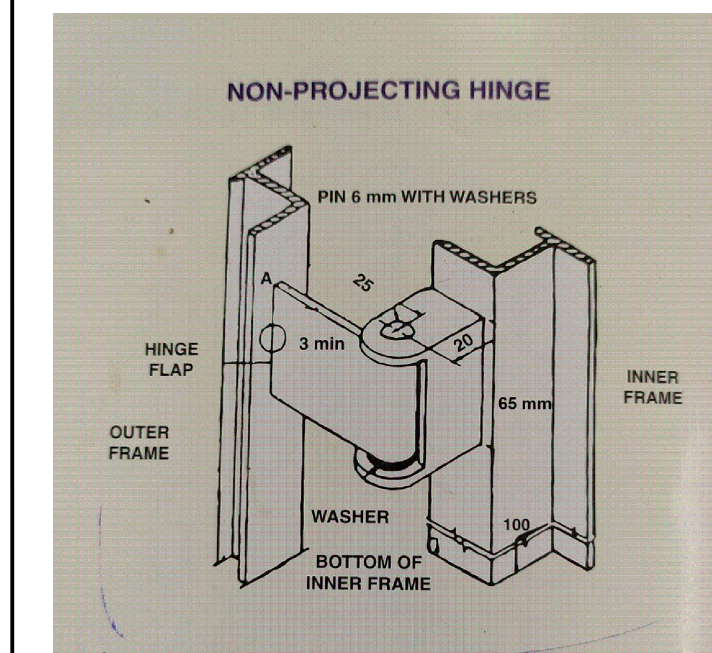
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

**GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS**

NOTES -

1. **FIXTURES SHALL BE AS PER CPWD SPECIFICATION**
2. **GLAZED SHUTTERS WILL OPEN OUTSIDE**
3. **WINDOW SHOULD BE FACTORY MADE TYPE WITH FLASH WELDING**
4. **NESTS/ CPWD APPROVED MAKE SHALL ONLY BE PROVIDED**



TYPICAL HINGE DETAIL

N.K.
(NARENDRA KUMAR)
pl Approved 10.3.23
(Prasad Approval)
Count 13/4/23
(Rk Gang)
Rev 05 13/3/2023
(SANDEEP SOOD)

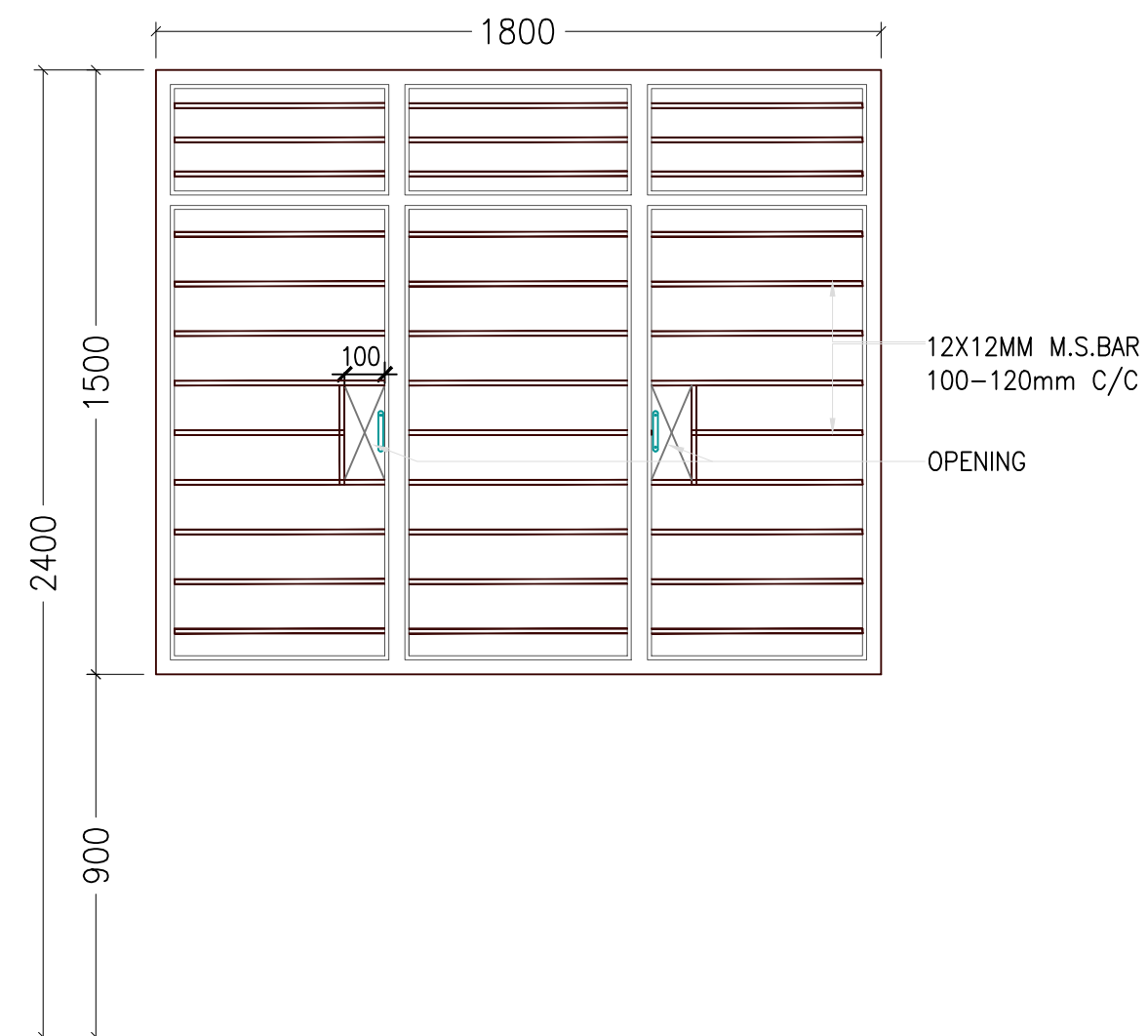
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : DOOR WINDOW DETAIL

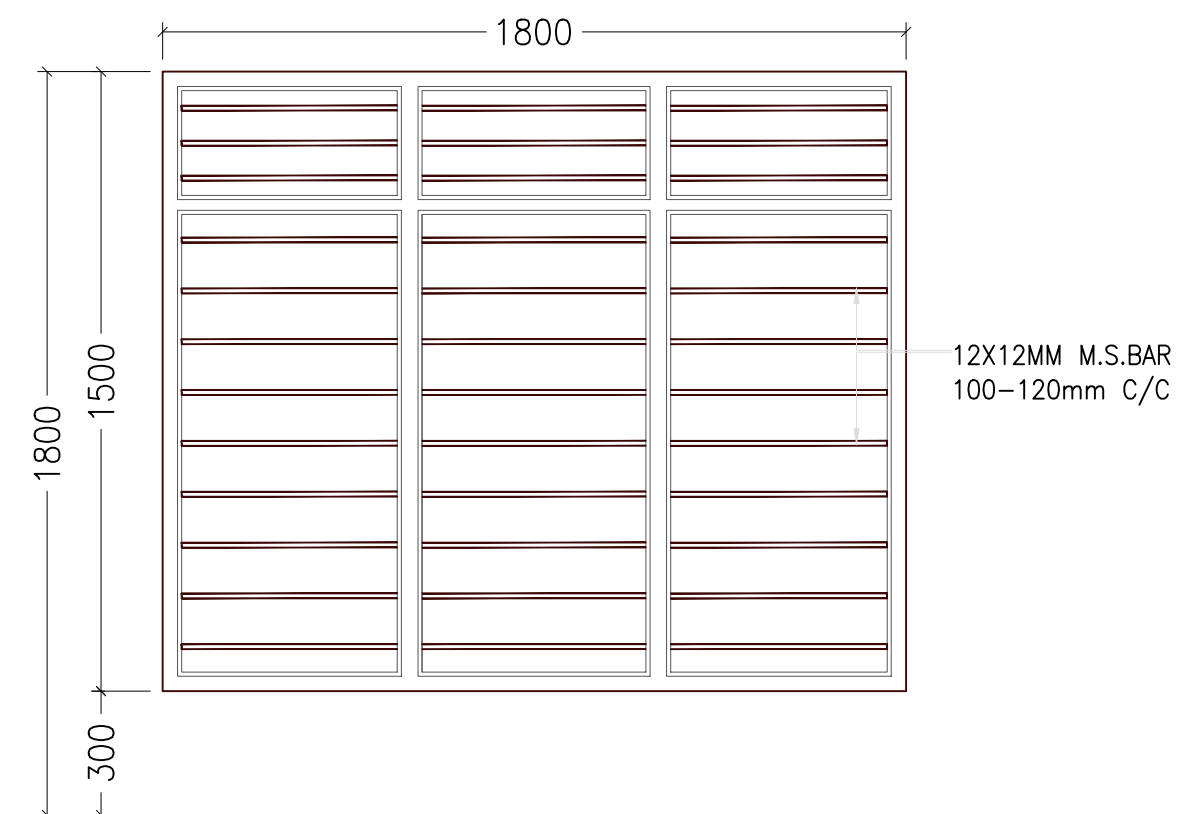
DRAWING TITLE : SCHOOL GRILL AND COLLAPSIBLE DETAIL

DWG. NO.- EMRS NAME/SCH/DWD/AR_02

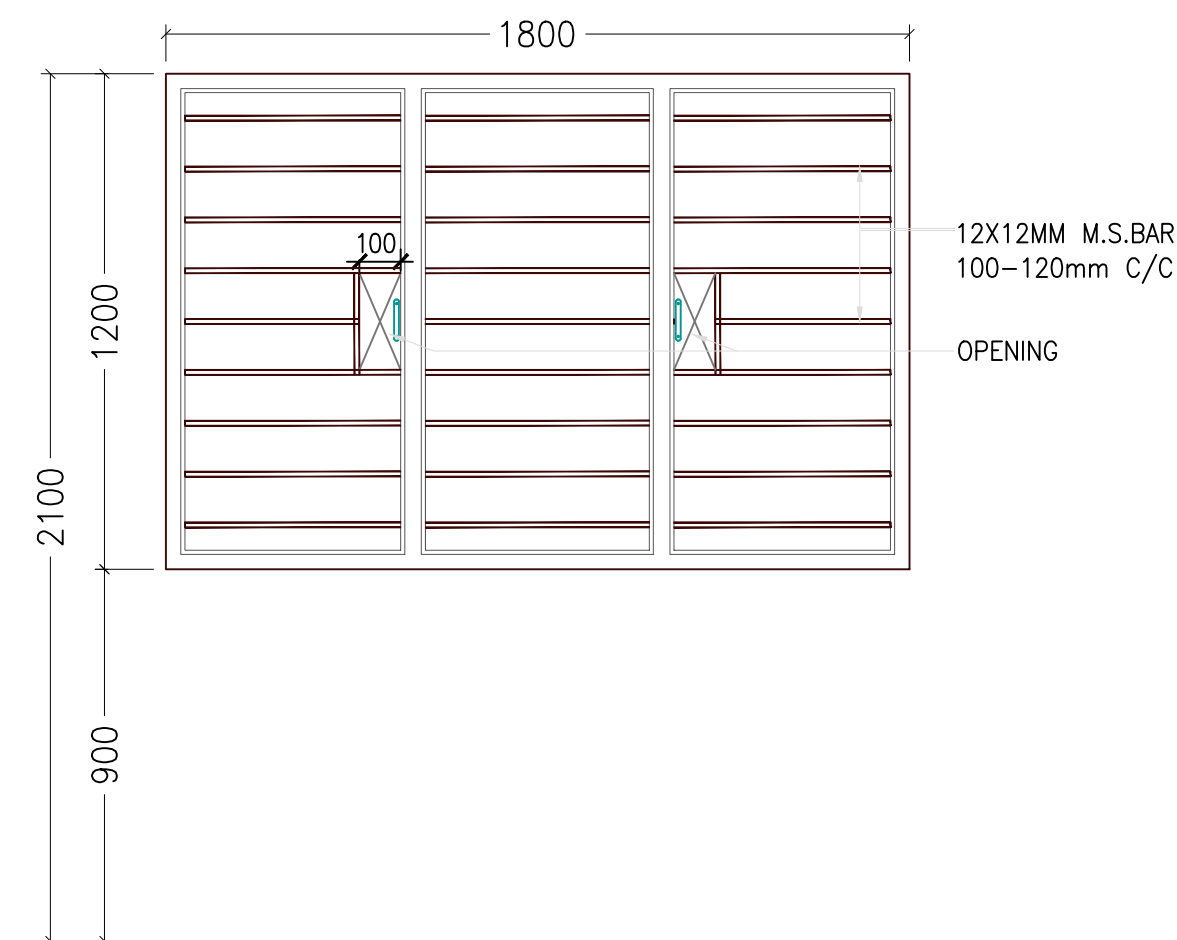
DATE - 09 MARCH 2023



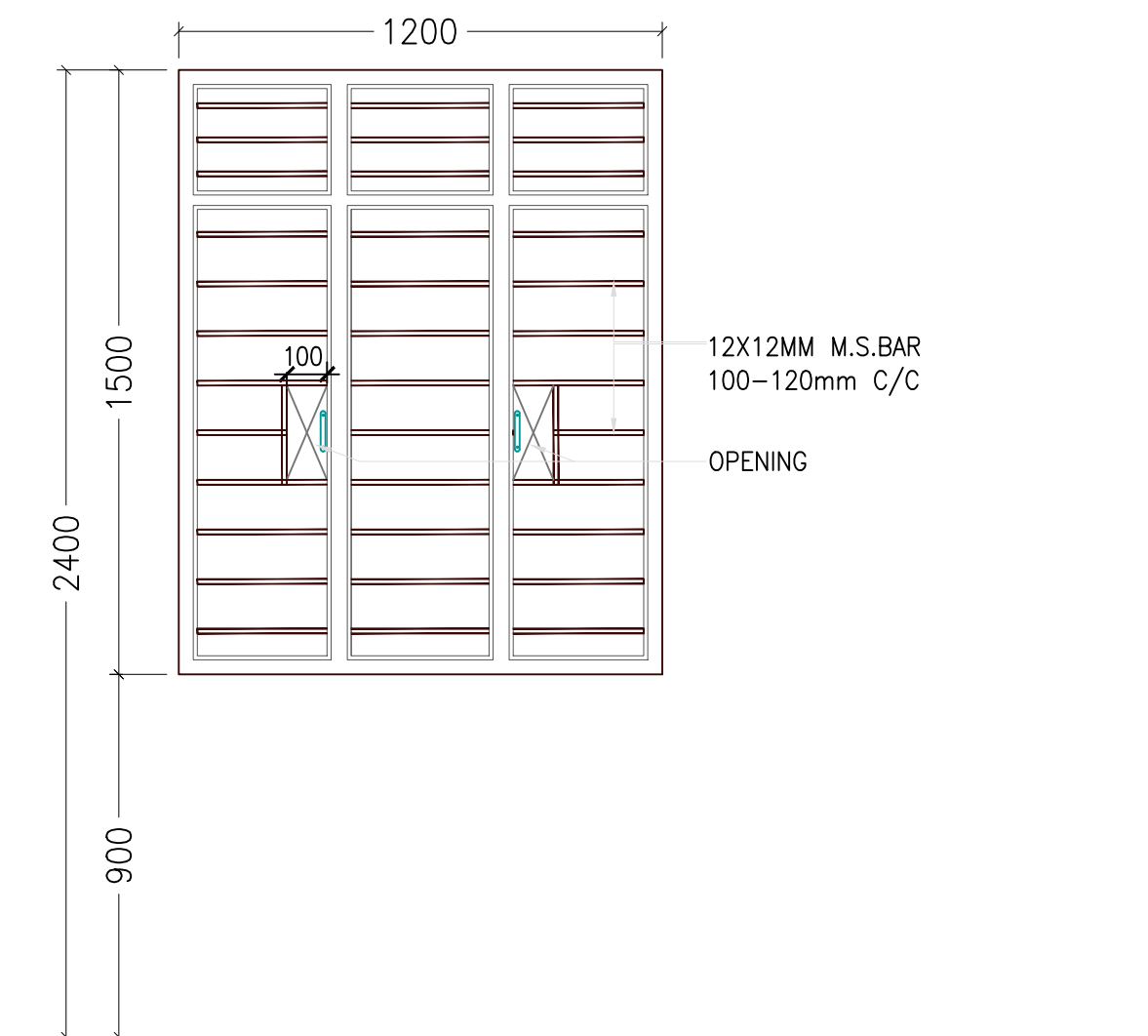
ELEVATION
**CLASSROOM, ADMIN AREA,
LABS, LIBRARY, RAMP**
W1 (1800X1500)



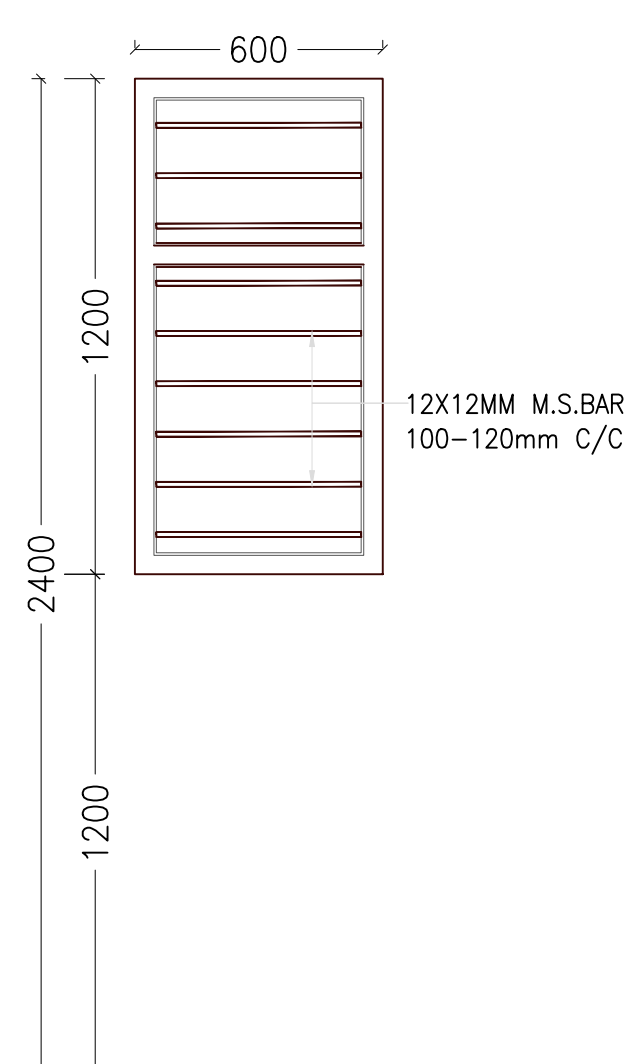
ELEVATION
1st FLOOR ENTRANCE PORCH
FIXED WINDOW
W1 (1800X1500)



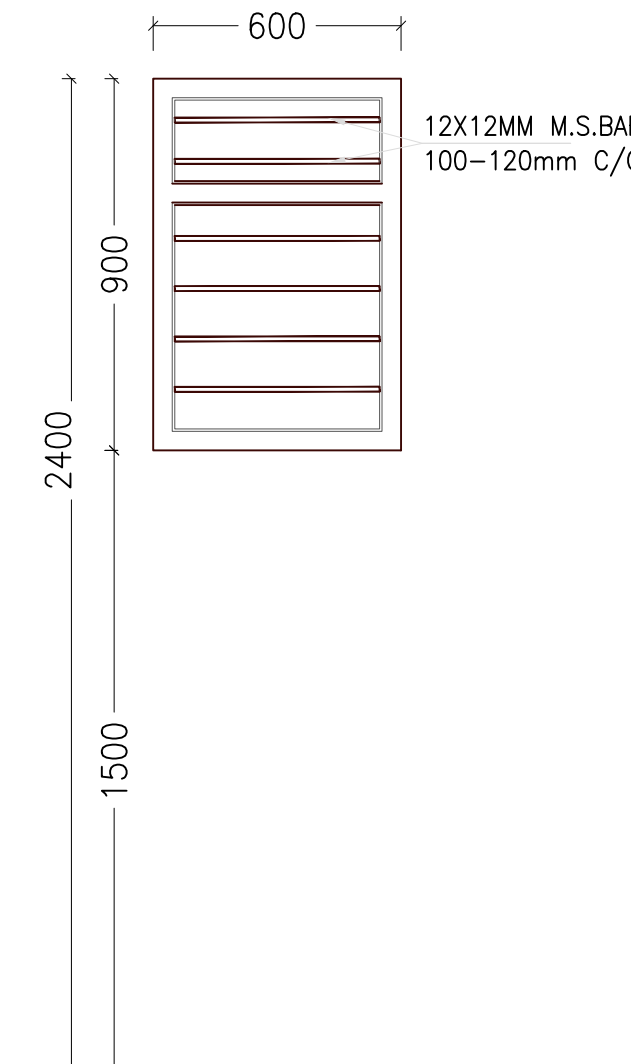
ELEVATION
RAMP
W2 (1800X1200)



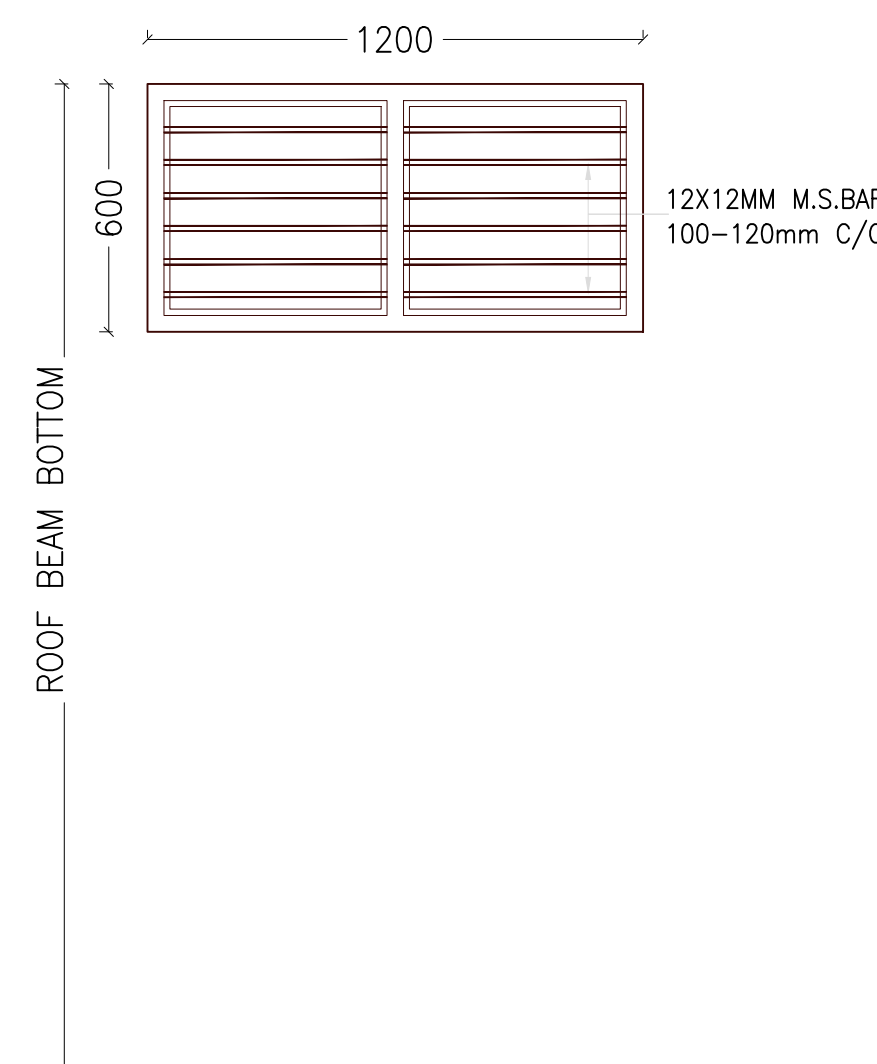
STORE, PANTRY
W3 (1200X1500)



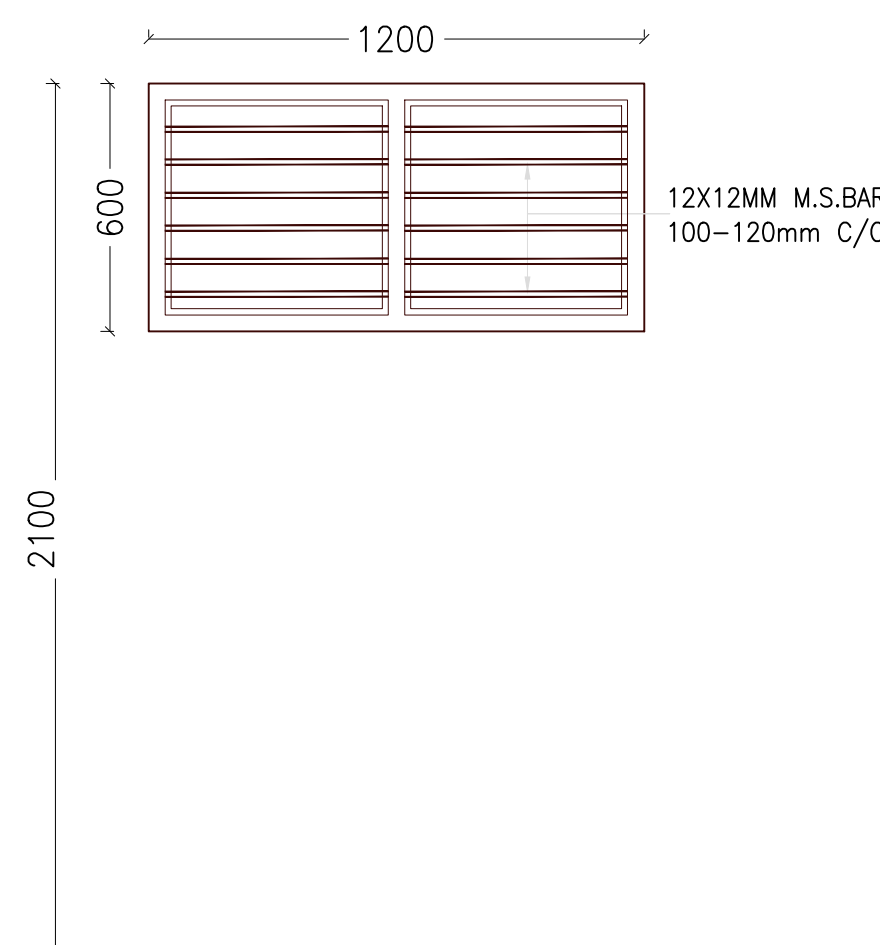
ELEVATION
TOILET
V1(600x1200)



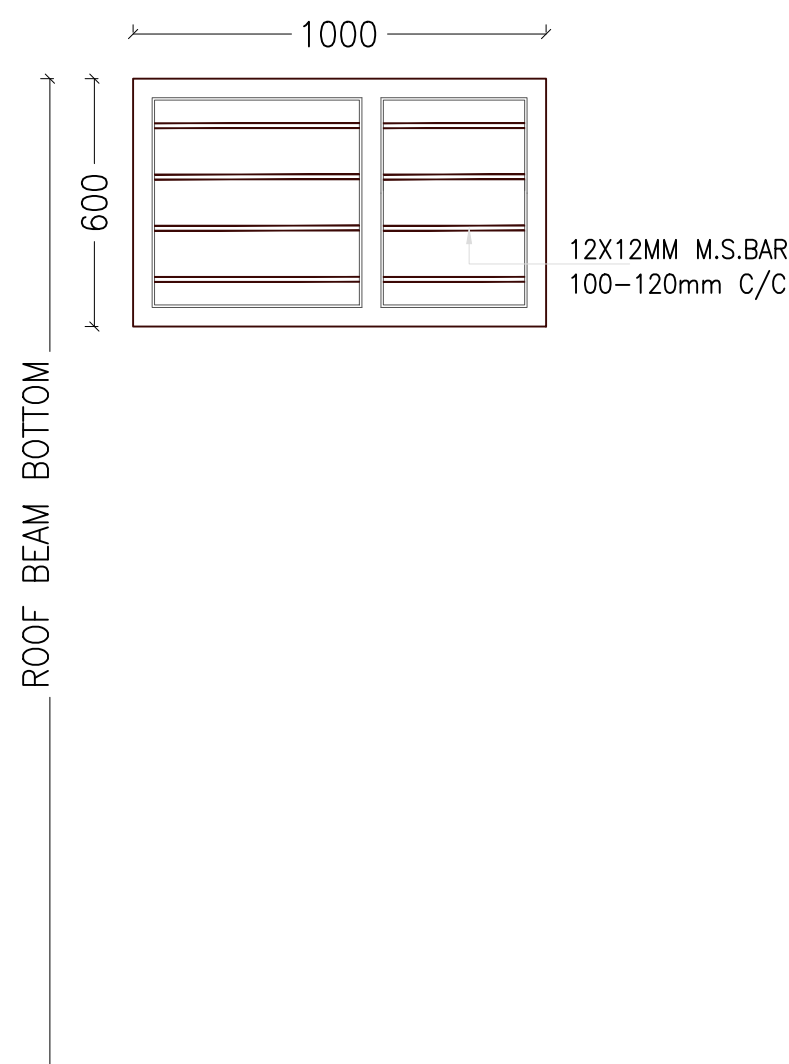
ELEVATION
TOILET
V2(600x900)



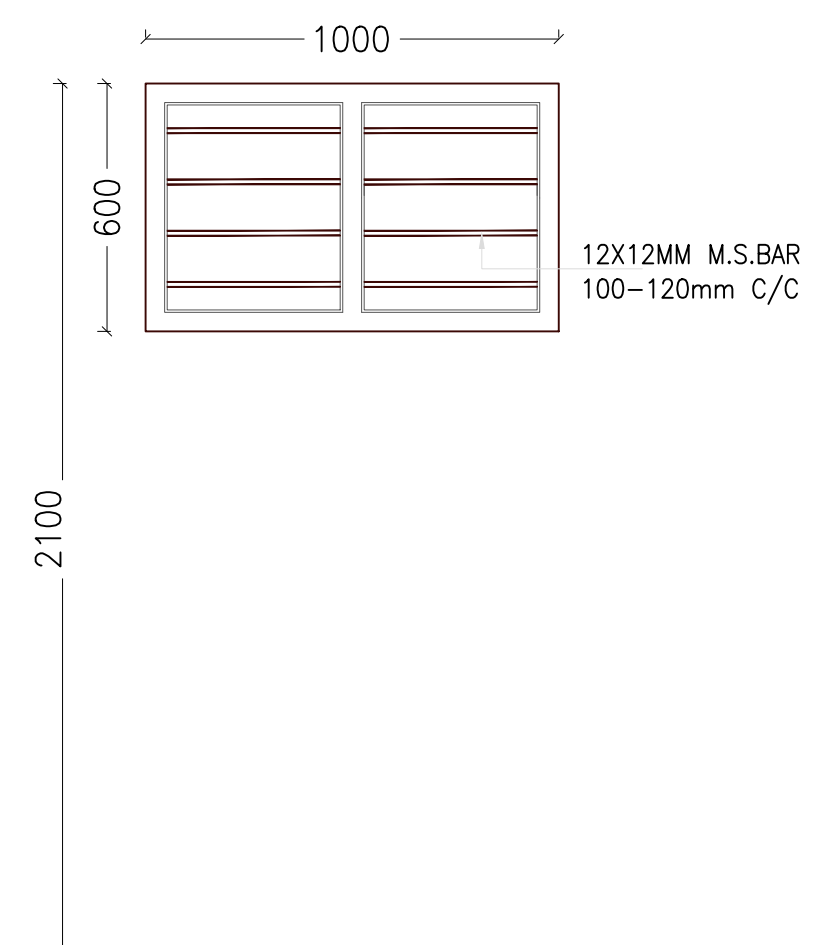
ELEVATION
CLASSROOM, ADMIN AREA, LABS, LIBRARY, RAMP
V3(1200X600)



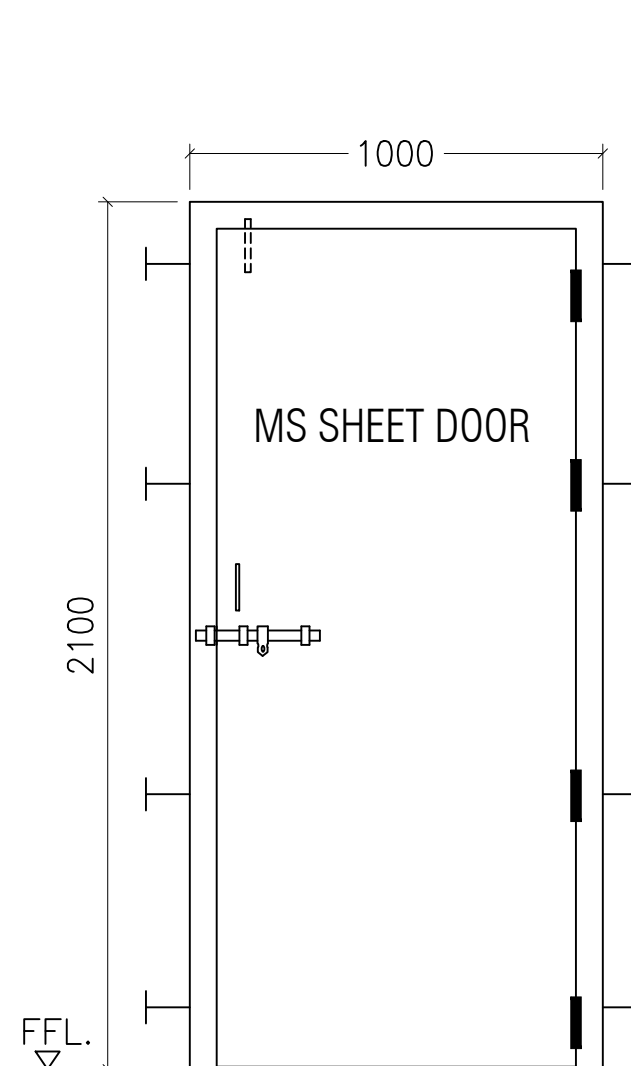
ELEVATION
STORE, SERVER, PANTRY, MEDICAL
V3(1200X600)



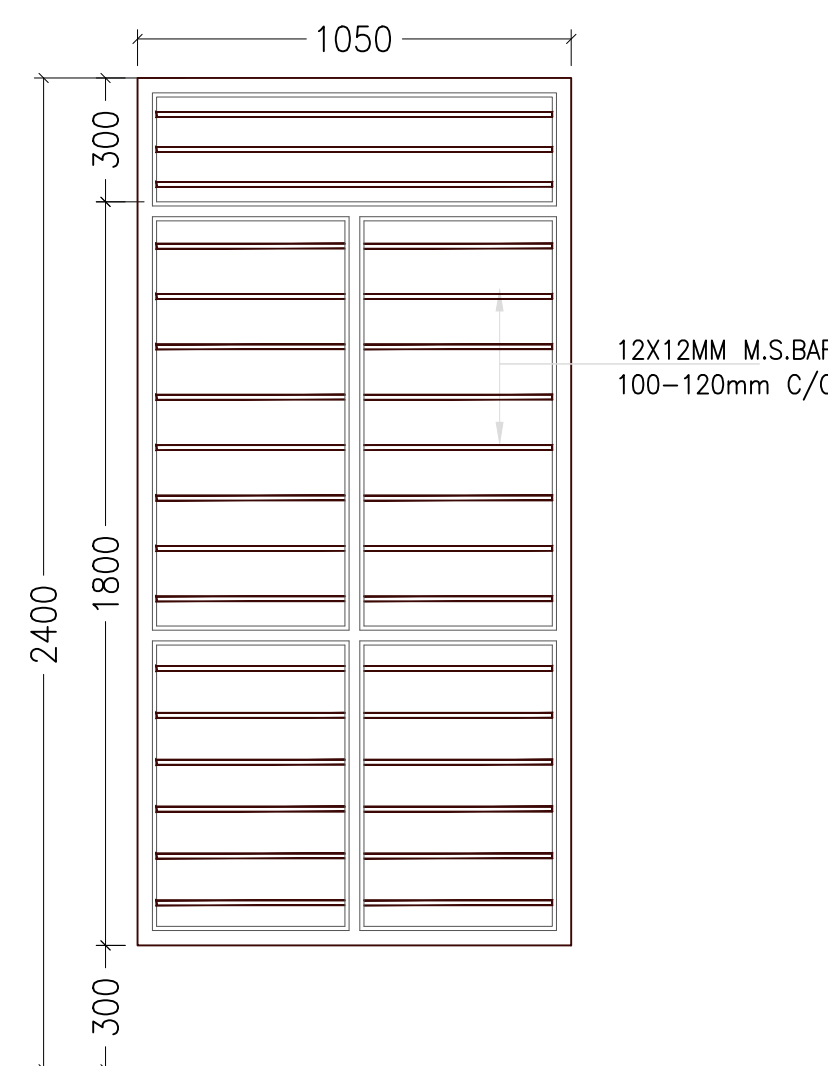
ELEVATION
HANDICAPPED TOILET
V4(1000x600)



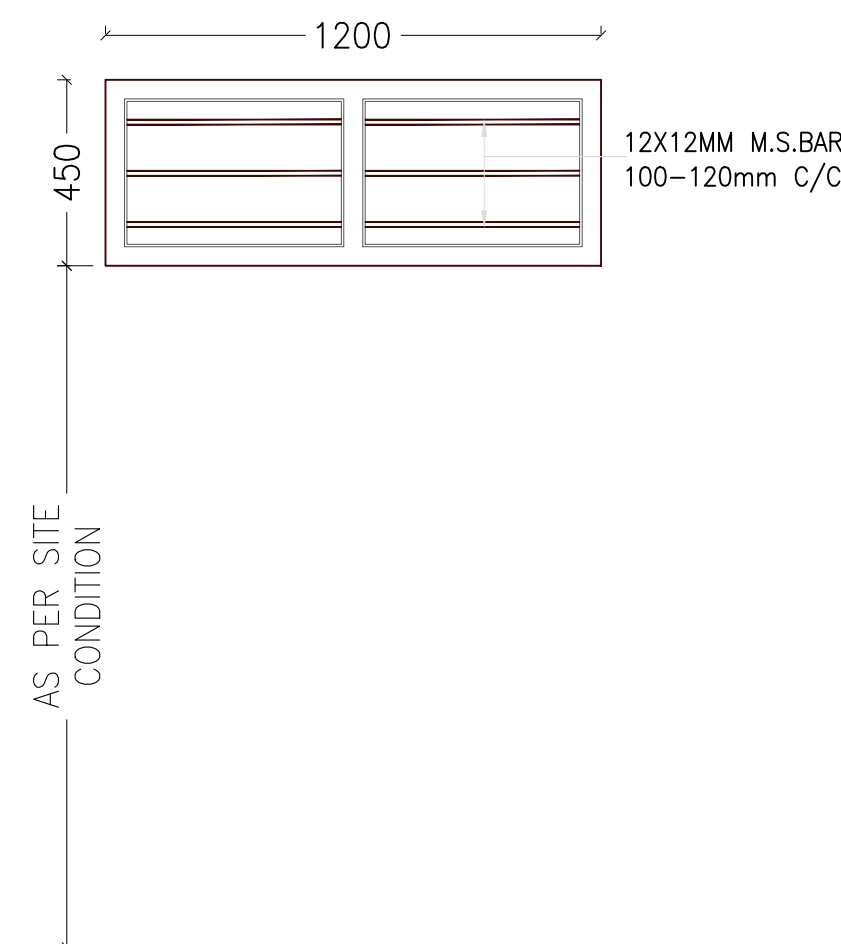
ELEVATION
**STAFF ROOM, OFFICE,
V.PRINCIPAL, PRINCIPAL**
V4(1000x600)



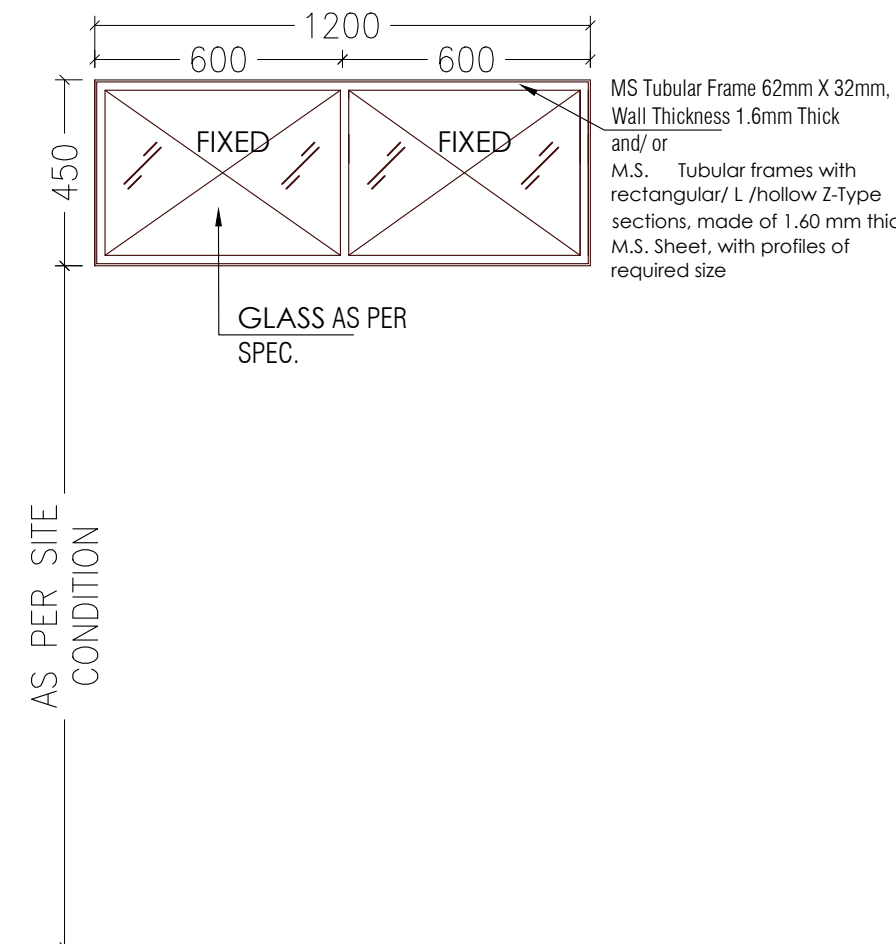
TERRACE DOOR
D2 - 1000 X 2100



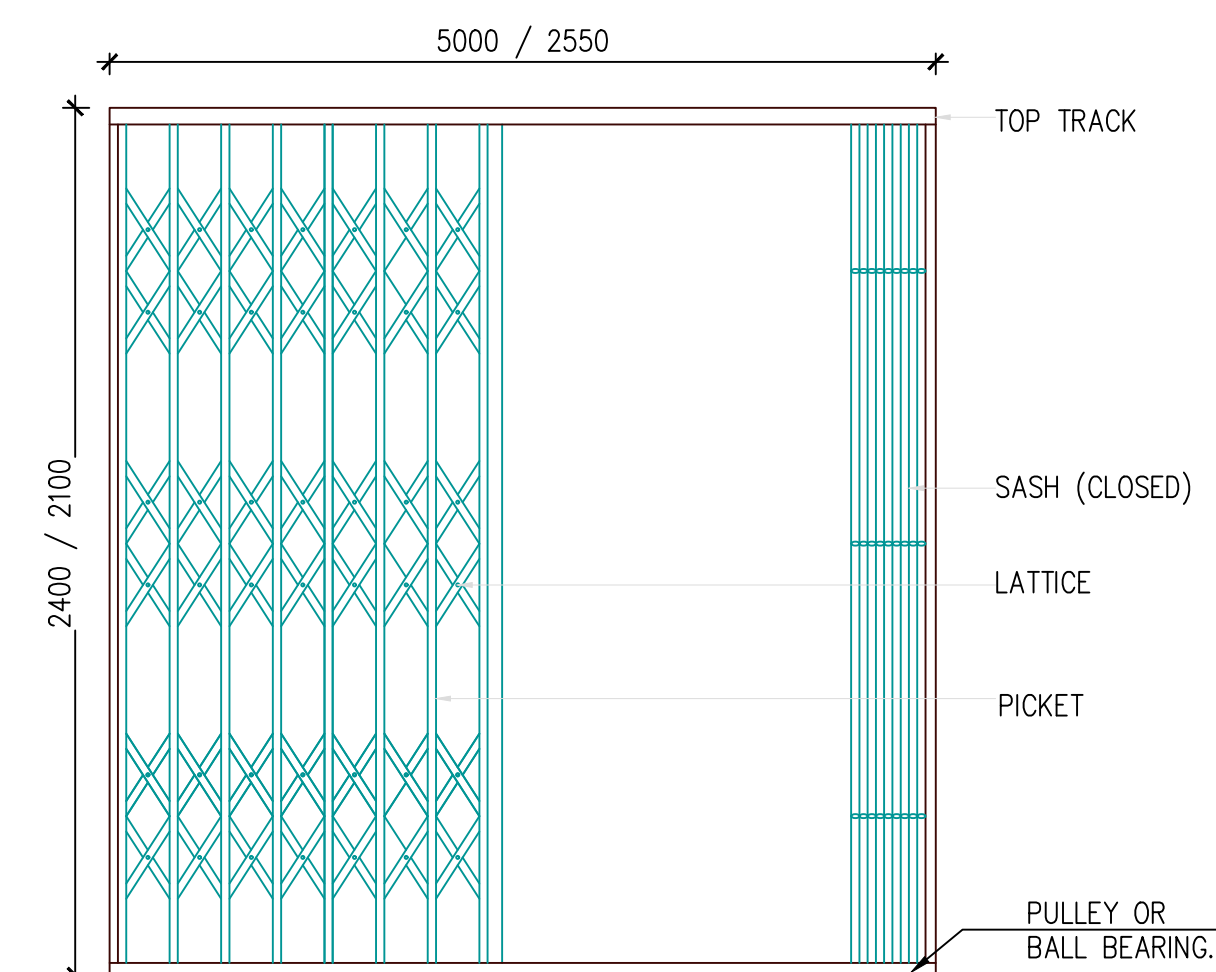
ELEVATION
FGL - FIXED GLASS
1050 x 2100



ELEVATION
STORE, MEDICAL ROOM, SERVER
V5(1200X450)

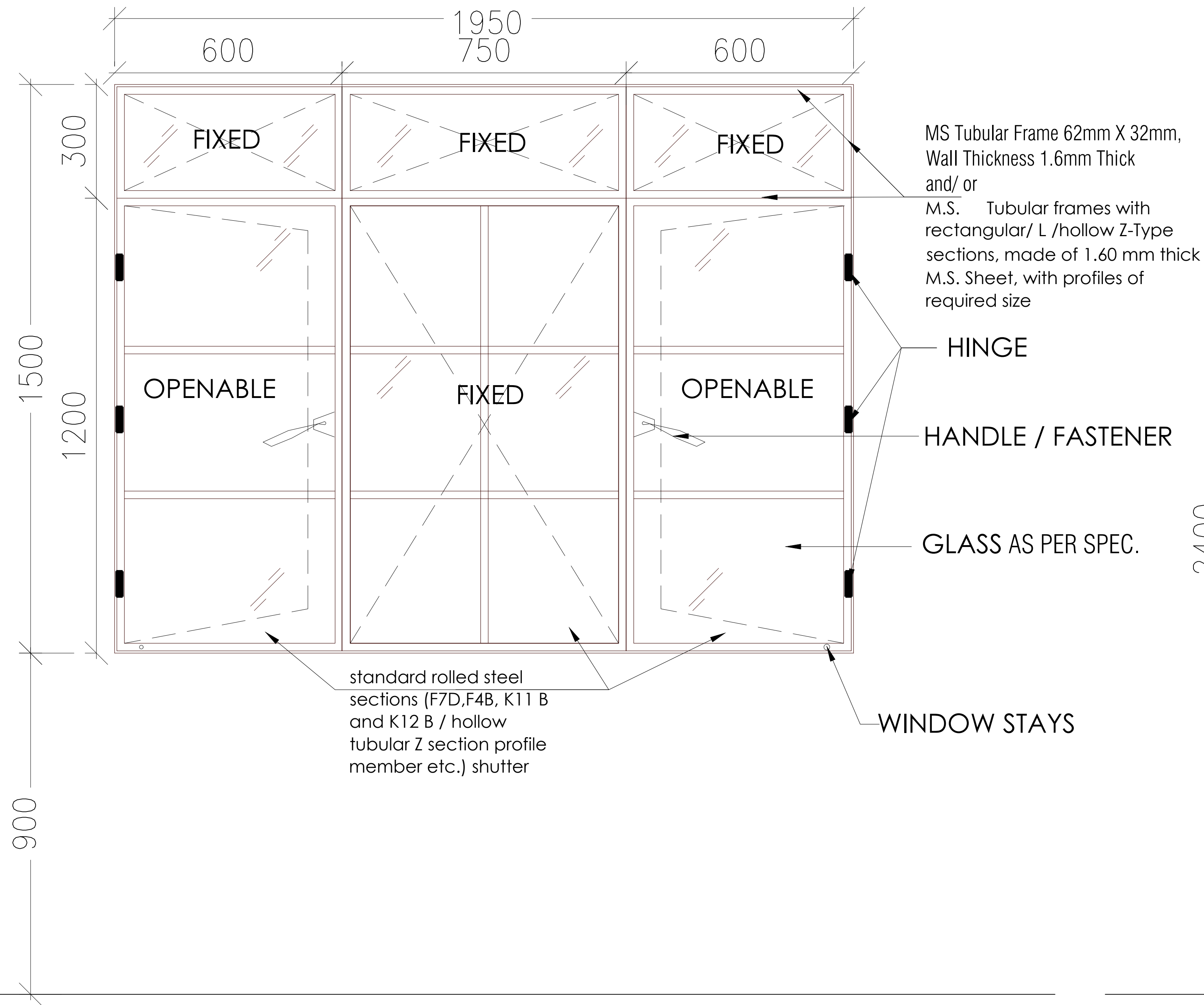


STORE, MEDICAL ROOM, SERVER
V5(1200x450)

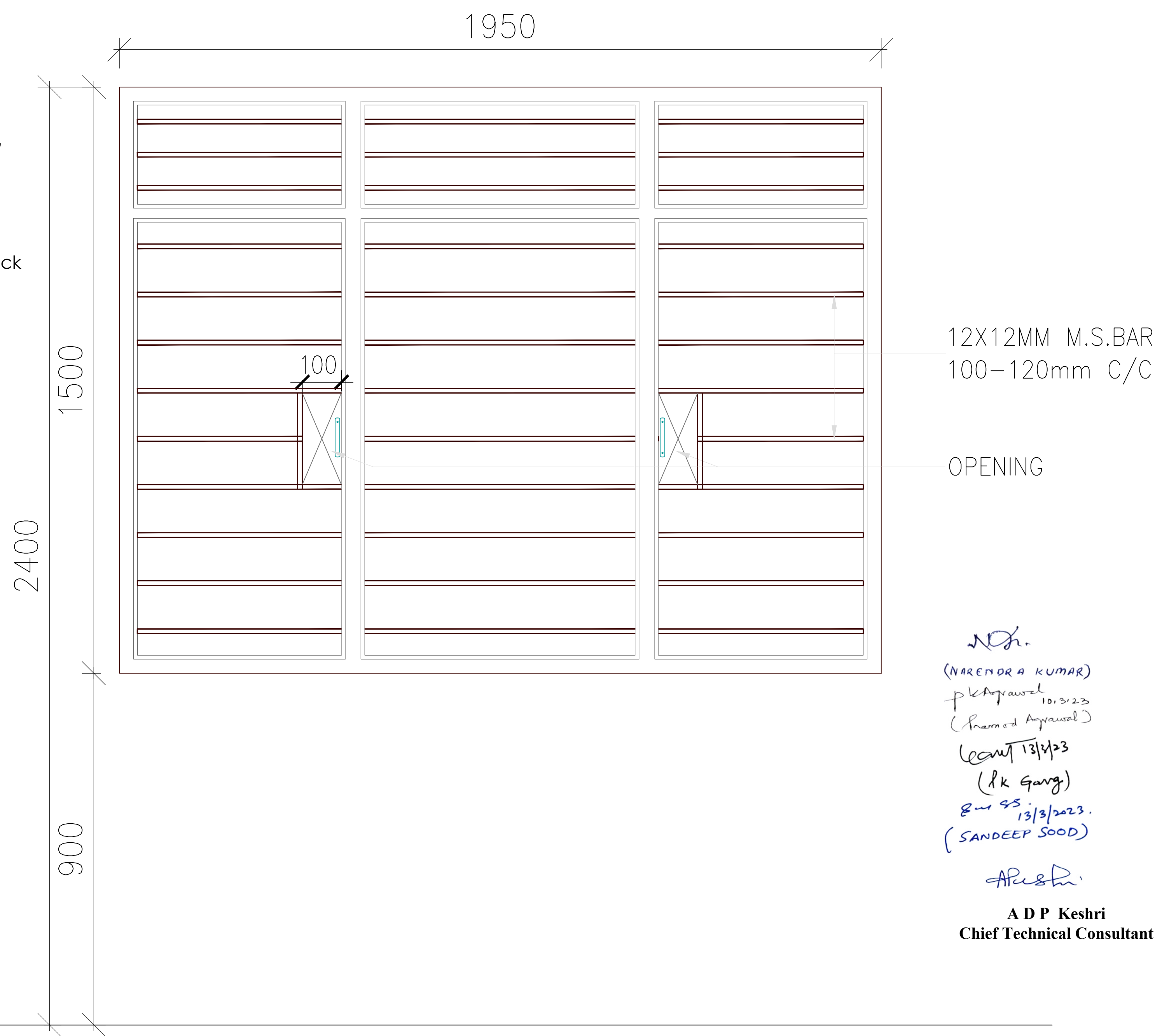


ELEVATION
COLLAPSIBLE GATE
CG1 - 5000 x 2400 (MAIN ENTRANCE GATE)
CG2 - 2550 x 2100 (ASSEMBLY AREA ENTRY)

Wherever Construction With Window Opening is Completed



W1 (1950X1500)



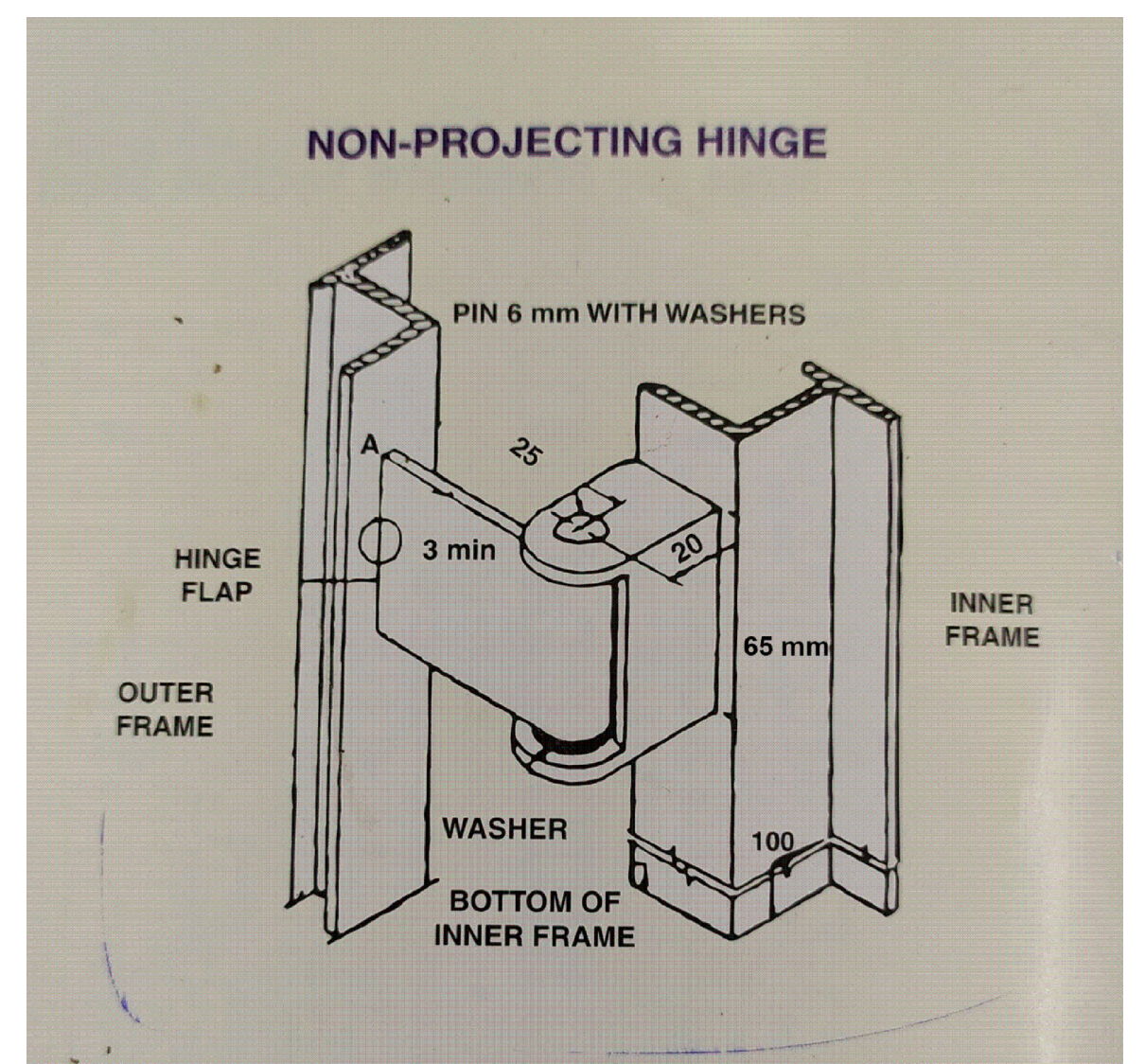
ELEVATION

N.K.
 (NARENDRA KUMAR)
 pl approved 10.3.23
 (Planned Approval)
 (CA) 13/4/23
 (Pk Gang)
 20/5/23
 13/3/2023.
 (SANDEEP SOOD)
ADP
 A D P Keshri
 Chief Technical Consultant



- NOTES -**
- 1. FIXTURES SHALL BE AS PER CPWD SPECIFICATION**
 - 2. GLAZED SHUTTERS WILL OPEN OUTSIDE**
 - 3. WINDOW SHOULD BE FACTORY MADE TYPE WITH FLASH WELDING**
 - 4. NESTS/ CPWD APPROVED MAKE SHALL ONLY BE PROVIDED**

W1 - WINDOW 1
 1950 x 1500

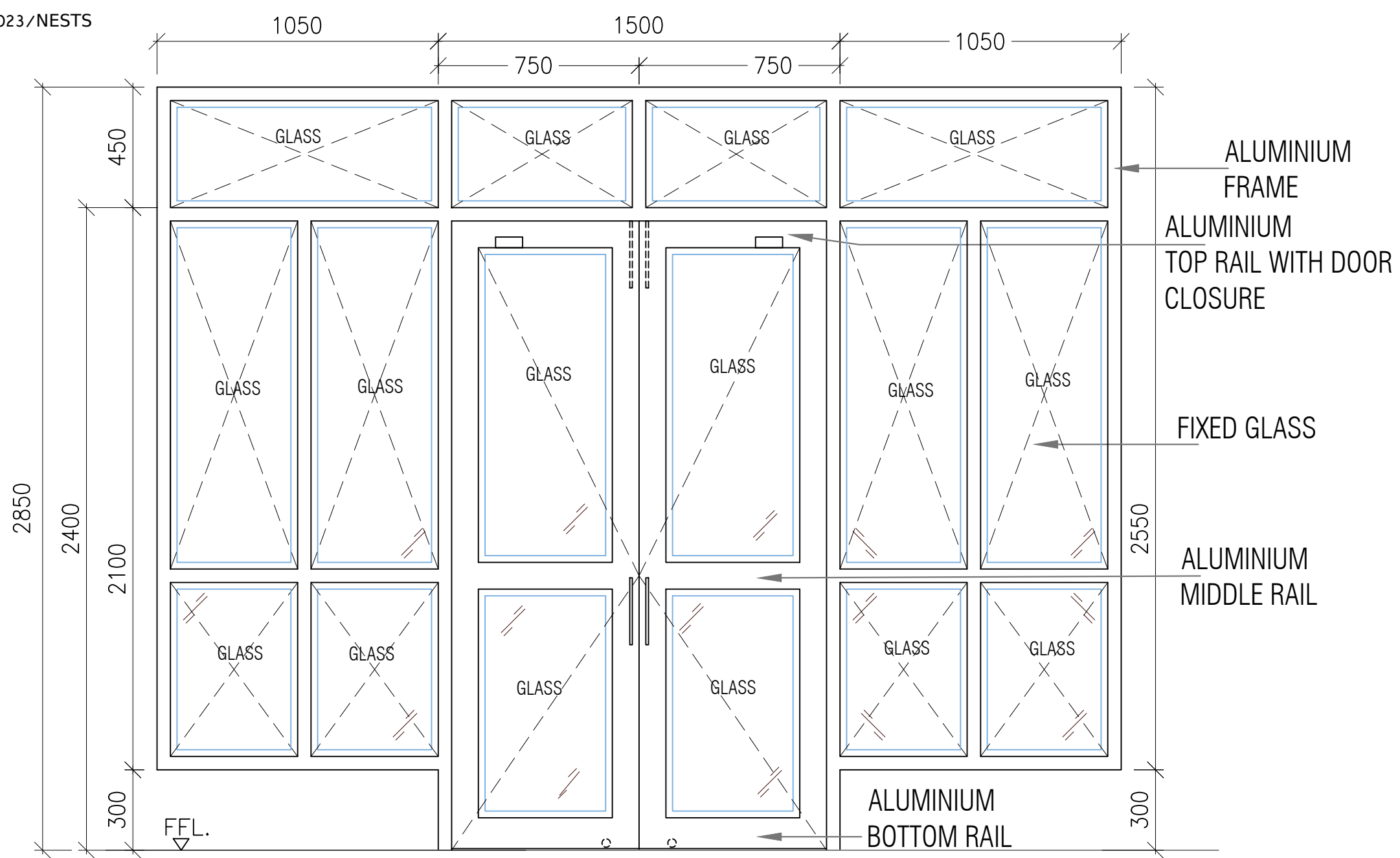


TYPICAL HINGE DETAIL

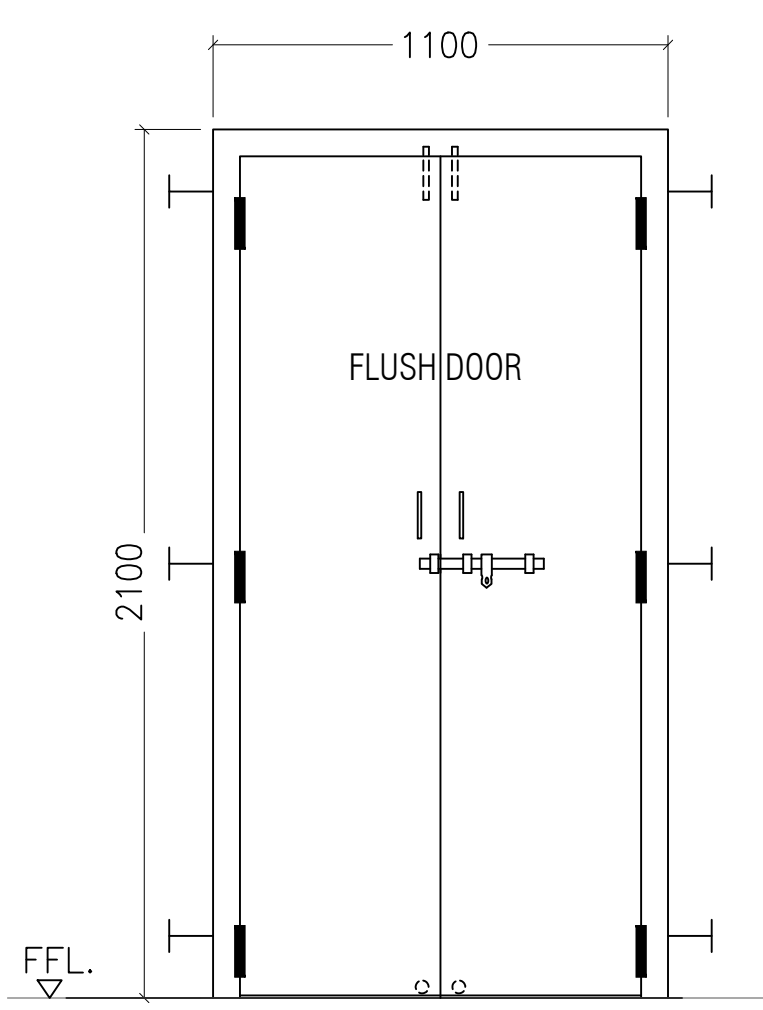
HOSTEL BLOCK- DOOR WINDOW VENTILATOR DETAIL

PROJECT - EMRS
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

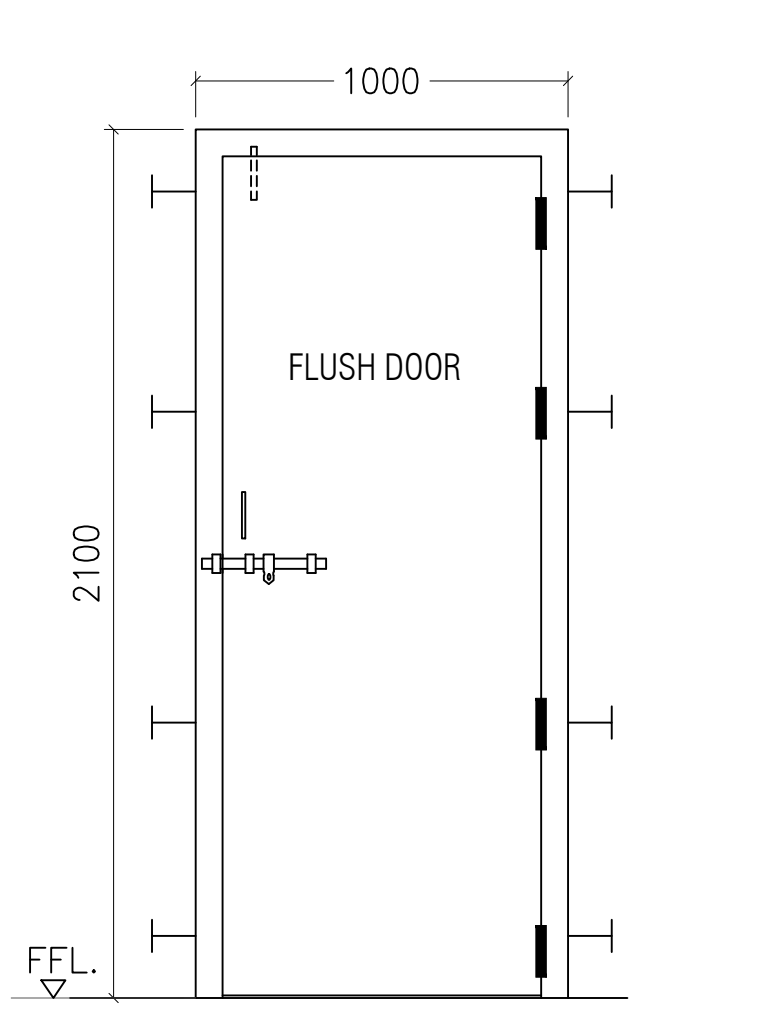
CLIENT -
**GOVERNMENT OF INDIA
 MINISTRY OF TRIBAL AFFAIRS
 NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS**



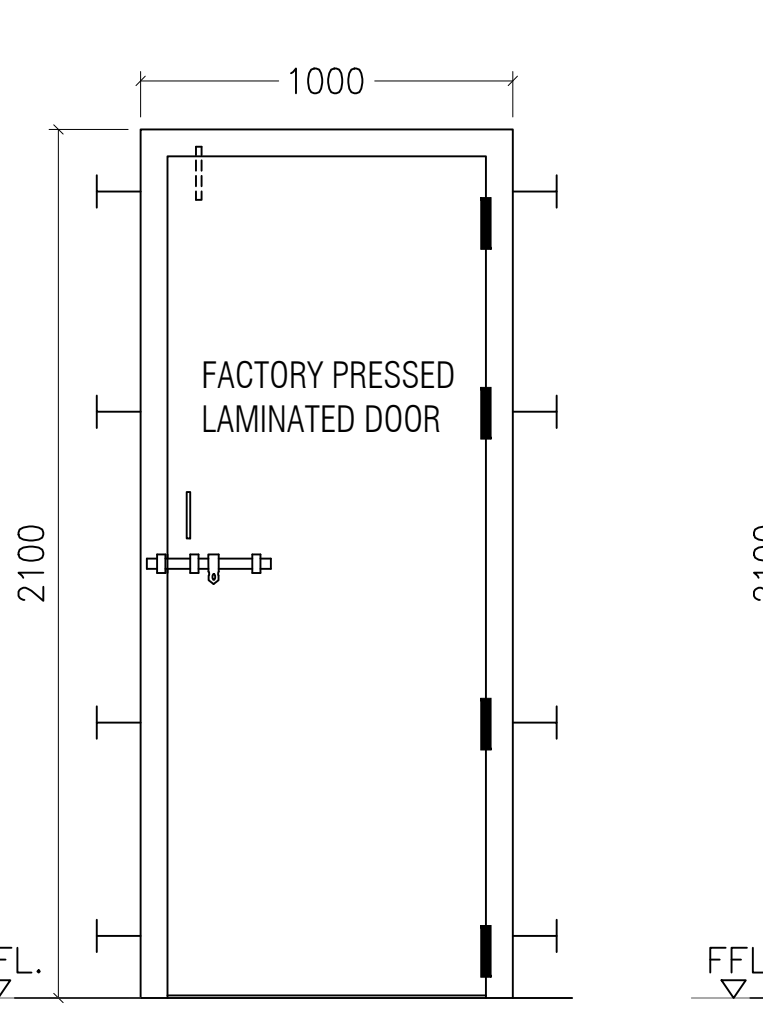
MAIN ENTRANCE DOOR
 MD - 1500 x 2400
 V1 - 1500 X 450 FIXED GLAZING ABOVE DOOR
 FGL - 1050X 2550 FIXED GLAZING ON SIDES



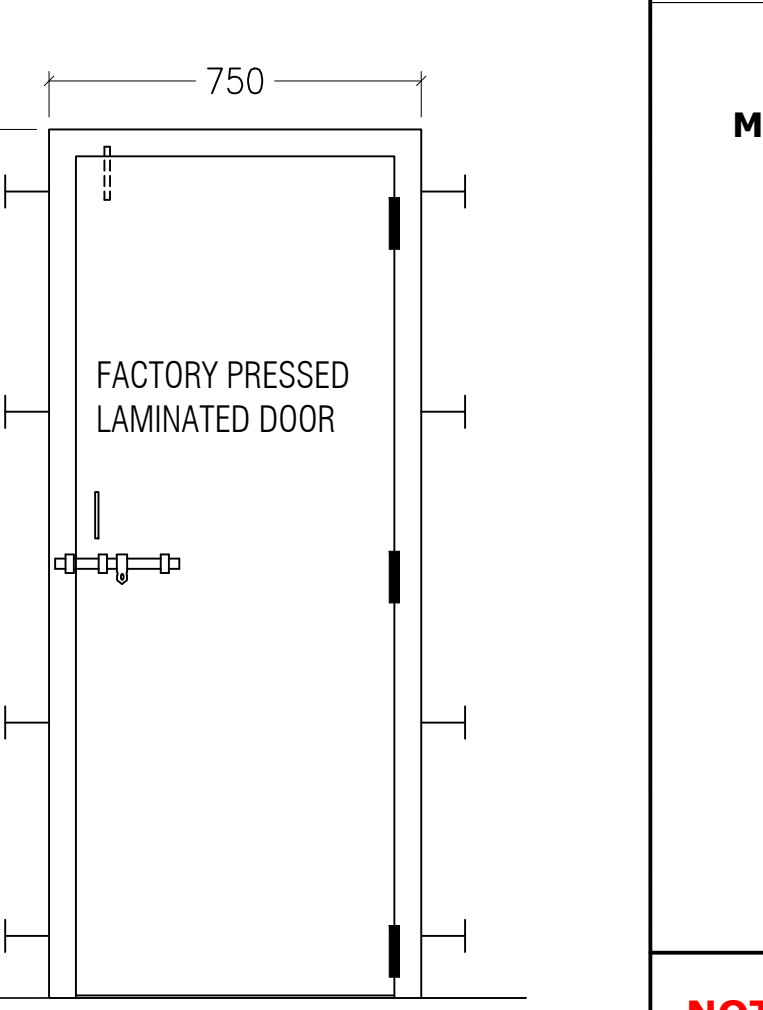
DORMITORY ROOM AND CORRIDOR EXITS
 D1 - 1100 X 2100



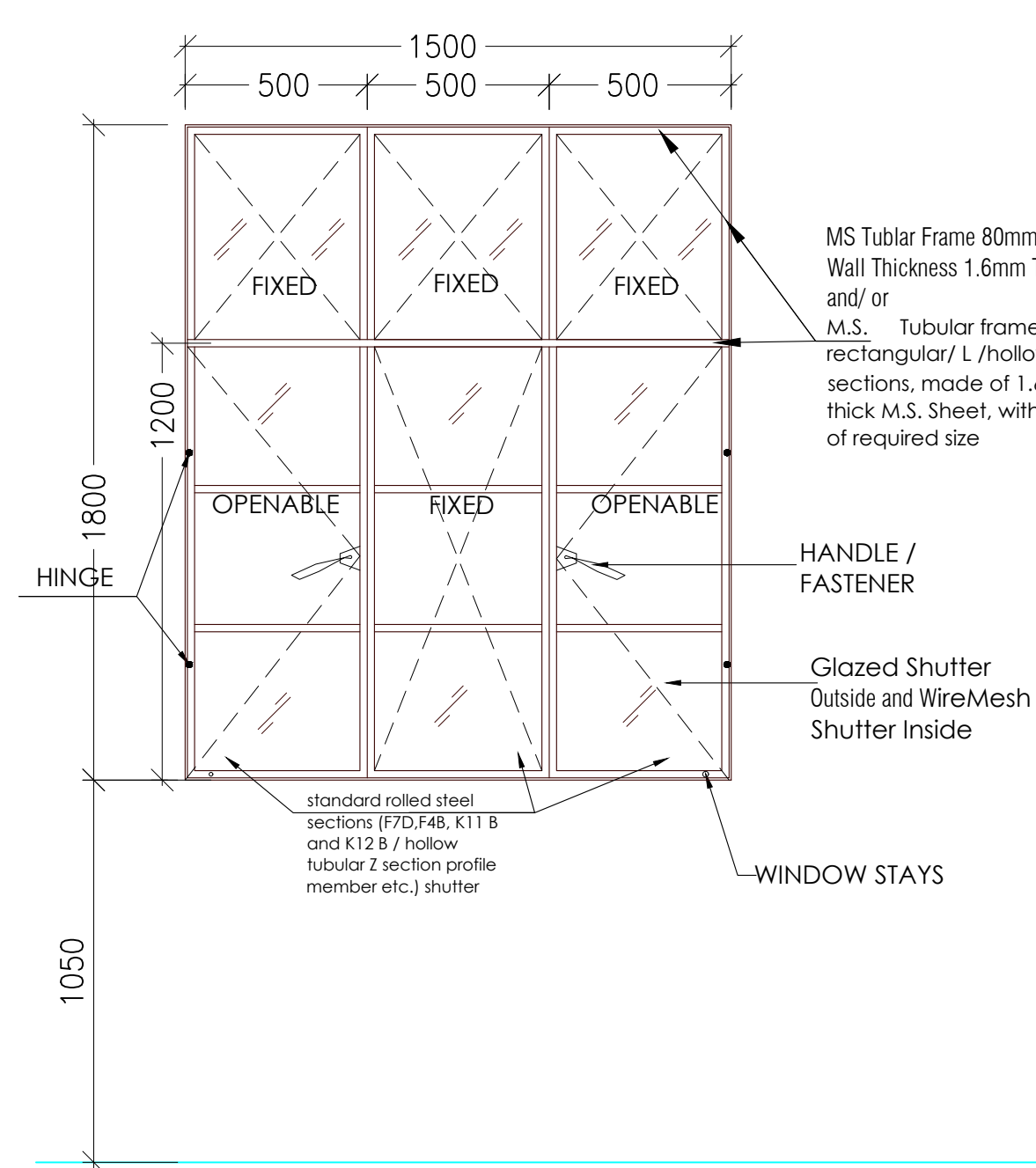
ELECTRICAL ROOM, COMMON ROOM & WARDEN ROOM
 D2-1000X2100



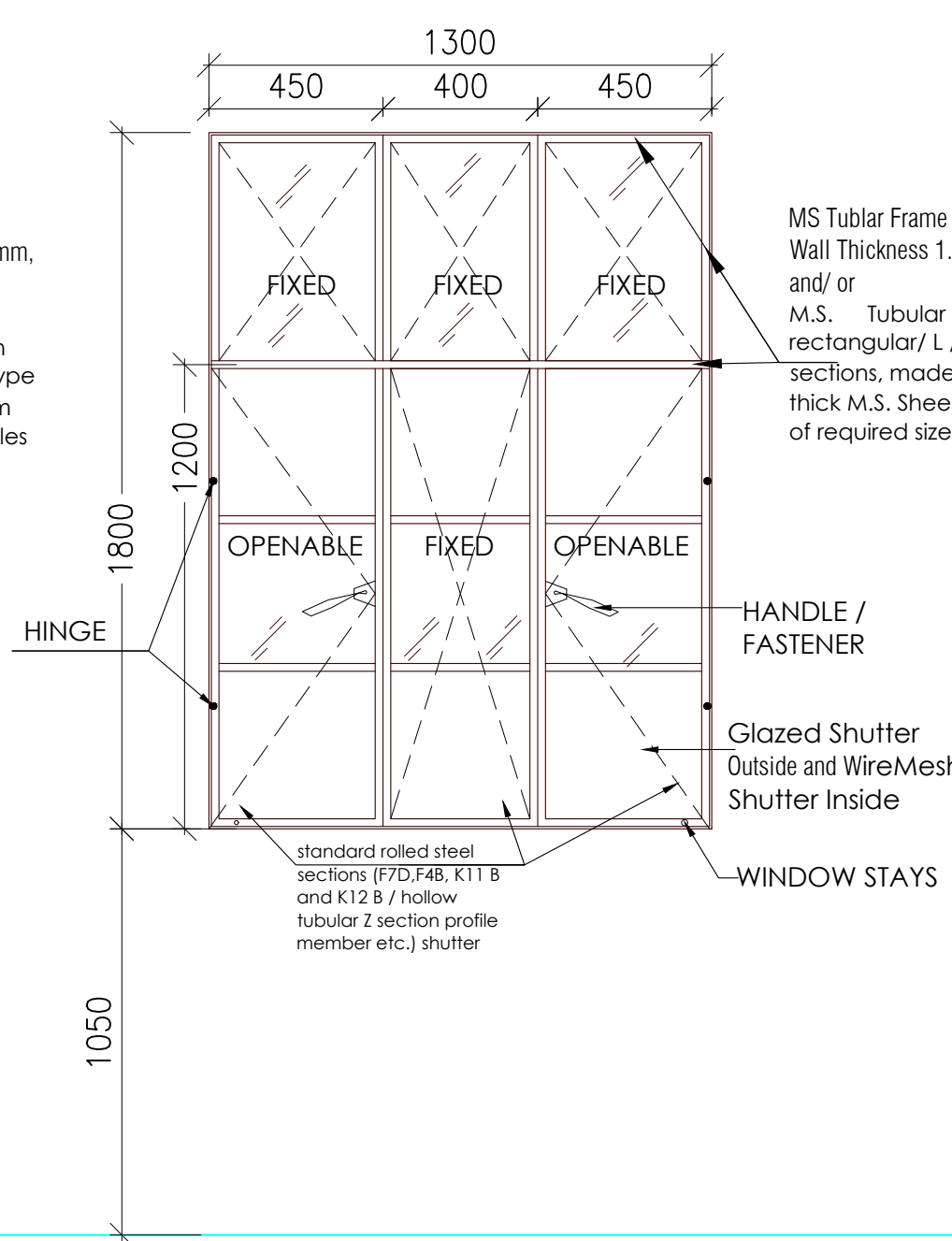
TOILET ENTRY DOOR
 D2-1000X2100



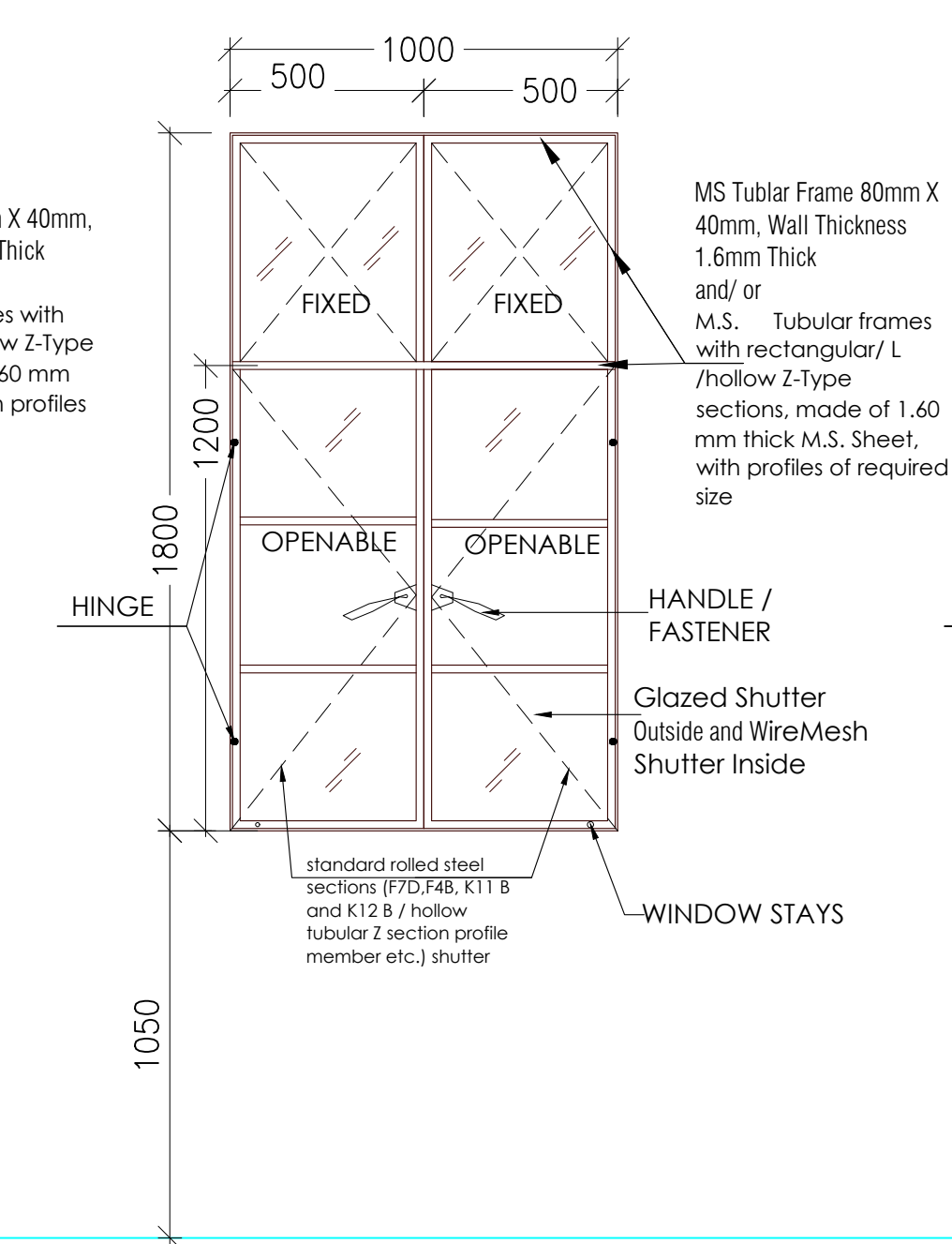
TOILET INTERNAL DOOR
 D3 - 750 X 2100



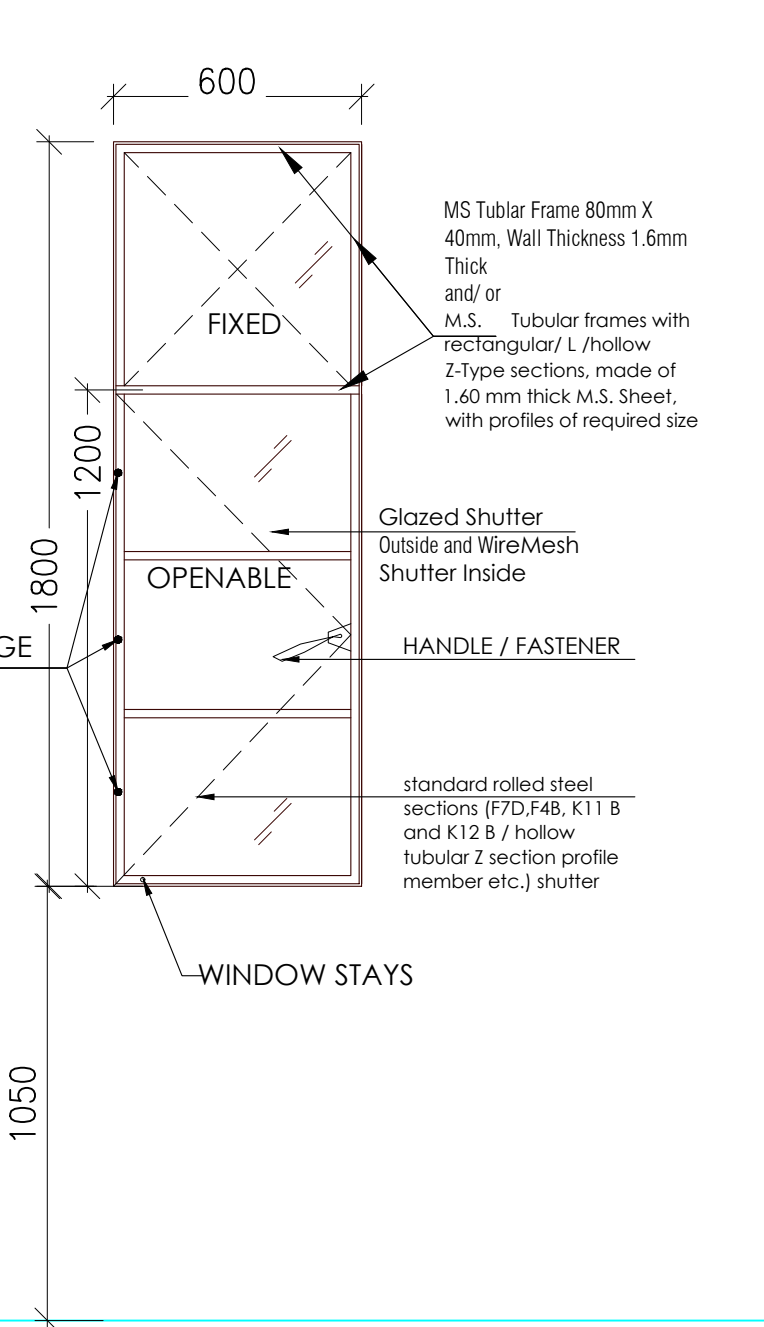
CORRIDOR
 W1 - WINDOW
 1500 x 1800



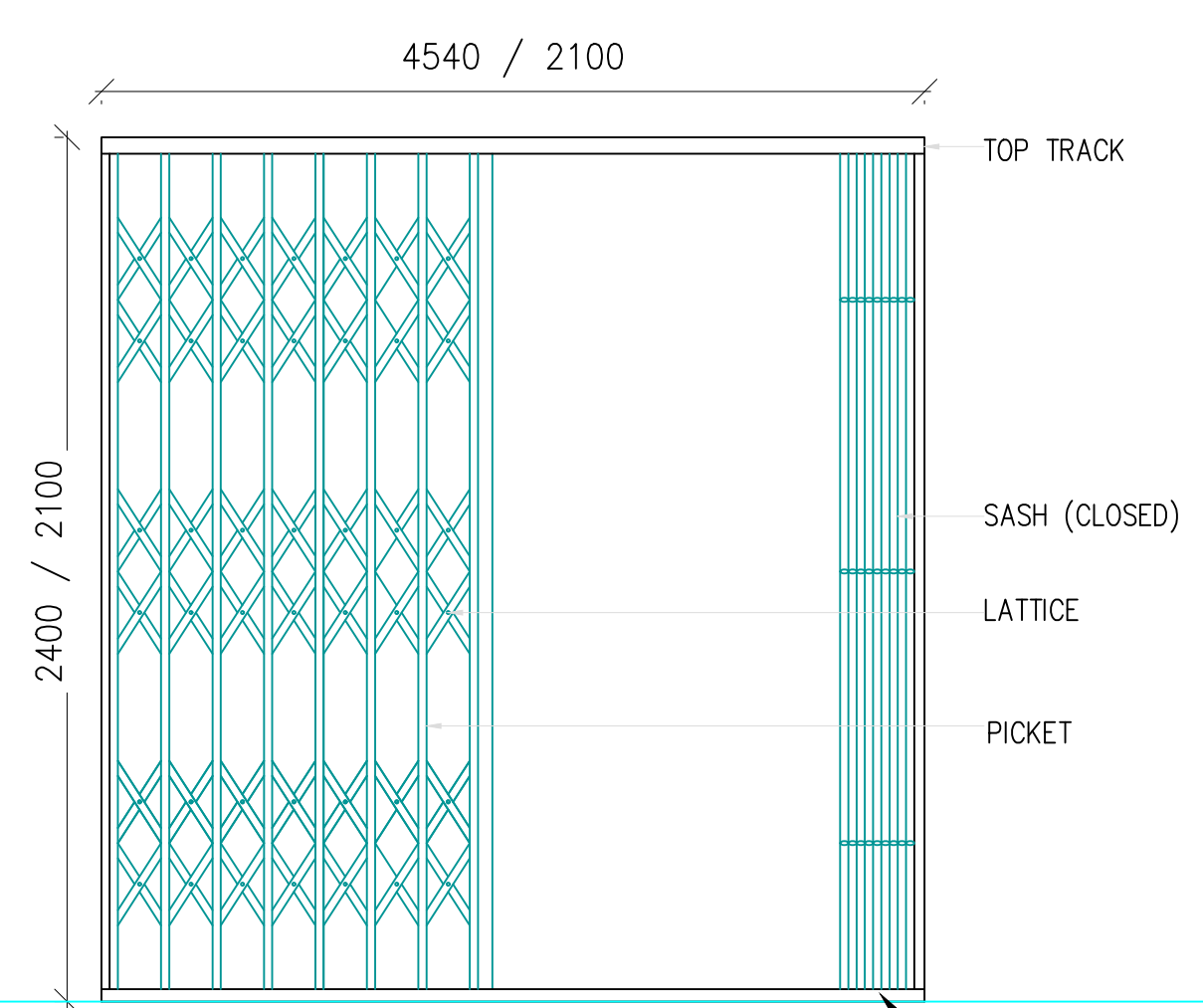
DORMITORY, CORRIDOR, WARDEN ROOM
 W2 - WINDOW 2
 1300 x 1800



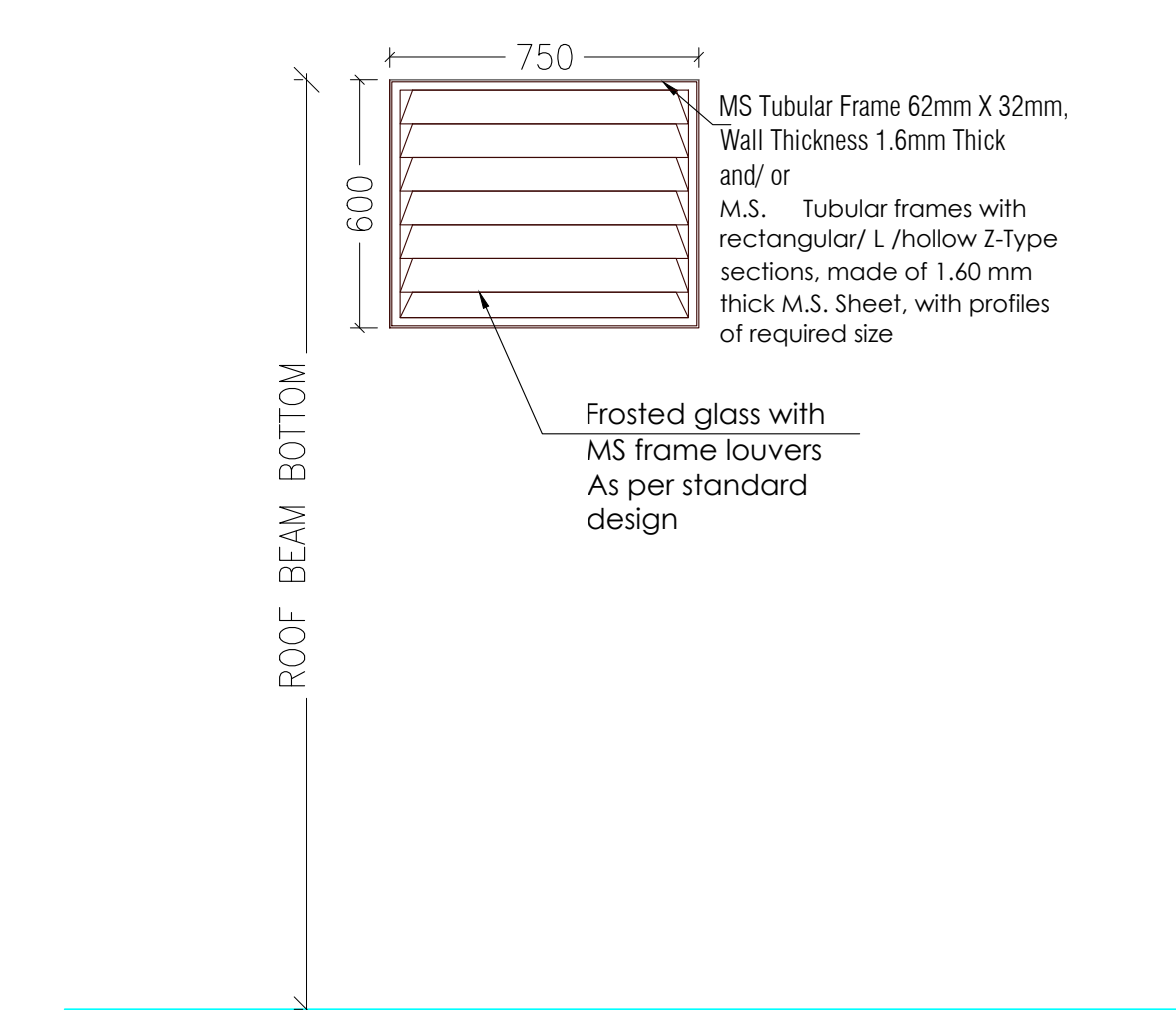
DORMITORY
 W3 - WINDOW 3
 1000 x 1800



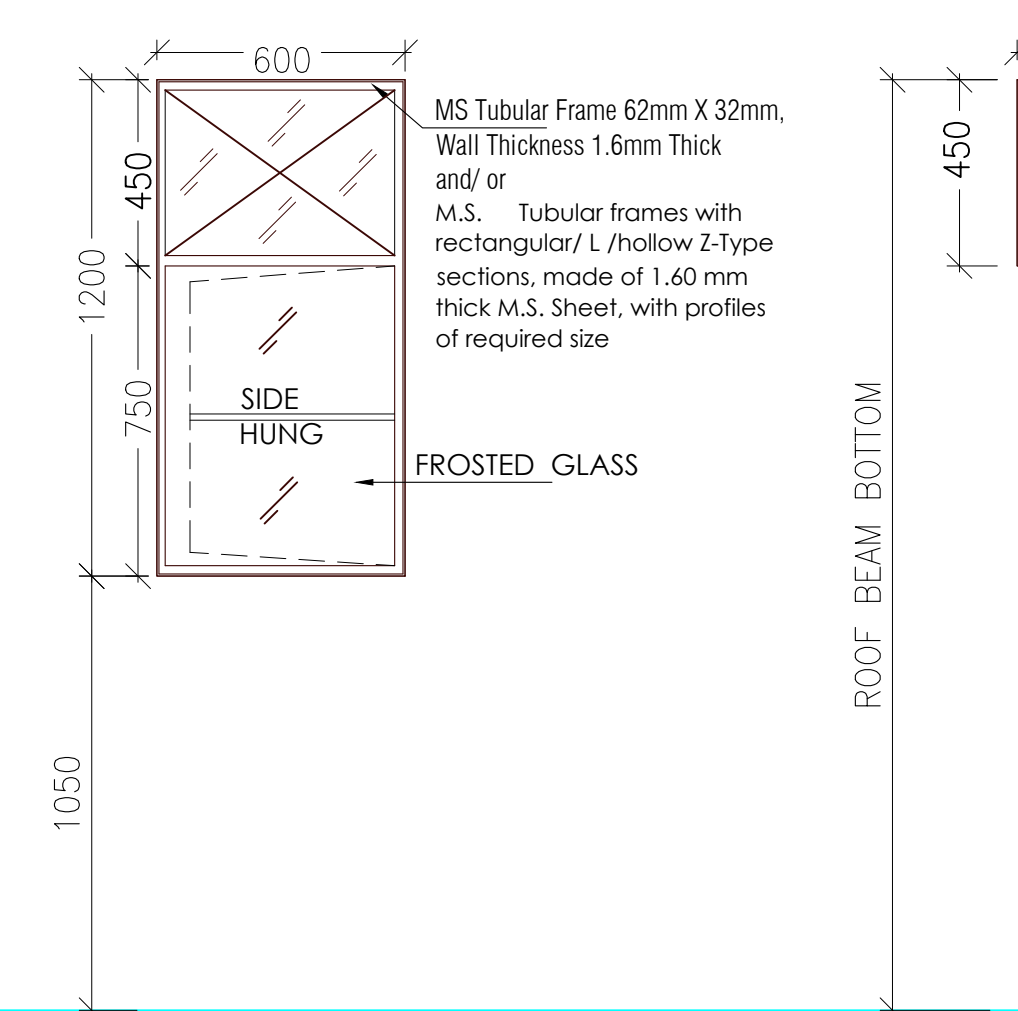
CORRIDOR
 W4 - WINDOW 4
 600 x 1800



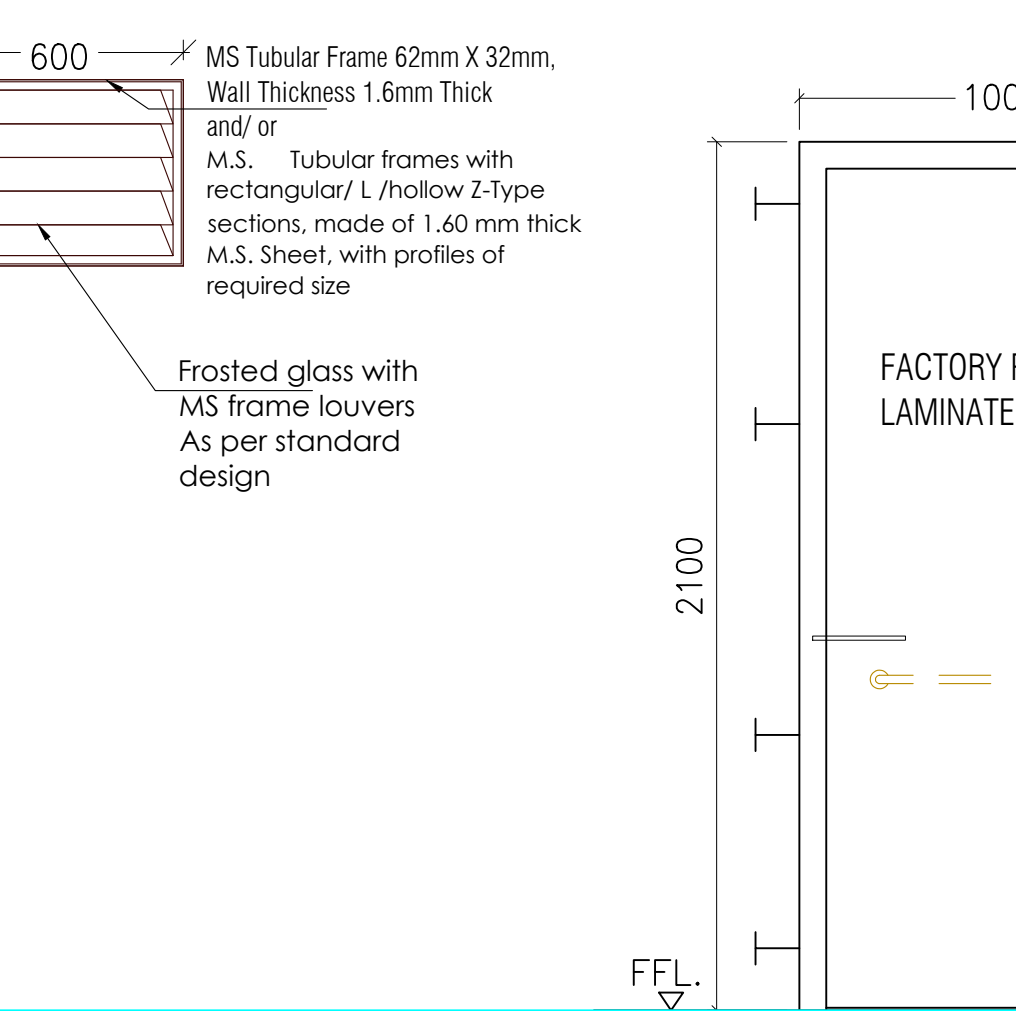
COLLAPSIBLE GATE
 CG1 - 4540 X 2400 (MAIN ENTRANCE DOOR)
 CG2- 2100 X 2100 (WARDEN ENTRY)



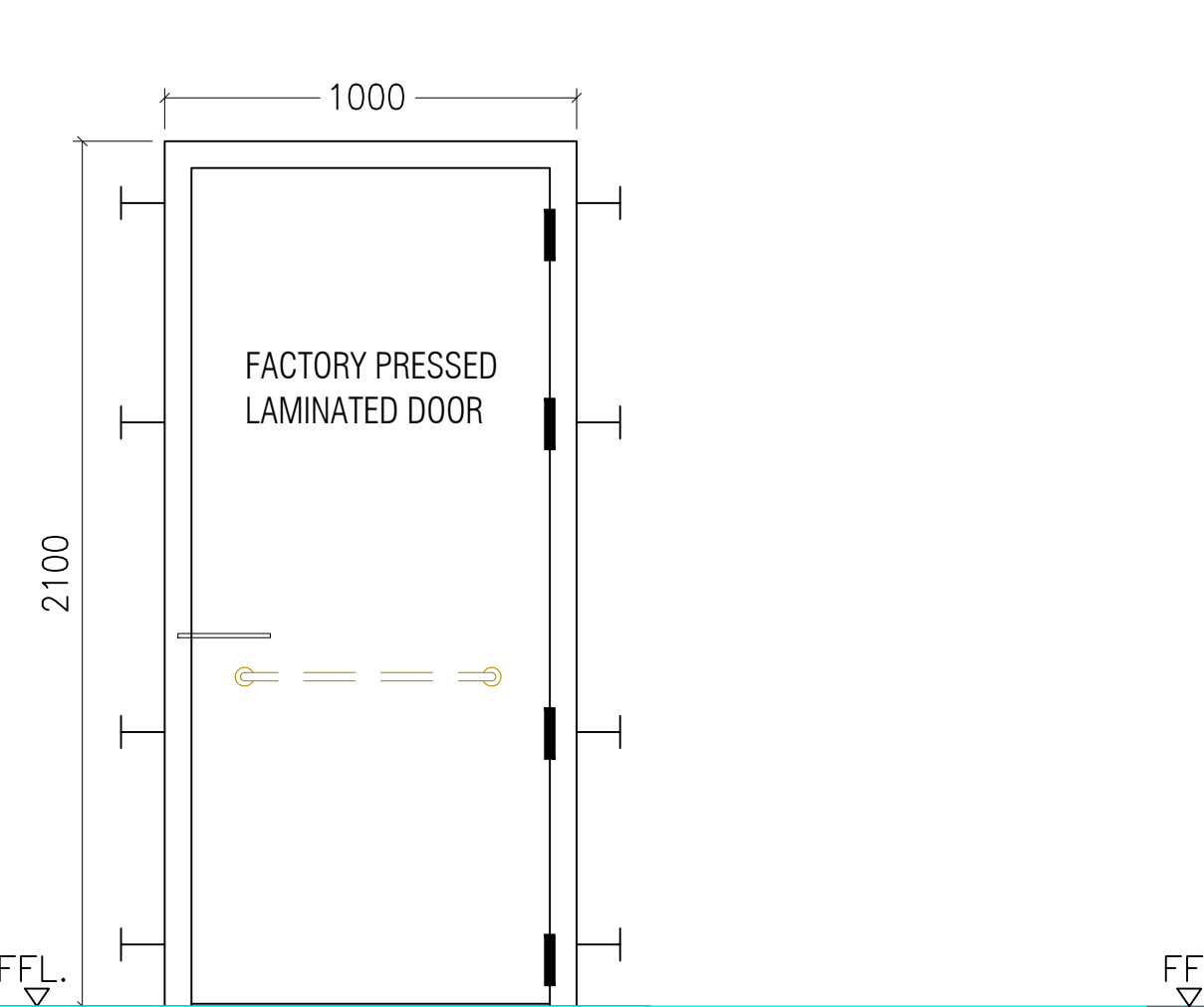
TOILET, DRINKING WATER, SERVICE AREA
 V2 - 750 x 600



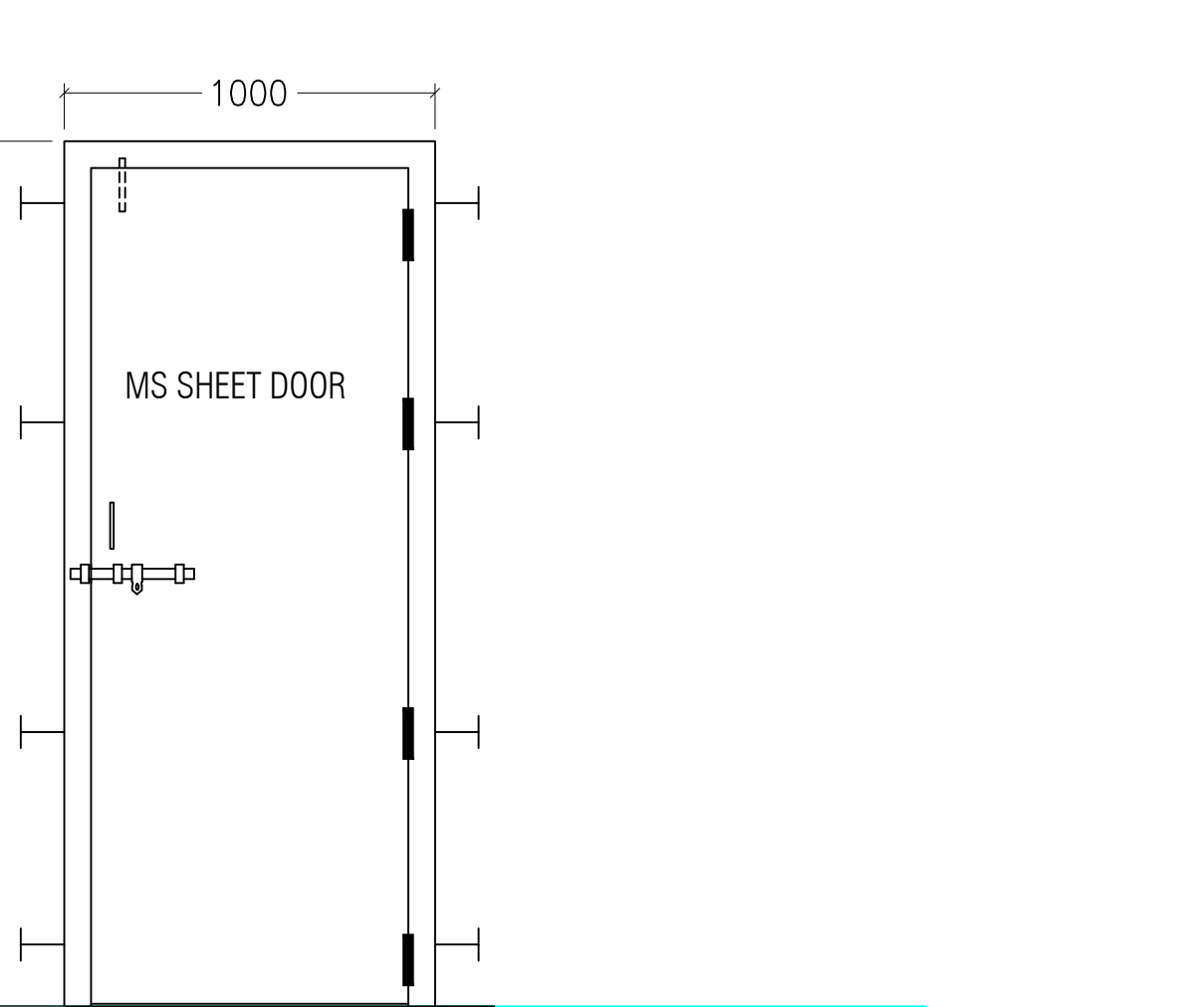
TOILET
 V3 - 600 x 1200



TOILET
 V4 - 600 x 450

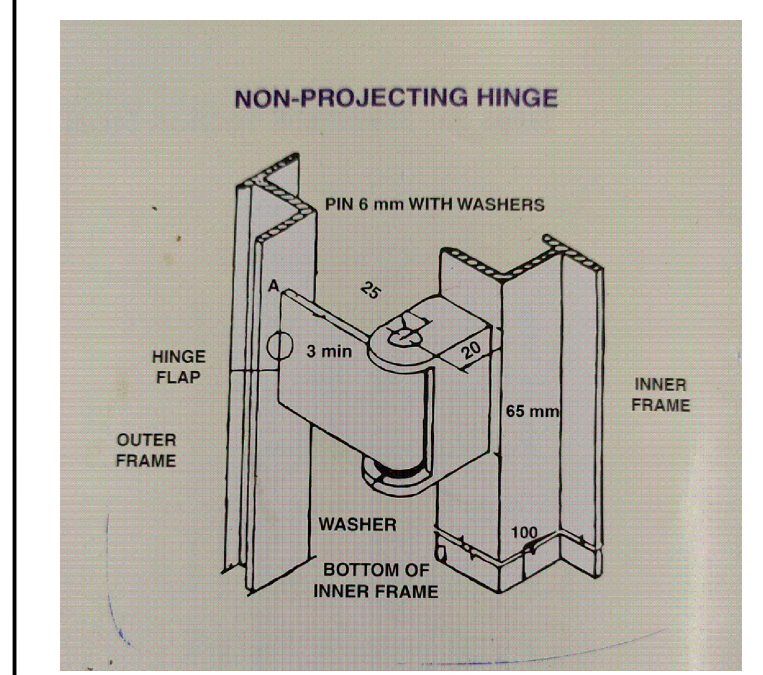


H.TOILET MAIN DOOR
 SD - 1000 X 2100



TERRACE
 D2-1000X2100

- NOTES -**
- FIXTURES SHALL BE AS PER CPWD SPECIFICATION**
 - GLAZED SHUTTERS WILL OPEN OUTSIDE**
 - WIRE MESH SHUTTER WILL OPEN INSIDE**
 - WINDOW SHOULD BE FACTORY MADE TYPE WITH FLASH WELDING**
 - NESTS/ CPWD APPROVED MAKE SHALL ONLY BE PROVIDED**



TYPICAL HINGE DETAIL

N.K.
 (NARENDRA KUMAR)
 p.k. Approved 10.3.23
 (Prasad Approved)
 13/3/23
 (Rk Gang)
 21/3/23
 13/3/23
 (SANDEEP SOOD)
Arushi

A D P Keshri
 Chief Technical Consultant

CATEGORY :
 DOOR WINDOW DETAIL

DRAWING TITLE :
 HOSTEL DOOR WINDOW DETAIL

DWG. NO.-
 EMRS NAME/HOSTEL/DWD/AR_01

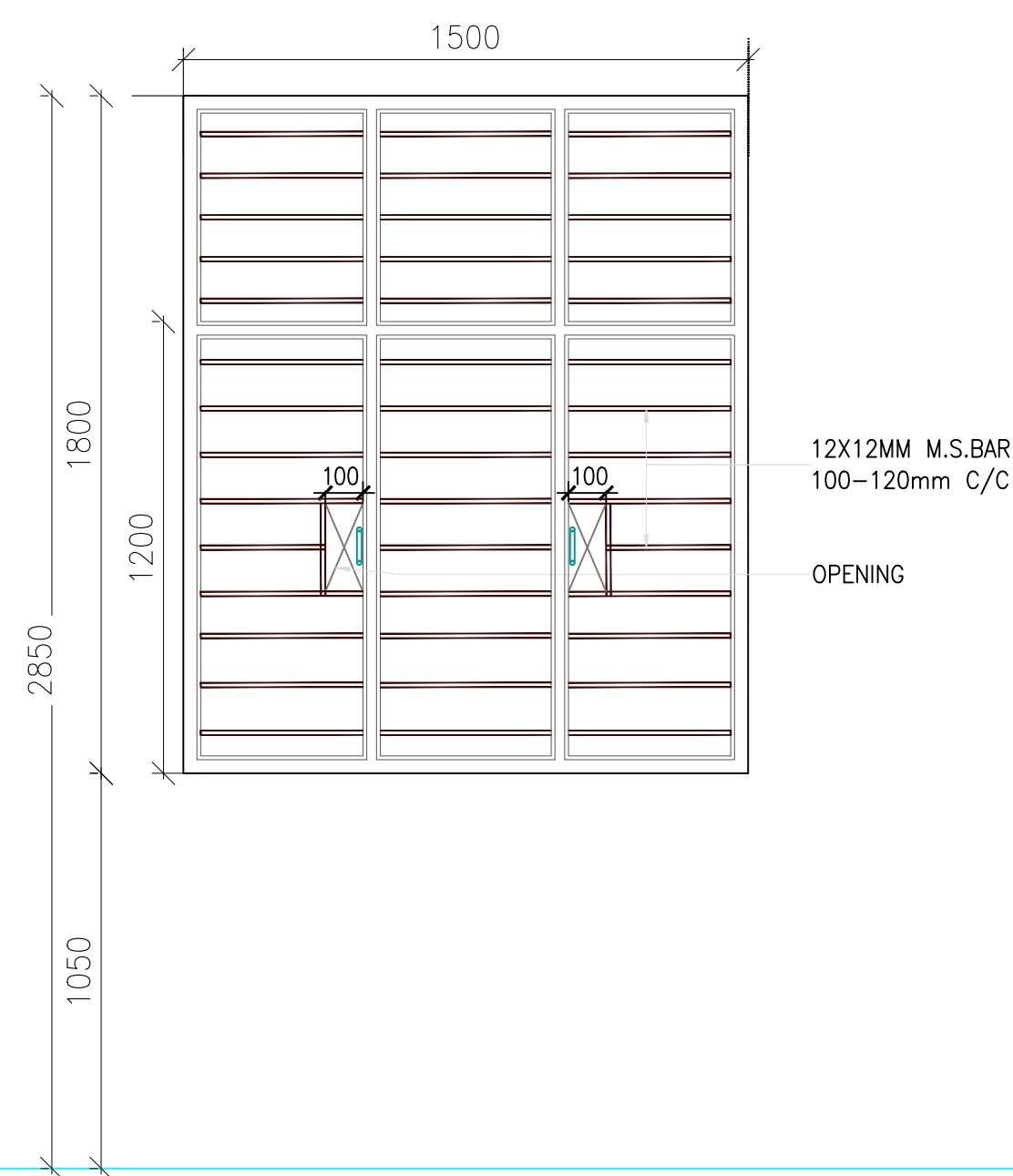
DATE - 09 MARCH 2023

HOSTEL BLOCK - GRILL AND COLLAPSIBLE DETAIL

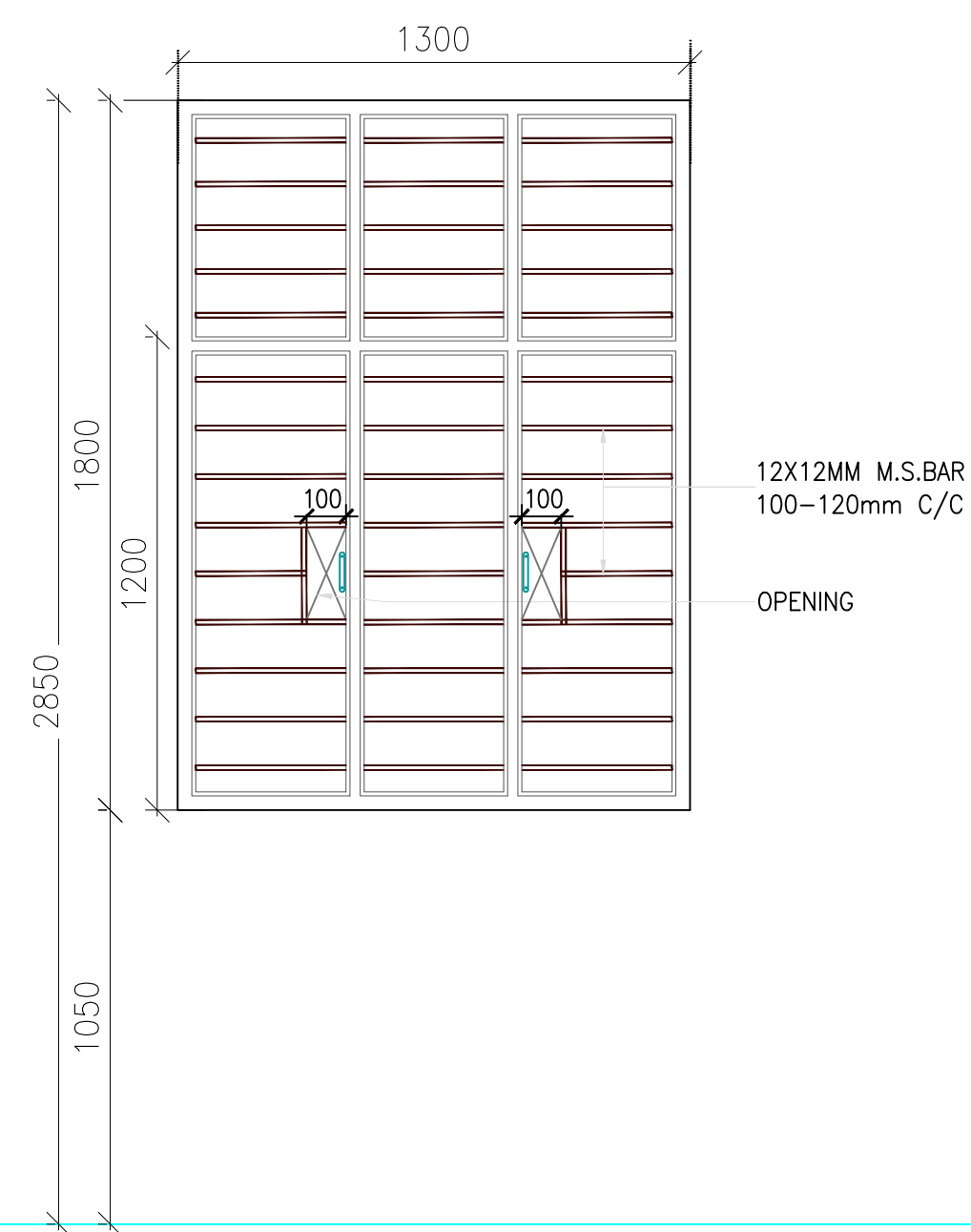
PROJECT - EMRS
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -
**GOVERNMENT OF INDIA
 MINISTRY OF TRIBAL AFFAIRS
 NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS**

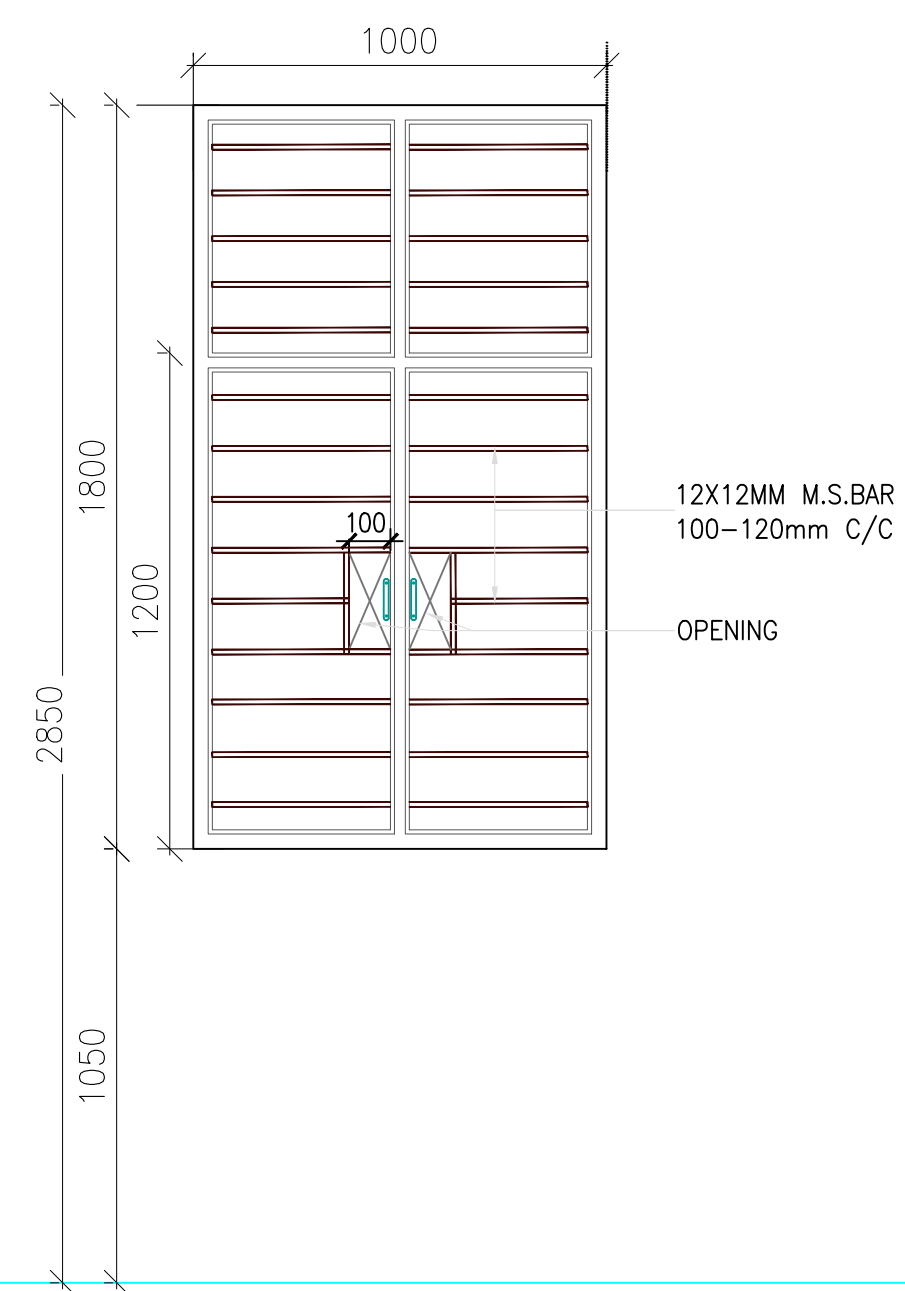
- NOTES -**
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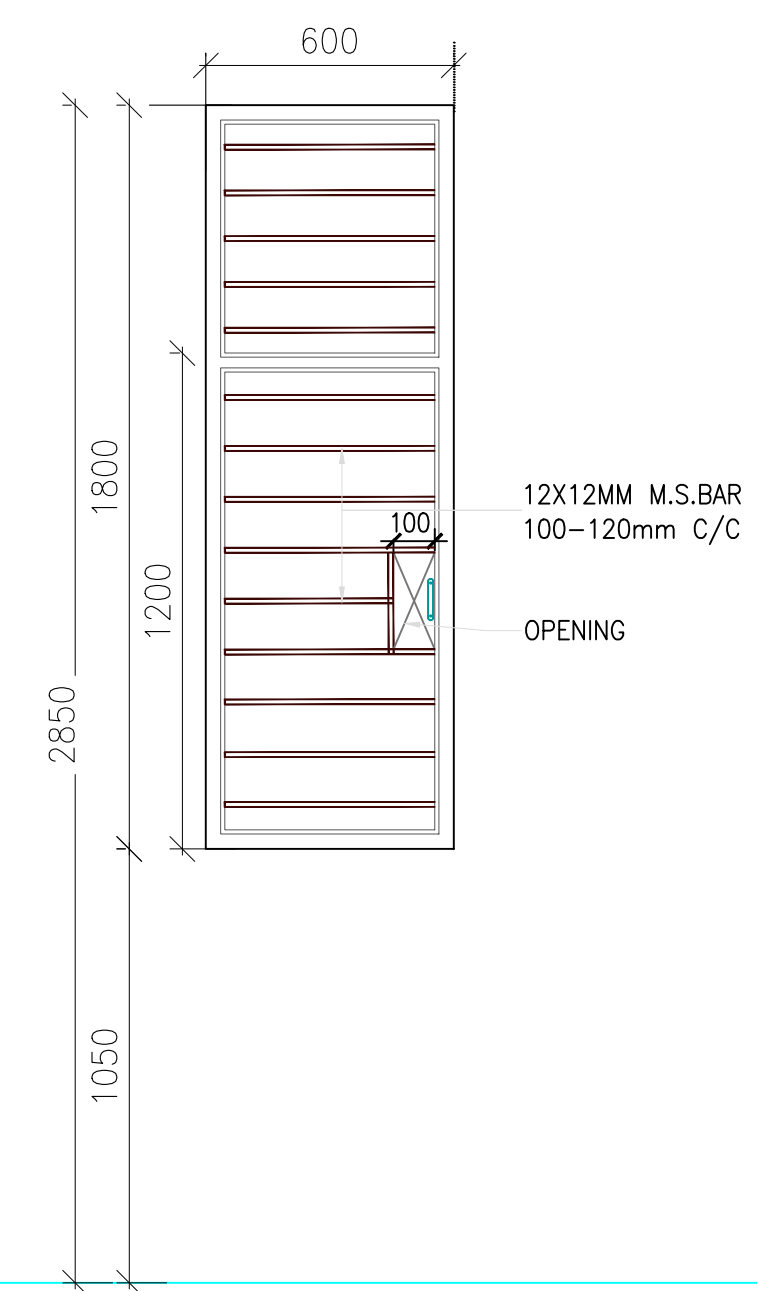
**ELEVATION
 CORRIDOR
 W1 - WINDOW
 1500 x 1800**



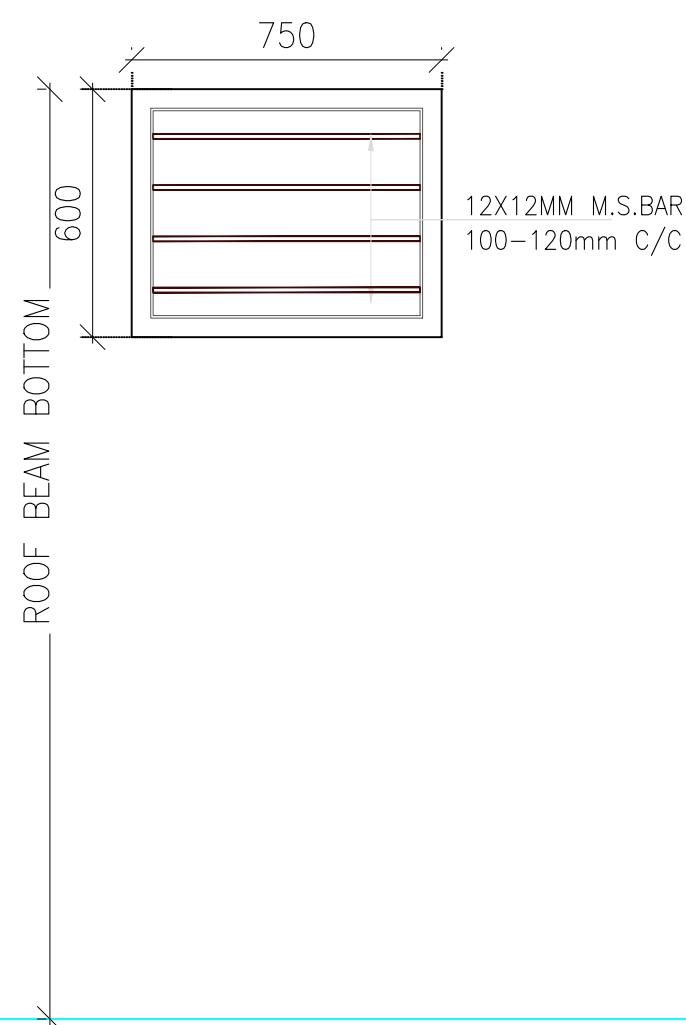
**ELEVATION
 DORMITORY, CORRIDOR, WARDEN ROOM
 W2 - WINDOW 2
 1300 x 1800**



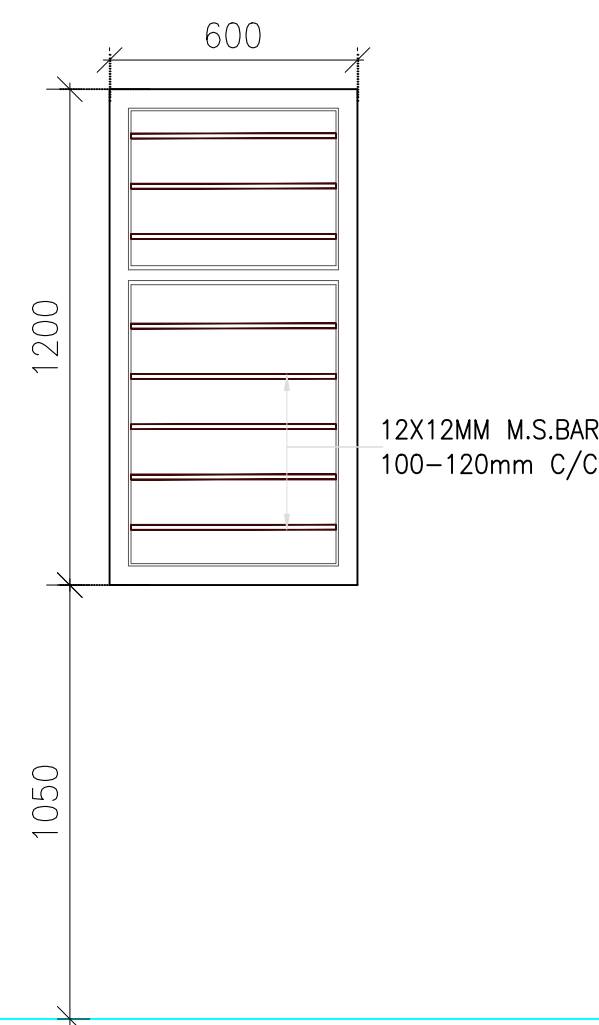
**ELEVATION
 DORMITORY
 W3 - WINDOW 3
 1000 x 1800**



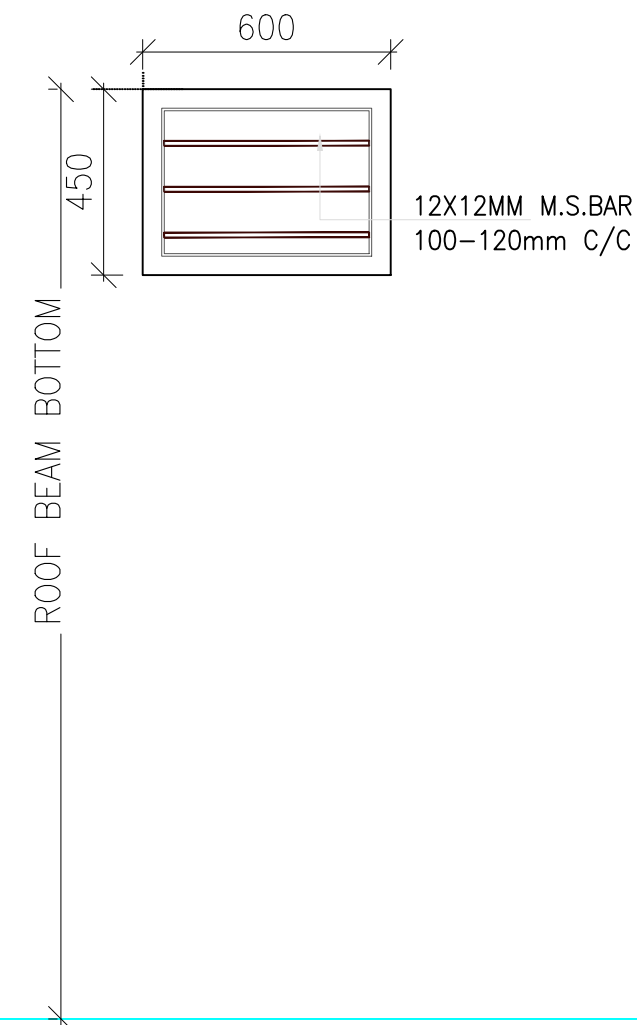
**ELEVATION
 CORRIDOR
 W4 - WINDOW 4
 600 x 1800**



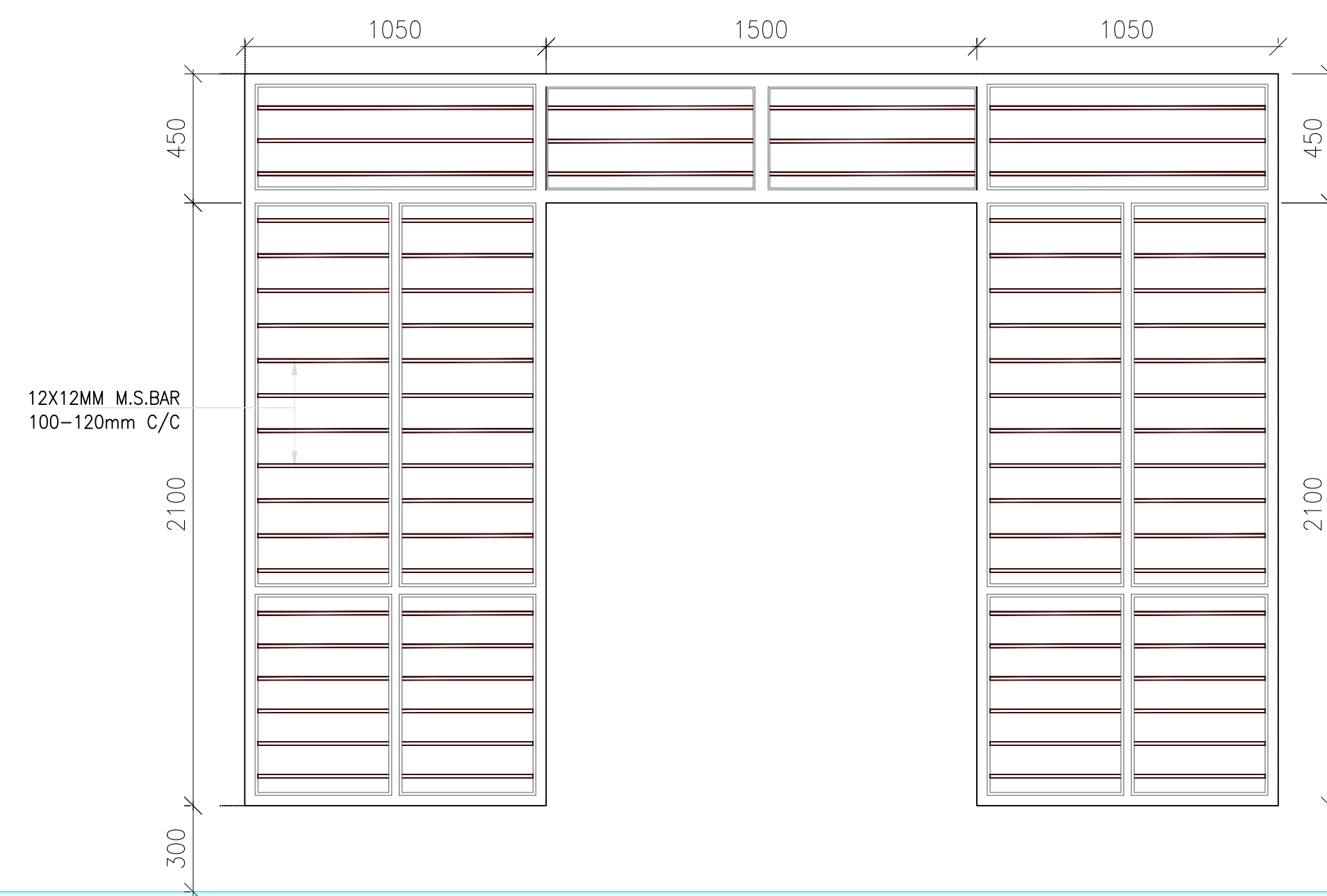
**ELEVATION
 TOILET, DRINKING WATER,
 SERVICE AREA
 V2 - 750 x 600**



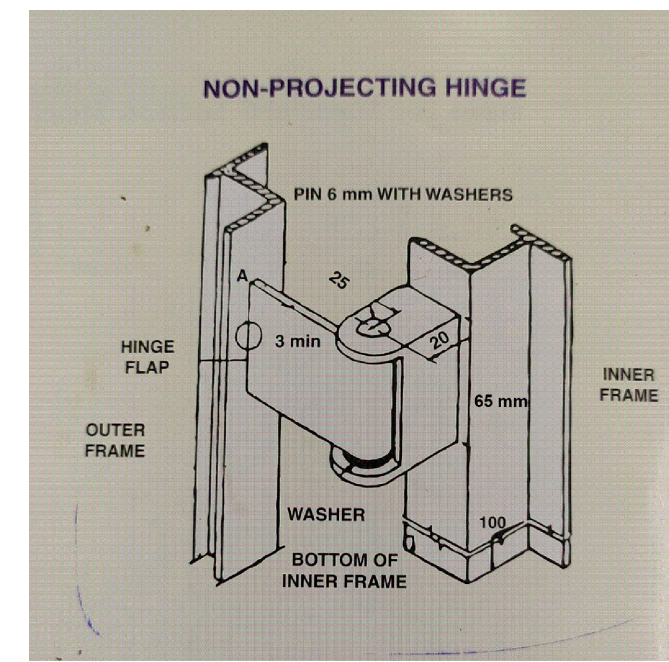
**ELEVATION
 TOILET
 V3 - 600 x 1200**



**ELEVATION
 TOILET
 V4 - 600x450**



**ELEVATION
 MAIN ENTRANCE DOOR GRILL
 V1 - 1500 X 450 FIXED GLAZING ABOVE DOOR
 FGL - 1050X 2550 FIXED GLAZING ON SIDE**



TYPICAL HINGE DETAIL

N.K.
 (NARENDRA KUMAR)
 Prepared 10.3.23
 (Prasad Anand)
 Cont 13/4/23
 (Rk Gang)
 Rev 05: 13/3/2023.
 (SANDEEP SOOD)

A.P.K.
**A D P Keshri
 Chief Technical Consultant**

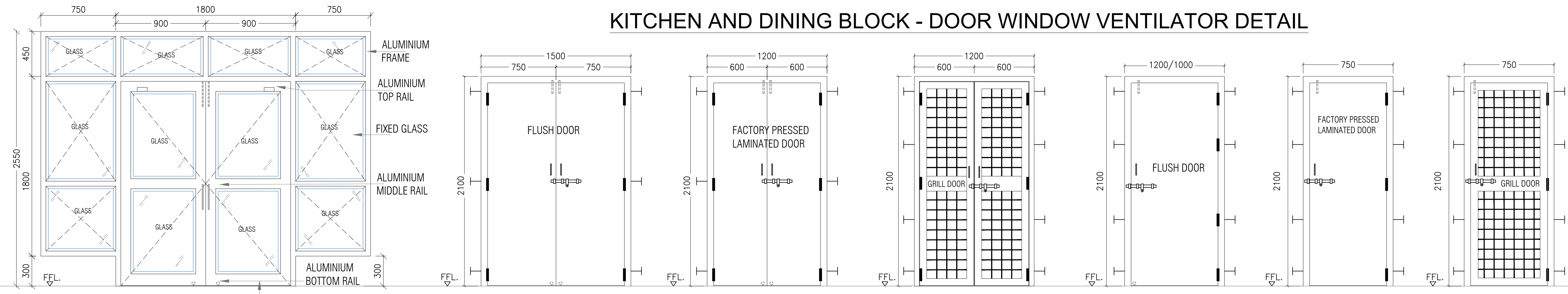
CATEGORY :
 DOOR WINDOW DETAIL

DRAWING TITLE :
 HOSTEL GRILL AND COLLAPSIBLE DETAIL

DWG. NO.-
 EMRS NAME/HOSTEL/DWD/AR_02

DATE - 09 MARCH 2023

KITCHEN AND DINING BLOCK - DOOR WINDOW VENTILATOR DETAIL



MAIN ENTRANCE DOOR
MD - 1800 x 2100
V2 - 1800 x 450 FIXED GLAZING ABOVE DOOR
GL1 - 750X 2250 FIXED GLAZING ON SIDE

PANTRY DOOR
D1 - 1500 X 2100

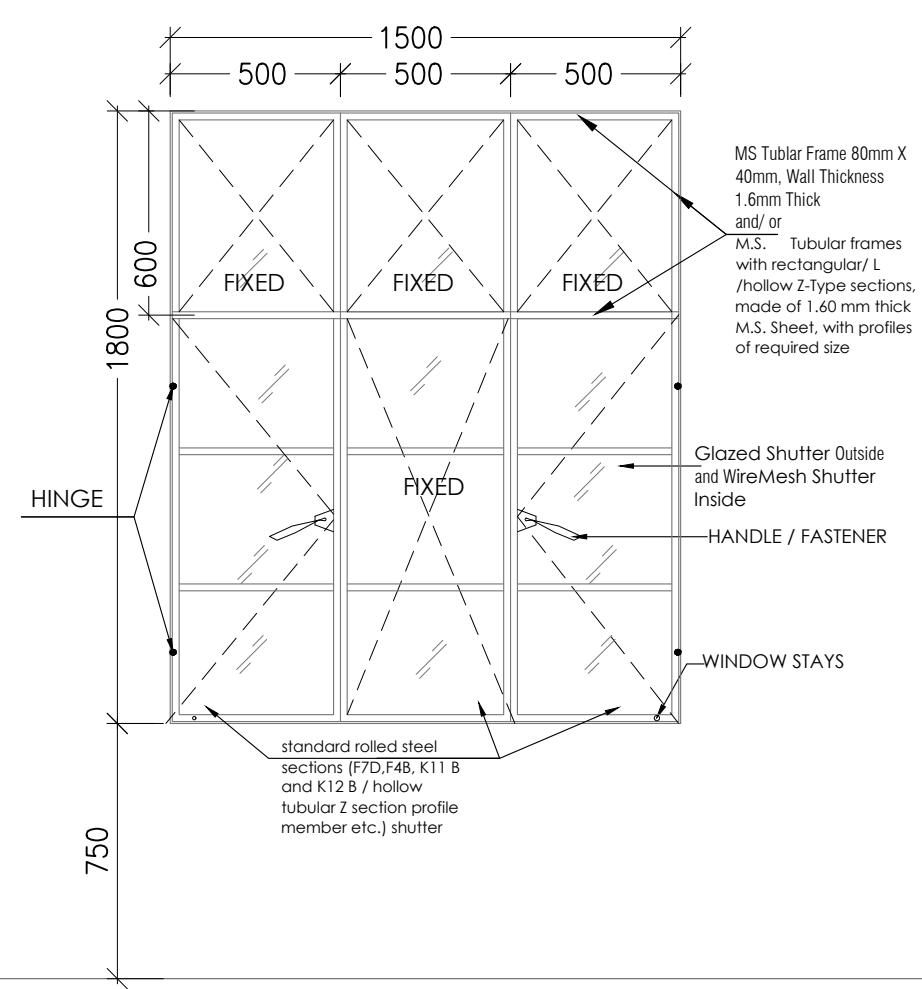
FRONT UTILITY WASH AREA MAIN DOOR
D2 - 1200 X 2100

REAR KITCHEN COURTYARD
D2 - 1200 X 2100

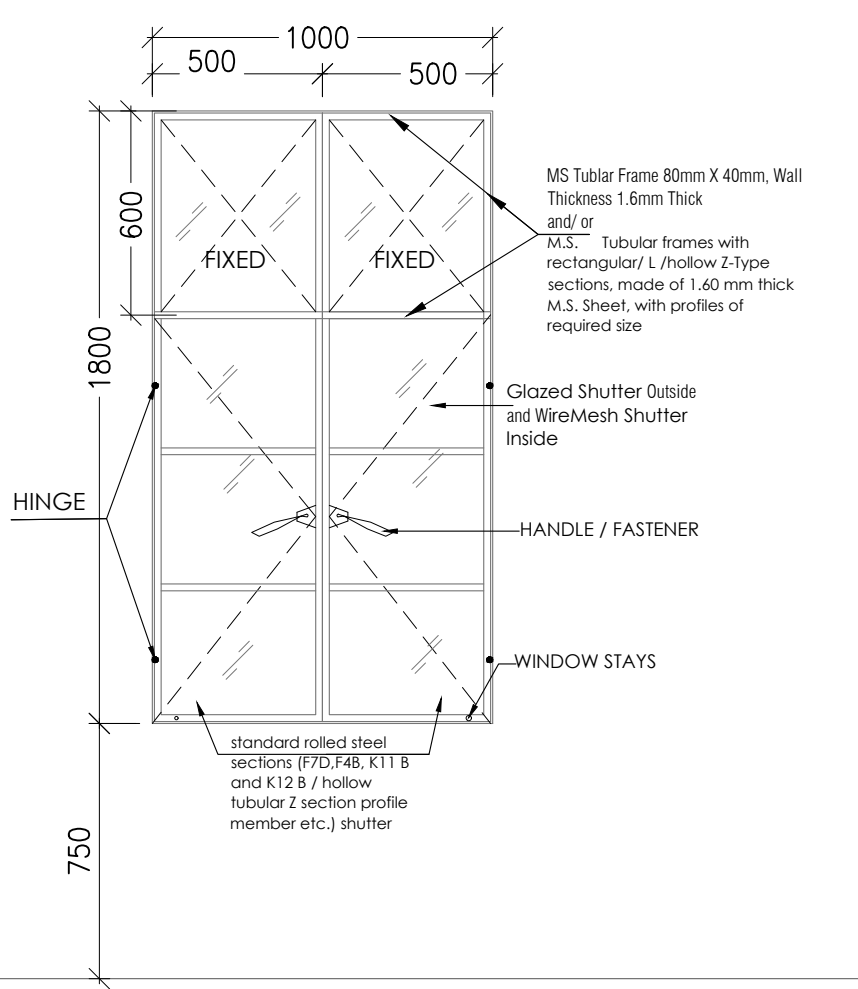
KITCHEN, PANTRY STORE ROOM
D2 - 1200 X 2100
D3 - 1000 X 2100

TOILET DOOR
D4 - 750 X 2100

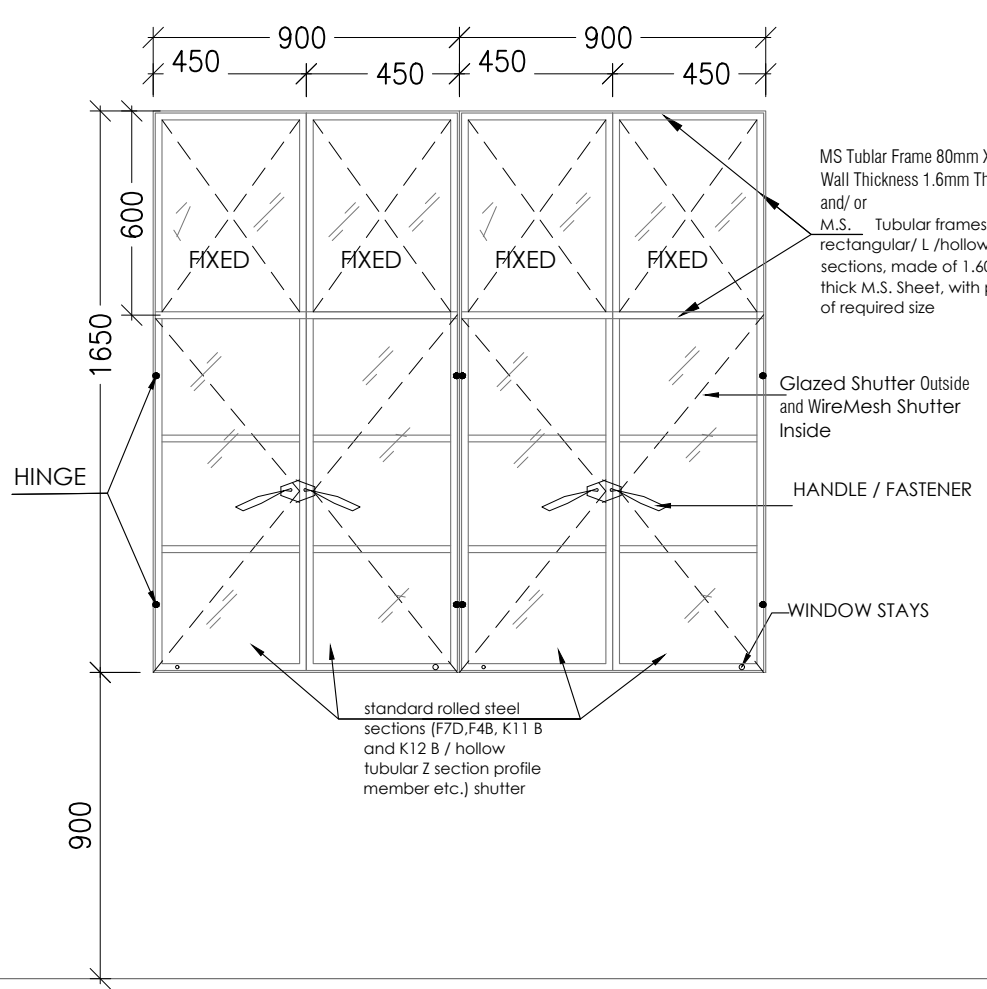
GAS BANK DOOR
D4 - 750 X 2100



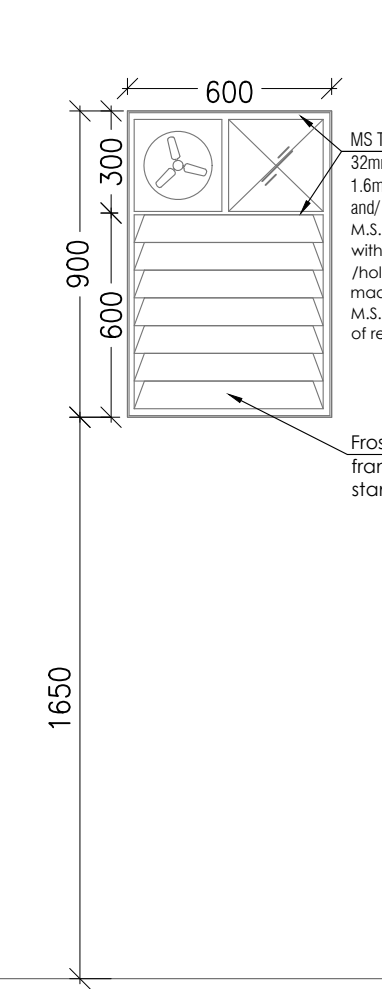
DINING HALL
W1 - WINDOW
1500 x 1800



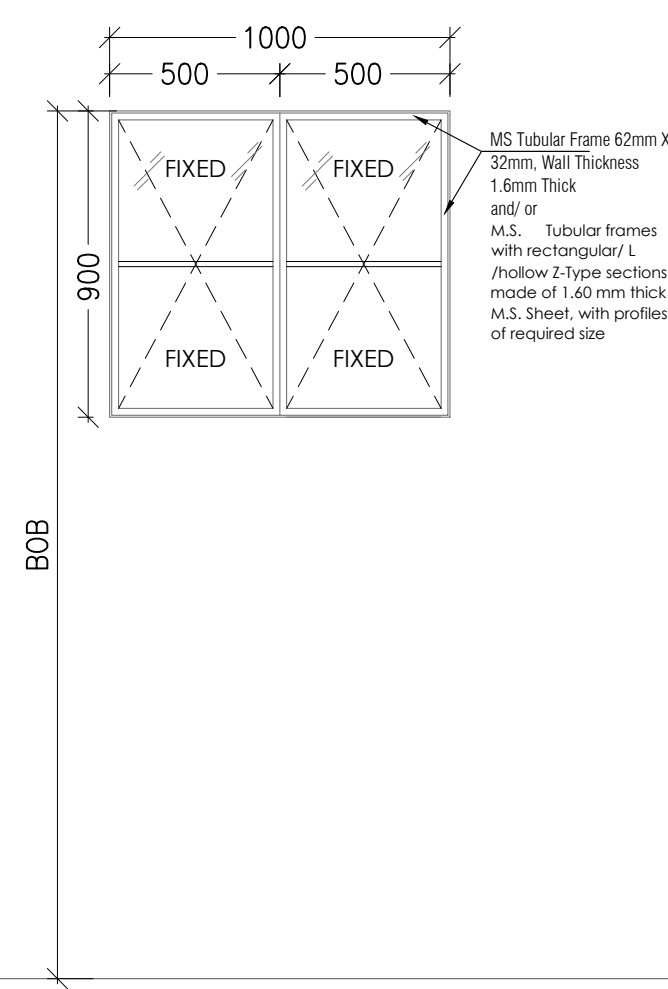
ENTRANCE LOBBY, PANTRY, STORE
W2 - WINDOW
1000 x 1800



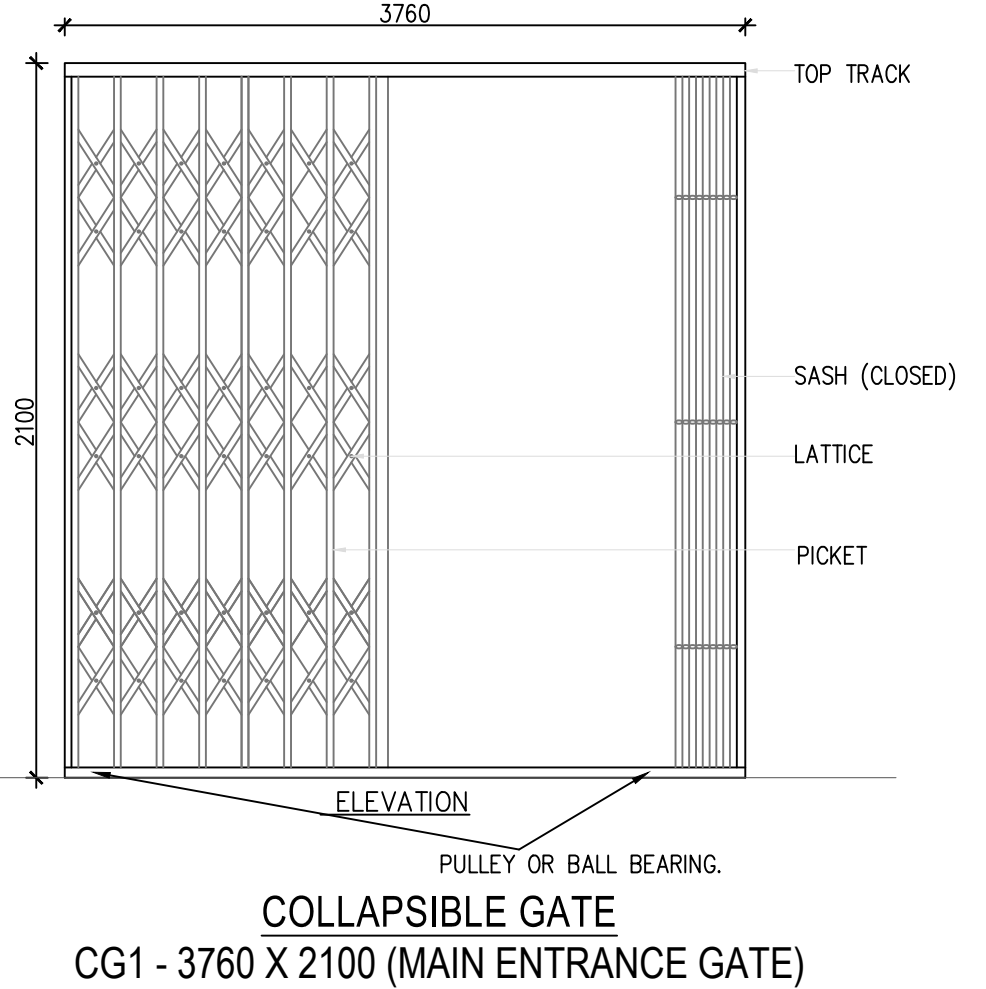
KITCHEN
W3 - WINDOW
1800 x 1650



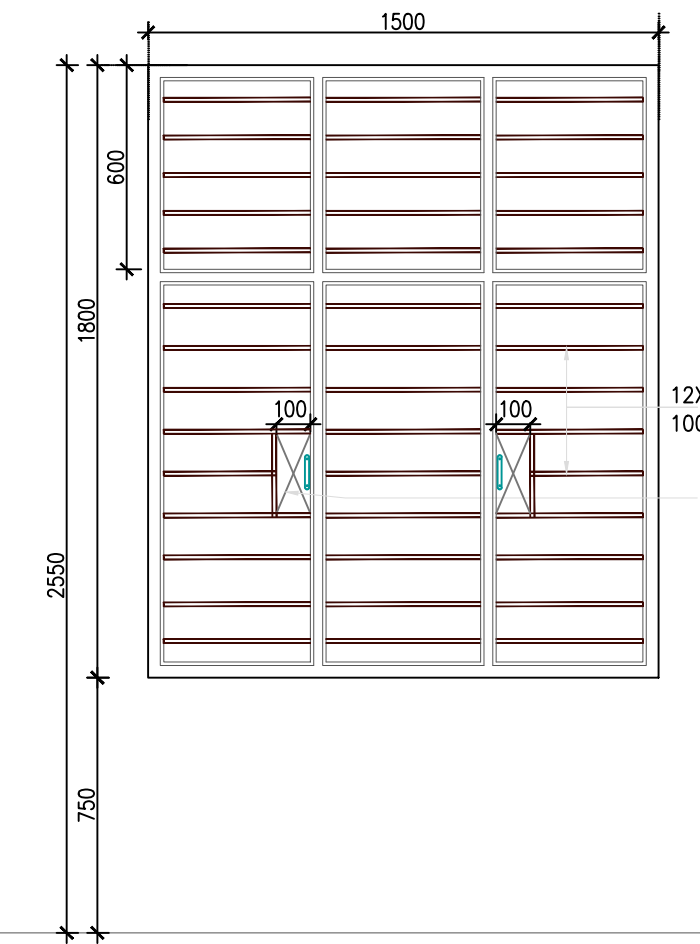
TOILET
V1 - VENTILATOR
600 x 900



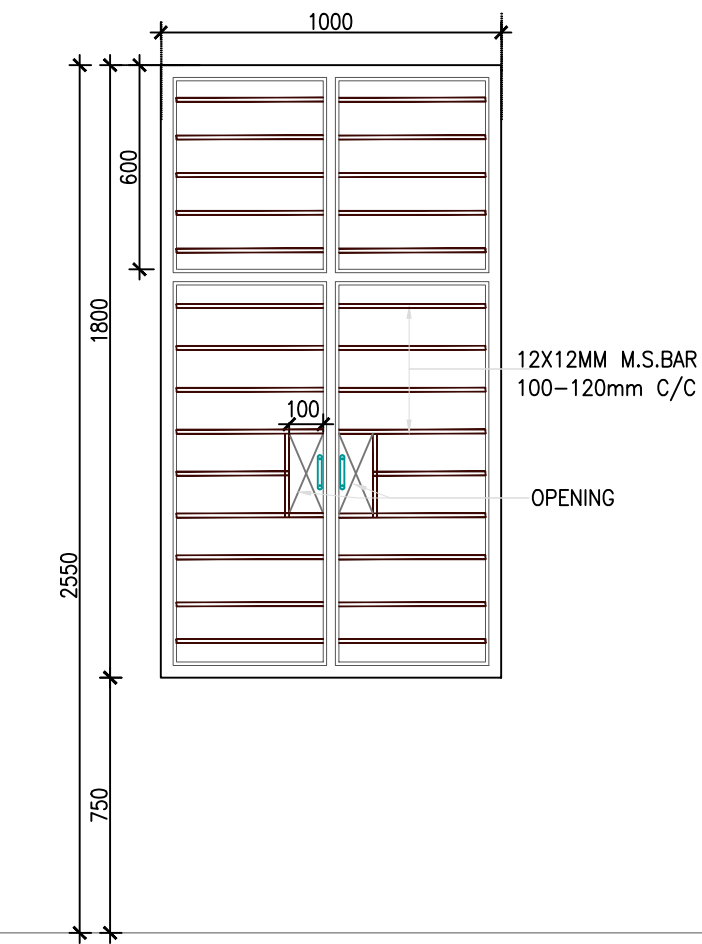
KITCHEN
V3 - VENTILATOR
1000 x 900



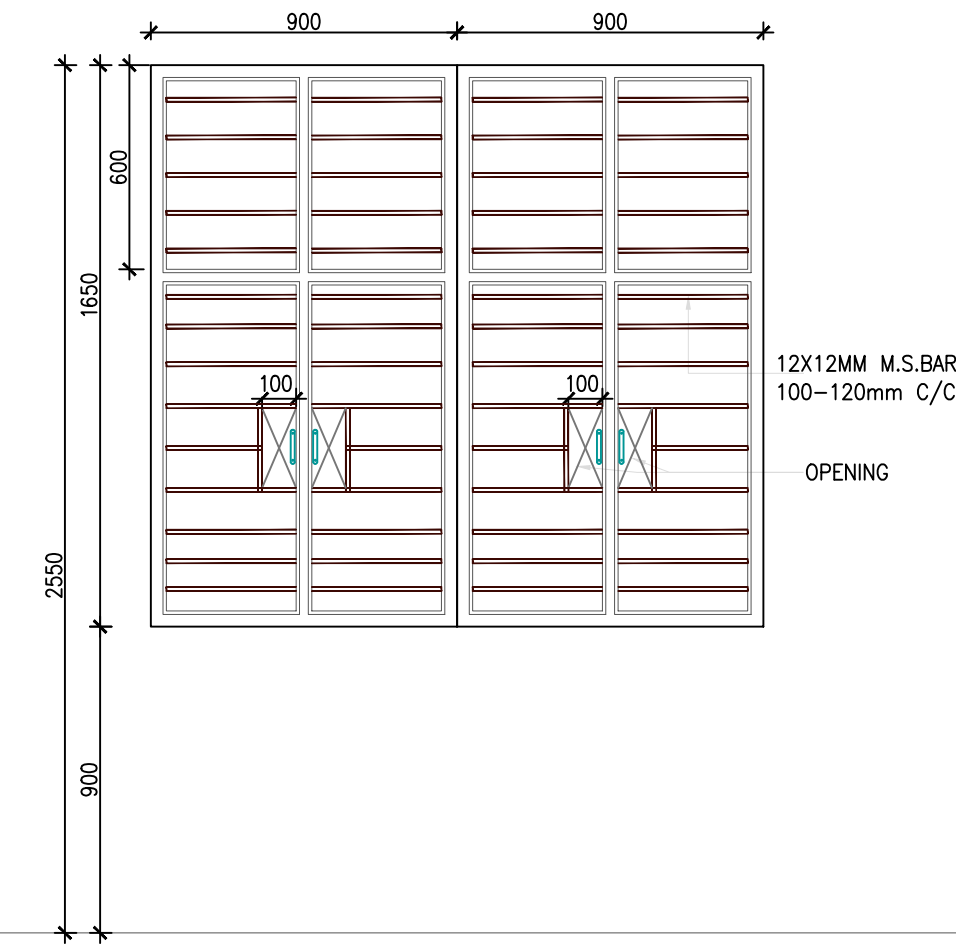
COLLAPSIBLE GATE
CG1 - 3760 X 2100 (MAIN ENTRANCE GATE)



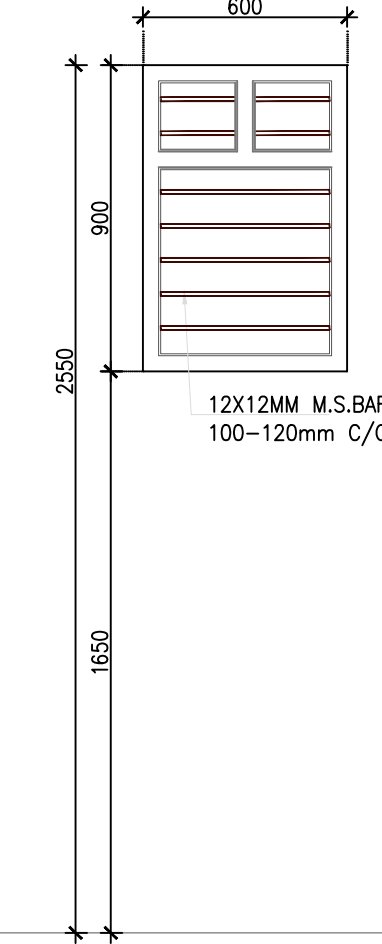
ELEVATION
DINING HALL
W1 - WINDOW
1500 x 1800



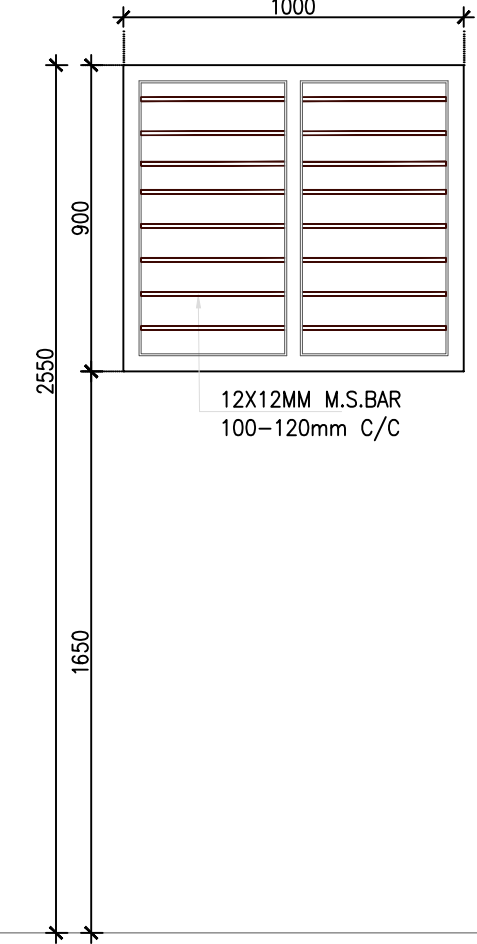
ELEVATION
ENTRANCE LOBBY, PANTRY, STORE
W2 - WINDOW
1000 x 1800



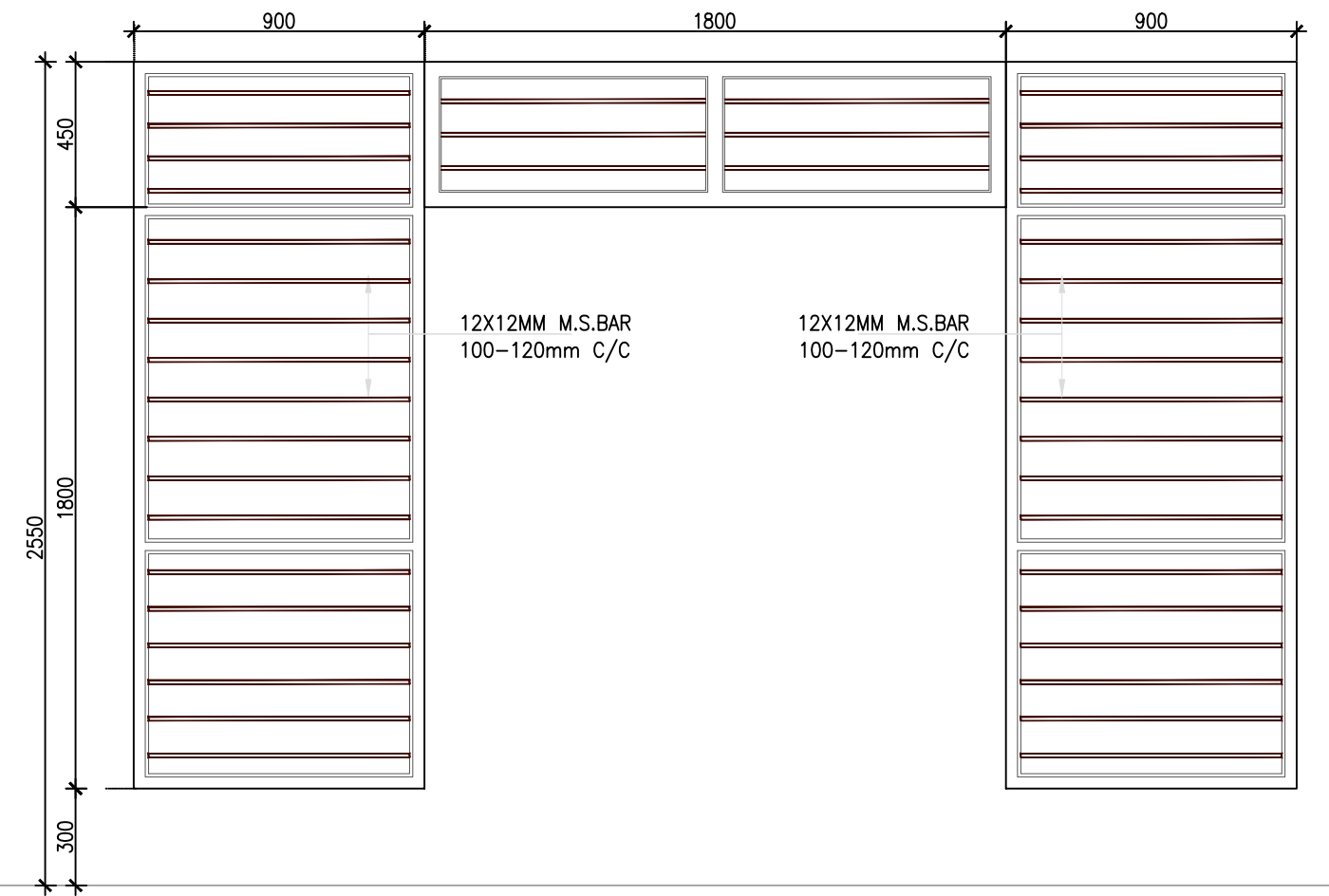
ELEVATION
KITCHEN
W3 - WINDOW
1800 x 1650



ELEVATION
TOILET
V1 - VENTILATOR
600 x 900



ELEVATION
KITCHEN
V3 - VENTILATOR
1000 x 900



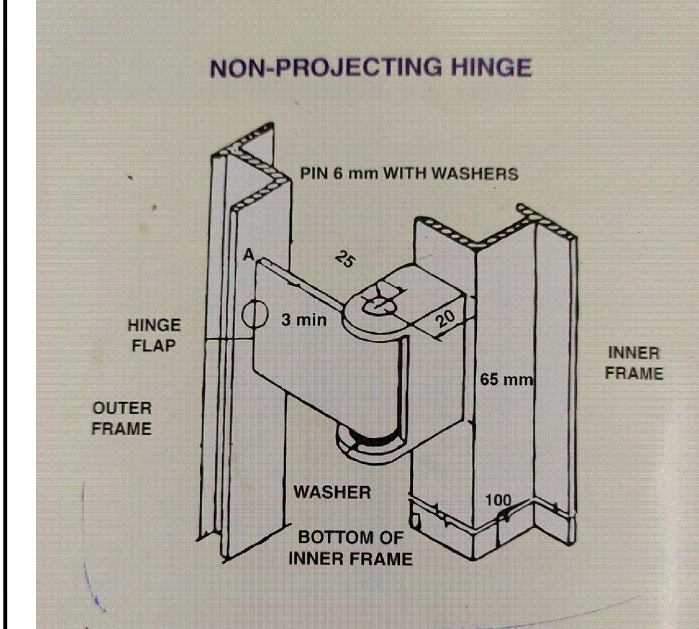
ELEVATION
MAIN ENTRANCE DOOR
V2 - 1800 x 450 FIXED GLAZING ABOVE DOOR
GL1 - 900X 2250 FIXED GLAZING ON SIDE

PROJECT - EMRS
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -
GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



- NOTES -**
- 1. FIXTURES SHALL BE AS PER CPWD SPECIFICATION**
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 - 4. WINDOW SHOULD BE FACTORY MADE TYPE WITH FLASH WELDING**
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TYPICAL HINGE DETAIL

N.K.
(NARENDRA KUMAR)
pl Approved 10.3.23
(Prasad Approval)
LCMT 13/4/23
(Rk Gang)
BMS SS 13/3/2023.
(SANDEEP SOOD)

A D P Keshri
Chief Technical Consultant

CATEGORY :
DOOR WINDOW DETAIL

DRAWING TITLE :
KITCHEN DOOR WINDOW DETAIL

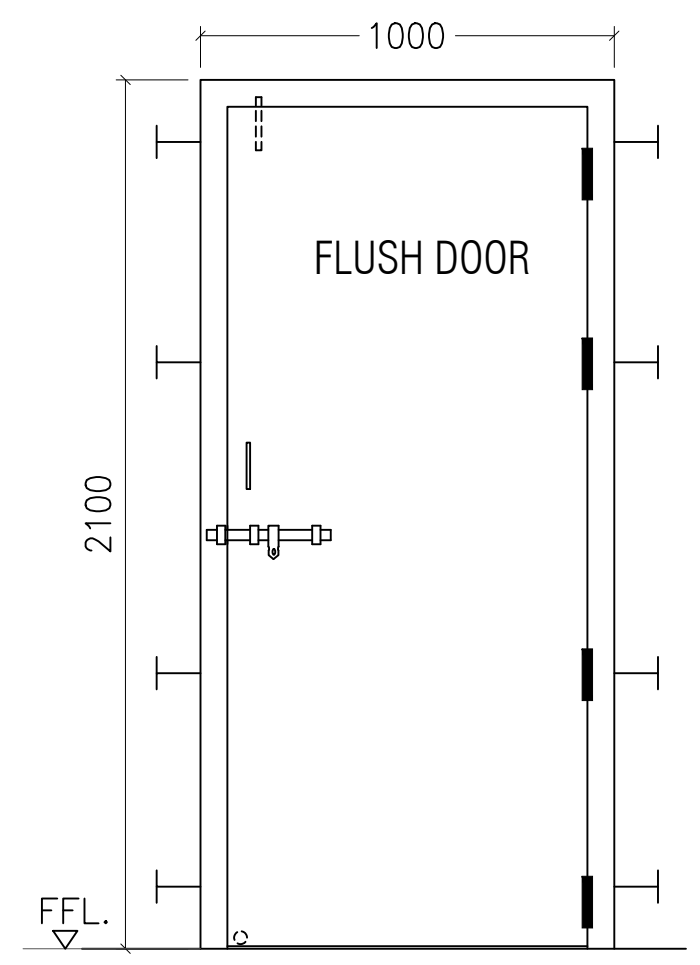
DWG. NO. -
EMRS NAME/KITCHEN/DWD/AR_01

DATE - 09 MARCH 2023

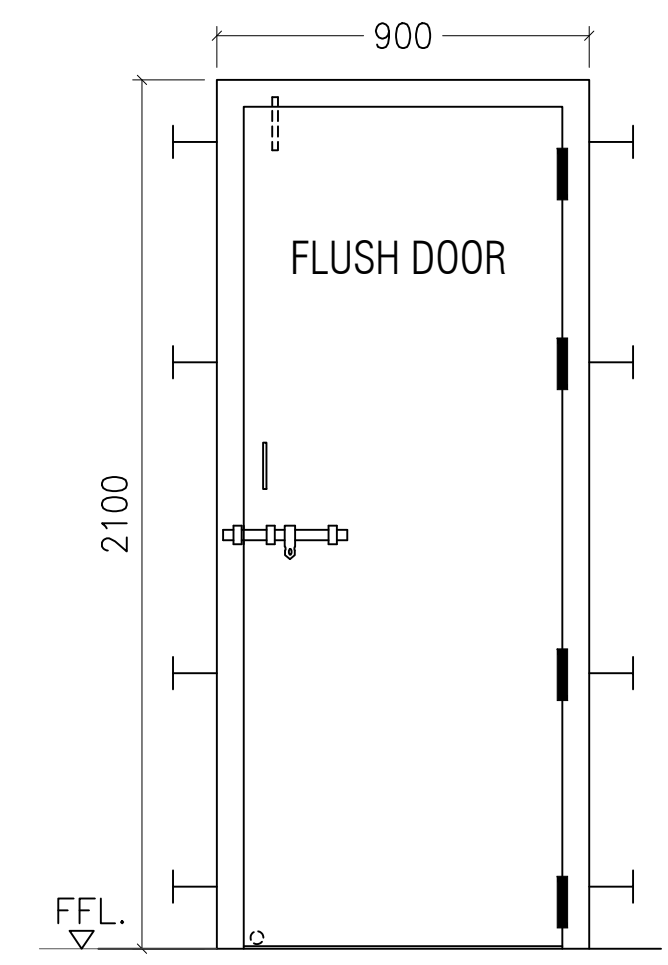
WARDEN RESIDENCE - DOOR- WINDOW VENTILATOR DETAIL

PROJECT - EMRS
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

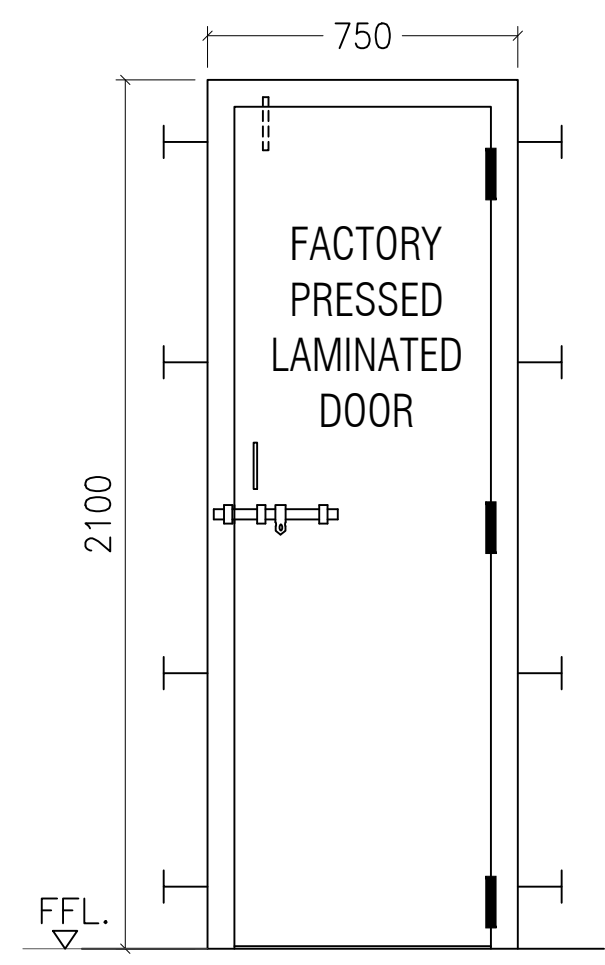
CLIENT -
GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



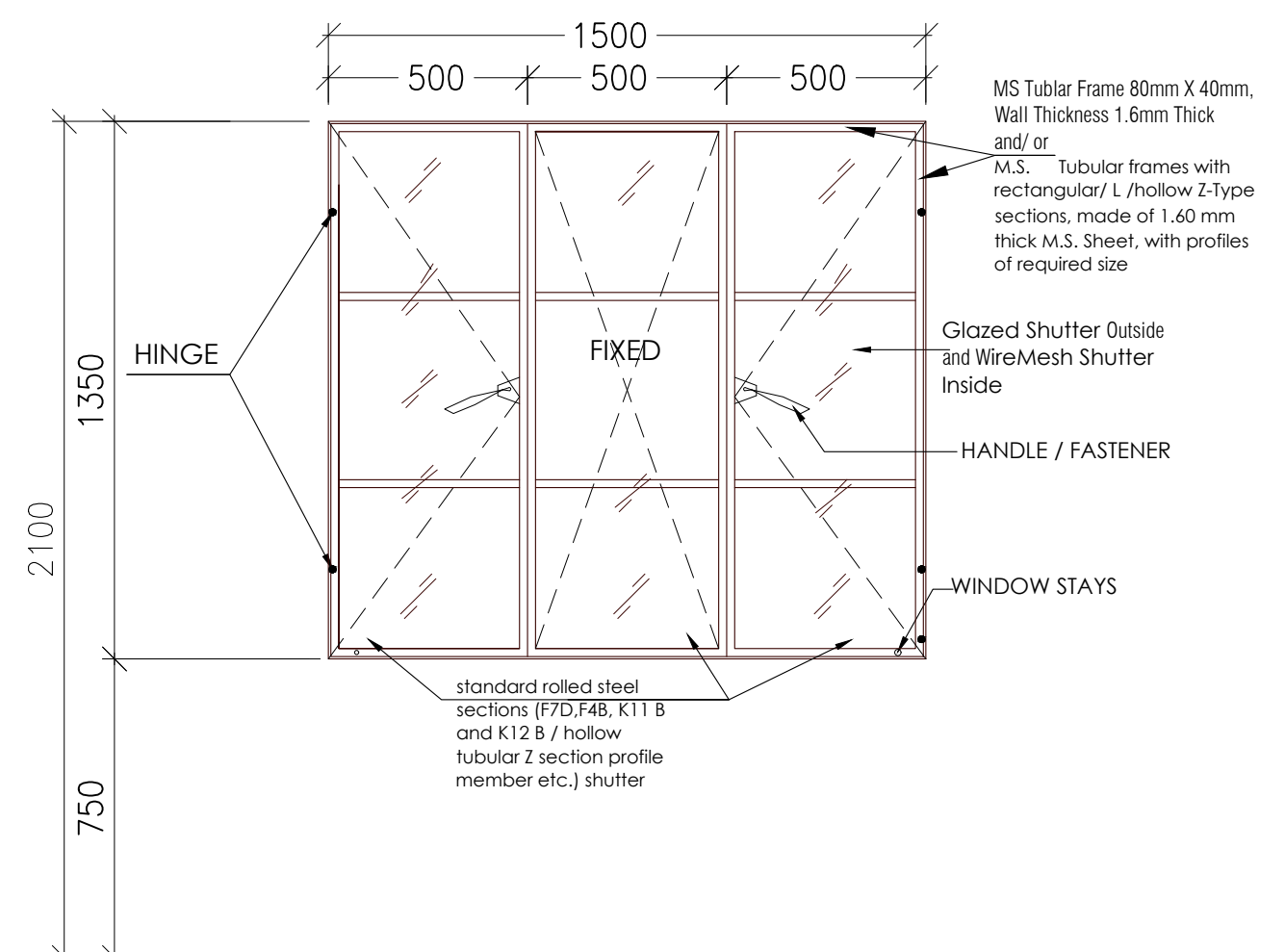
MAIN ENTRANCE DOOR
D1 - 1000 x 2100



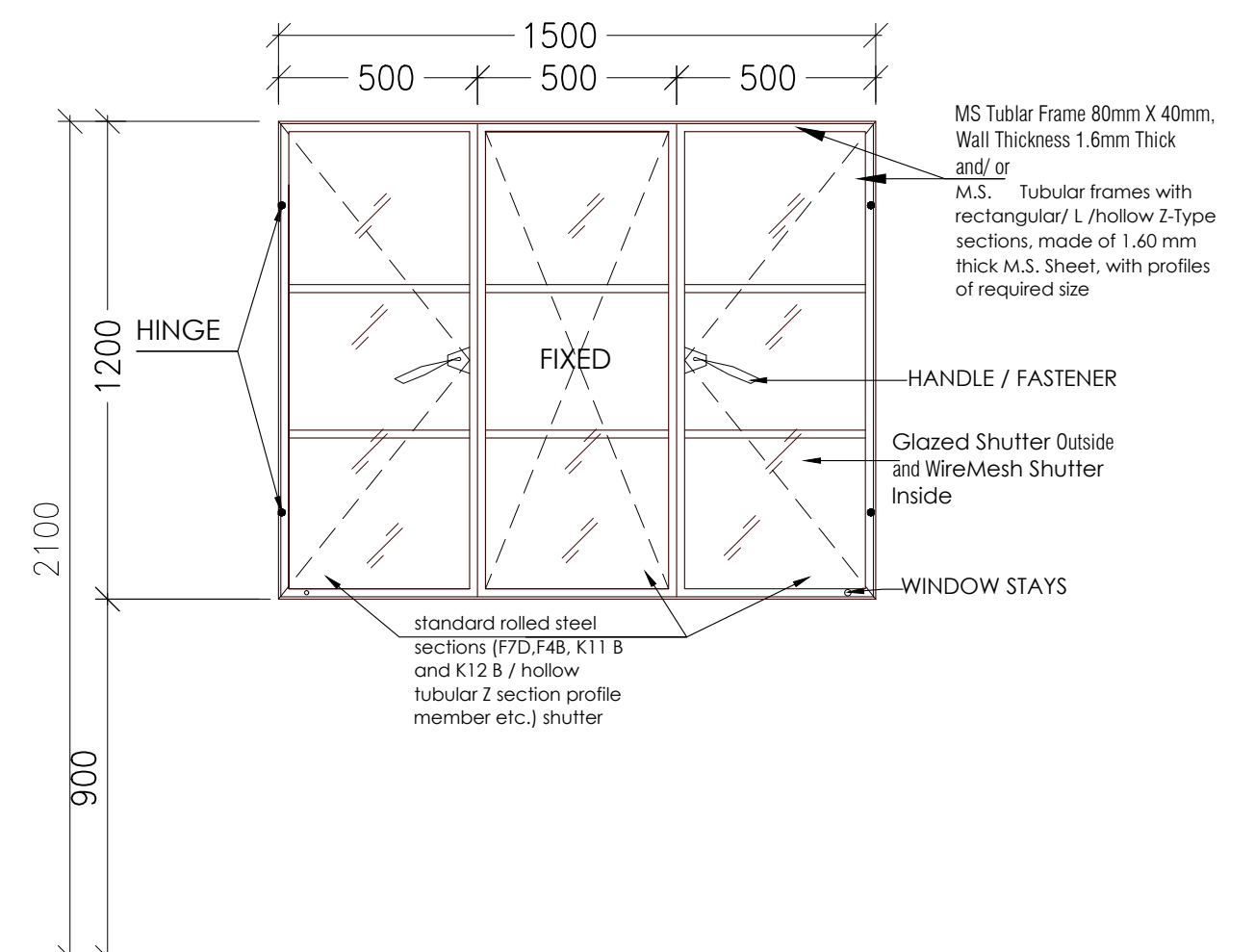
BEDROOM, BALCONY, UTILITY DOOR
D2 - 900 X 2100



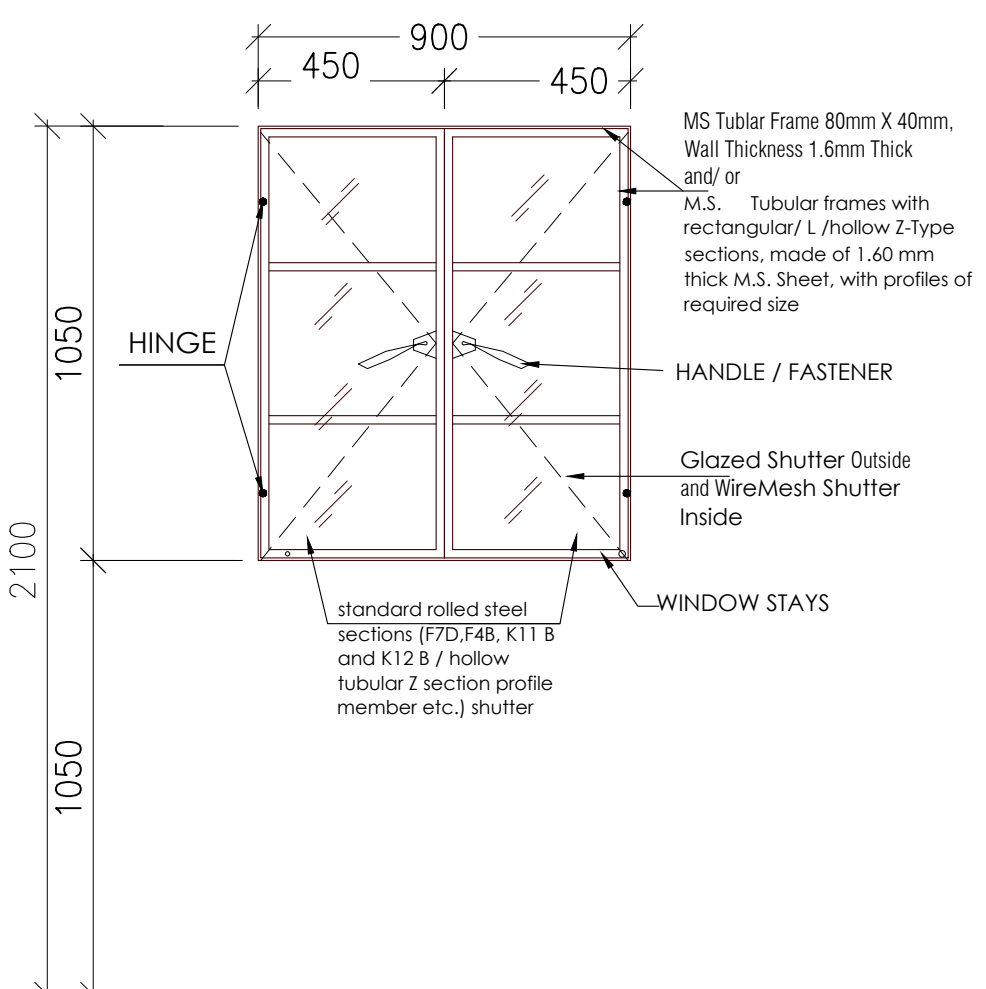
TOILET DOOR
D3 - 750 X 2100



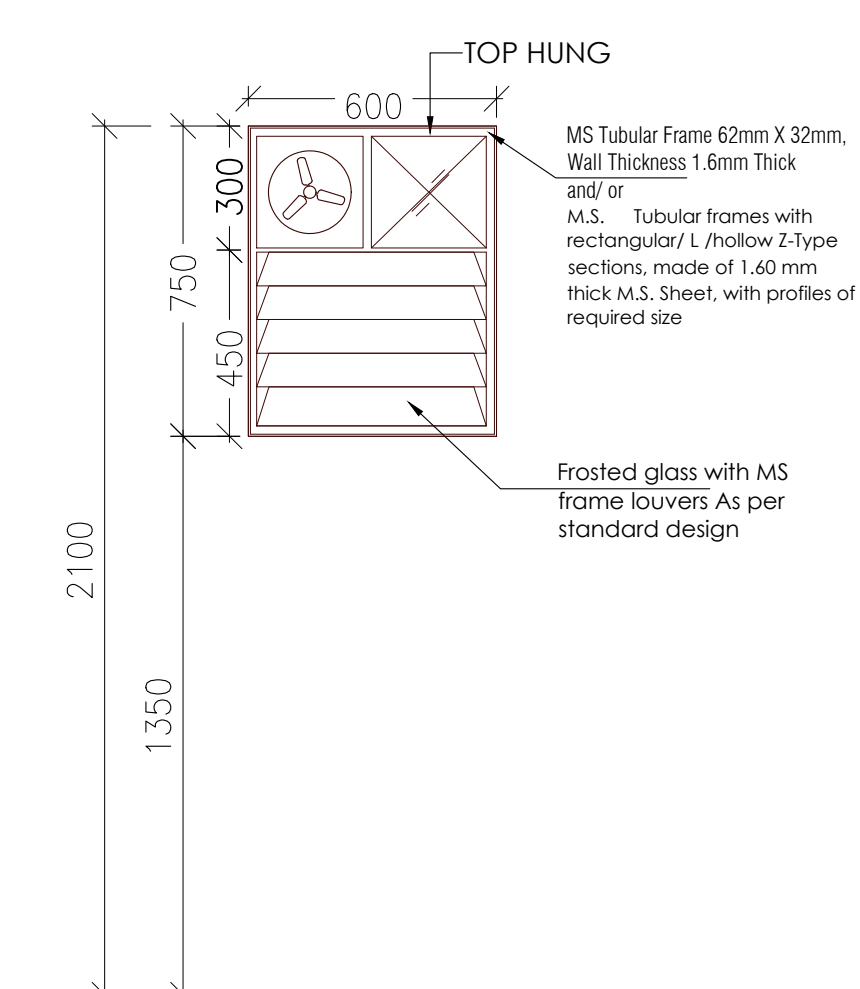
BEDROOM
W1 - WINDOW 1
1500 x 1350



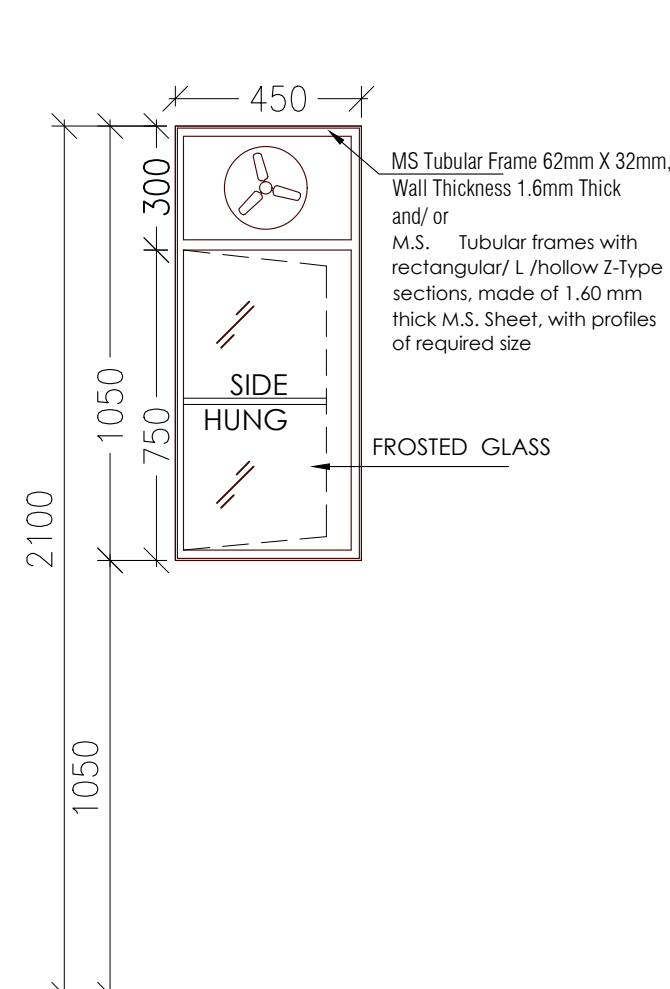
LIVING ROOM
W2 - WINDOW 2
1500 x 1200



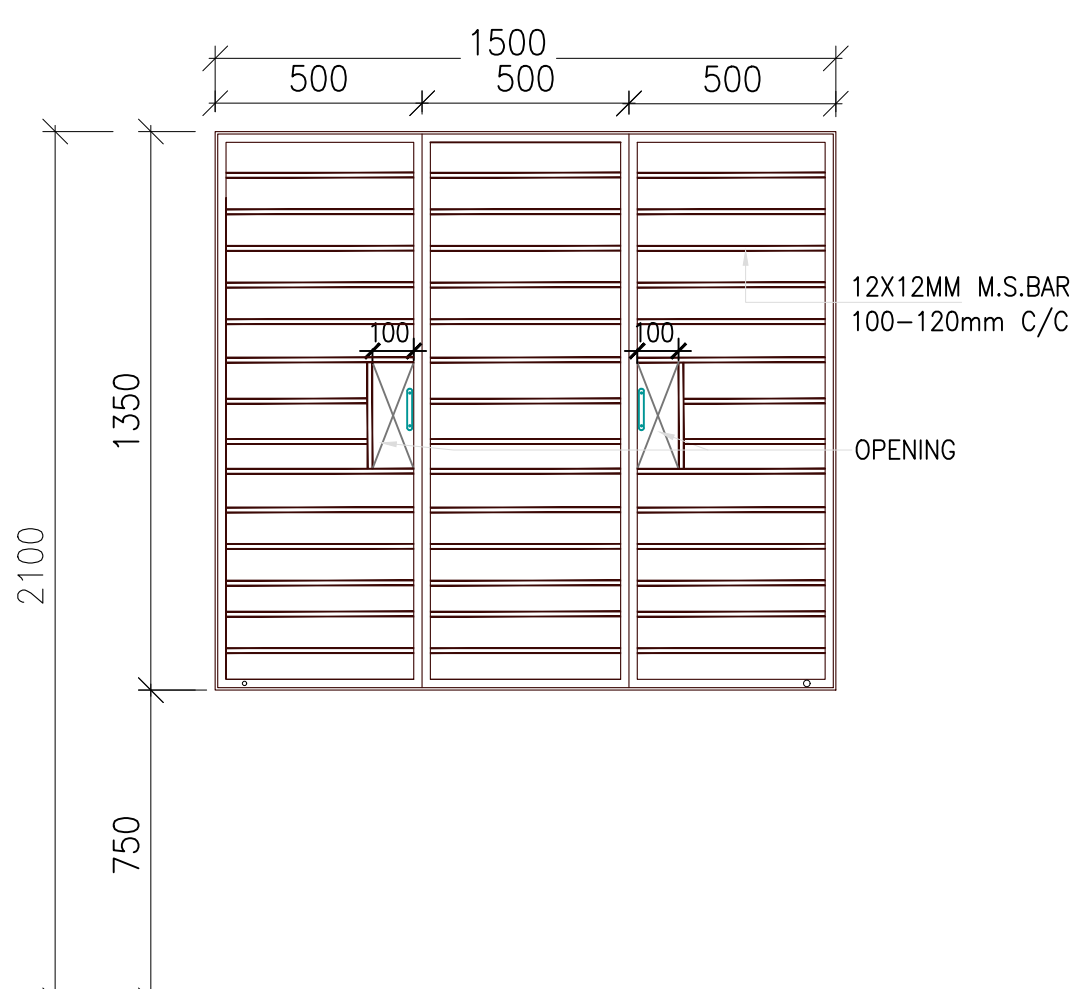
KITCHEN
W3 - WINDOW 3
900 x 1050



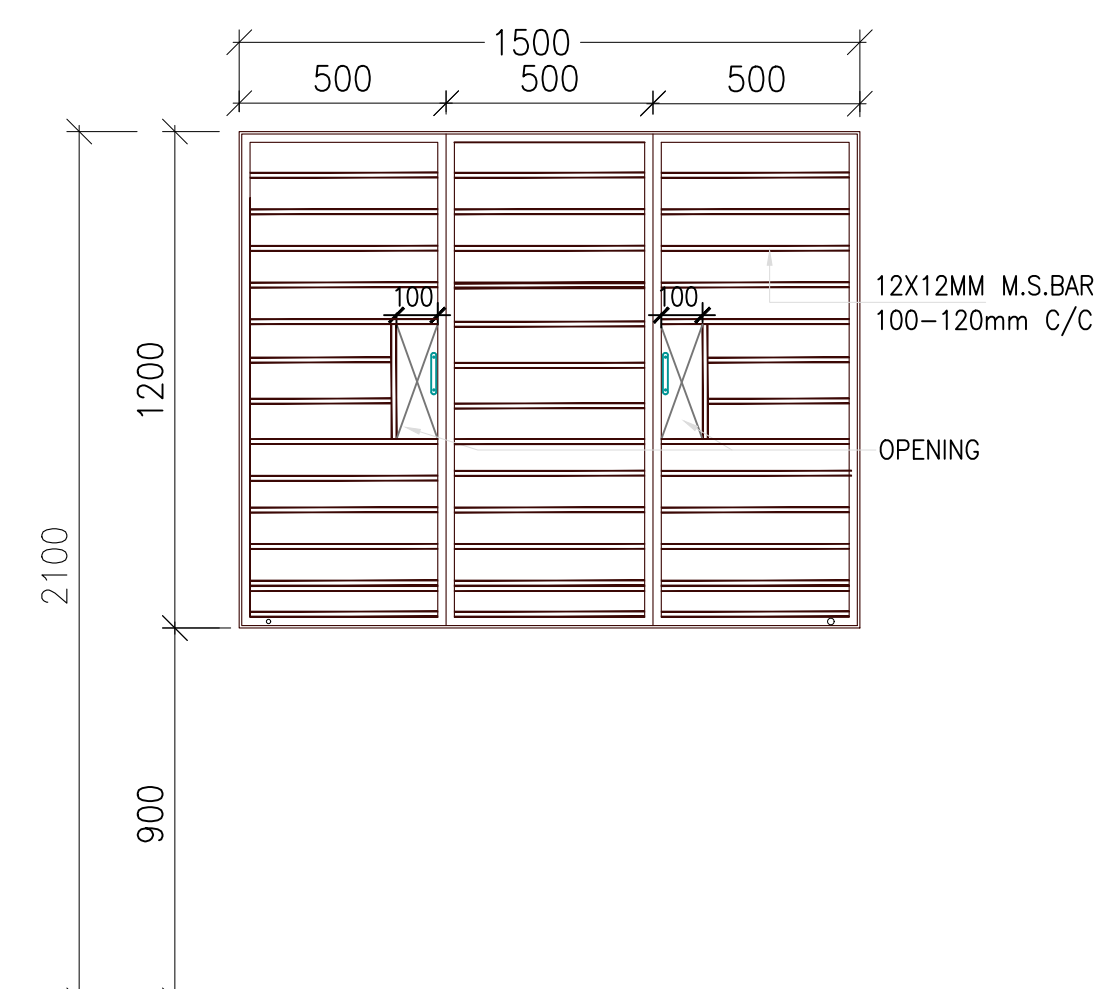
TOILET
V1 - VENTILATOR 1
600 x 750



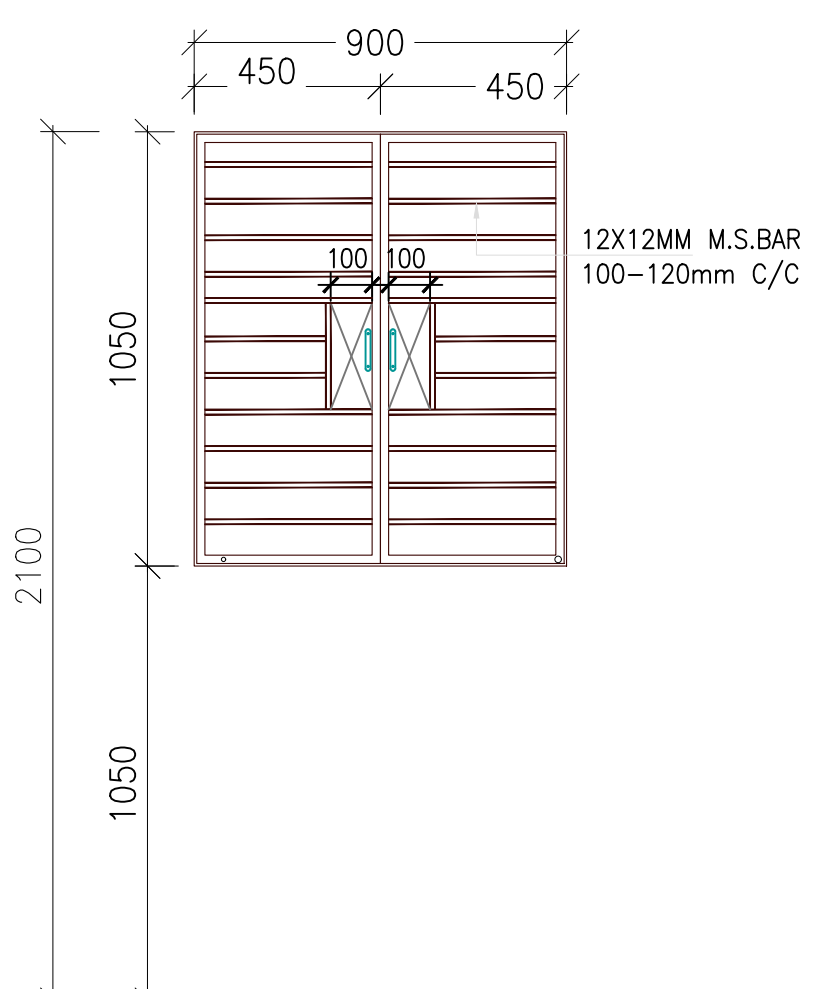
KITCHEN
V2 - VENTILATOR 2
450 x 1050



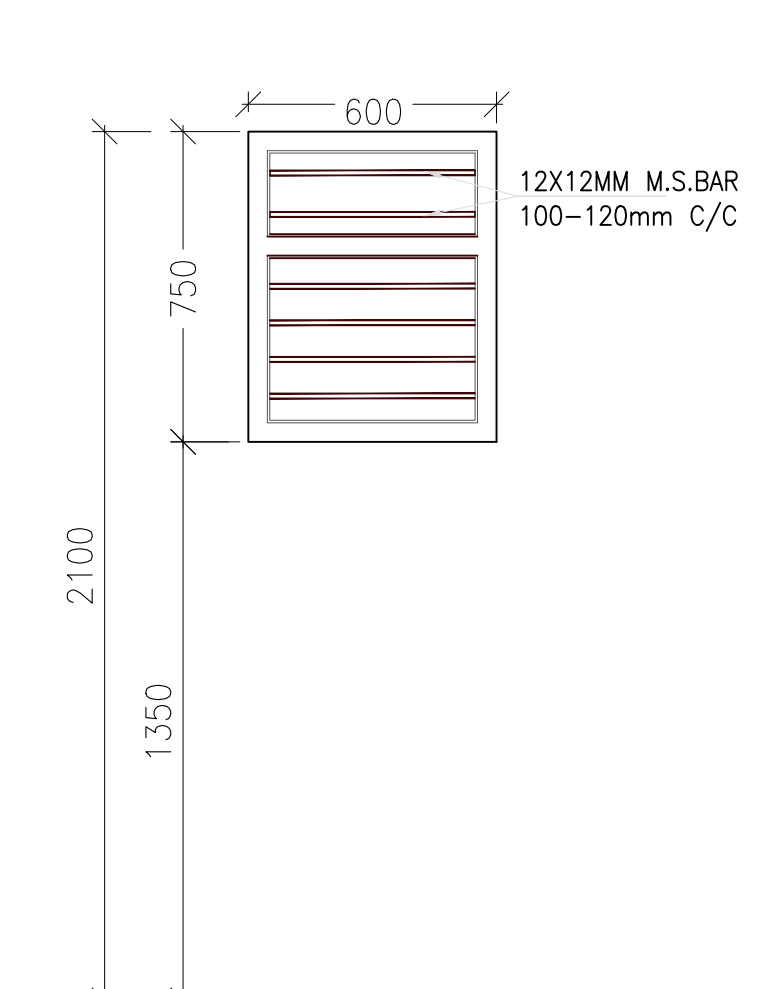
ELEVATION
BEDROOM
W1 - WINDOW 1
1500 x 1350



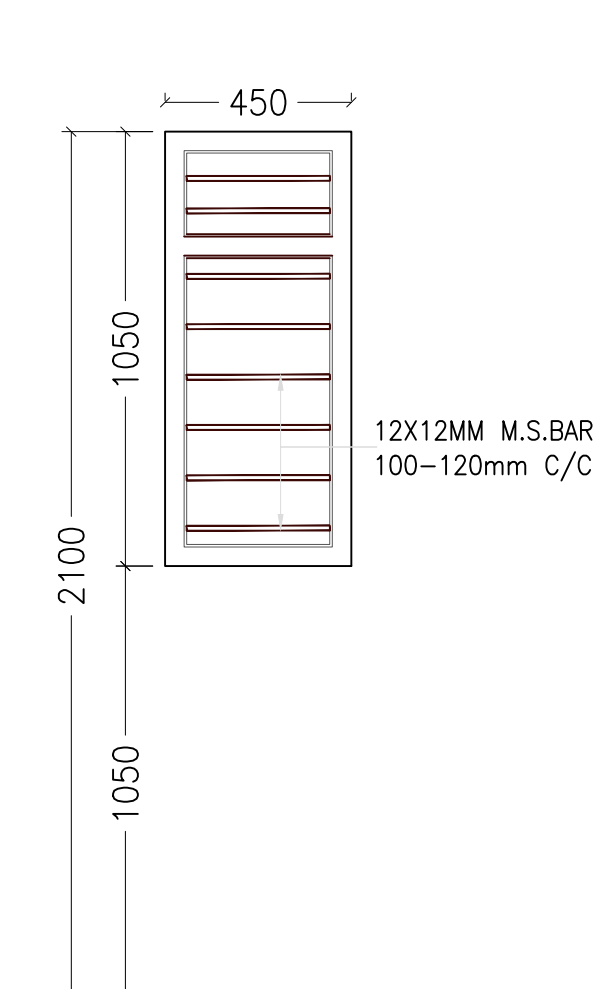
ELEVATION
LIVING ROOM
W2 - WINDOW 2
1500 x 1200



ELEVATION
KITCHEN
W3 - WINDOW 3
900 x 1050

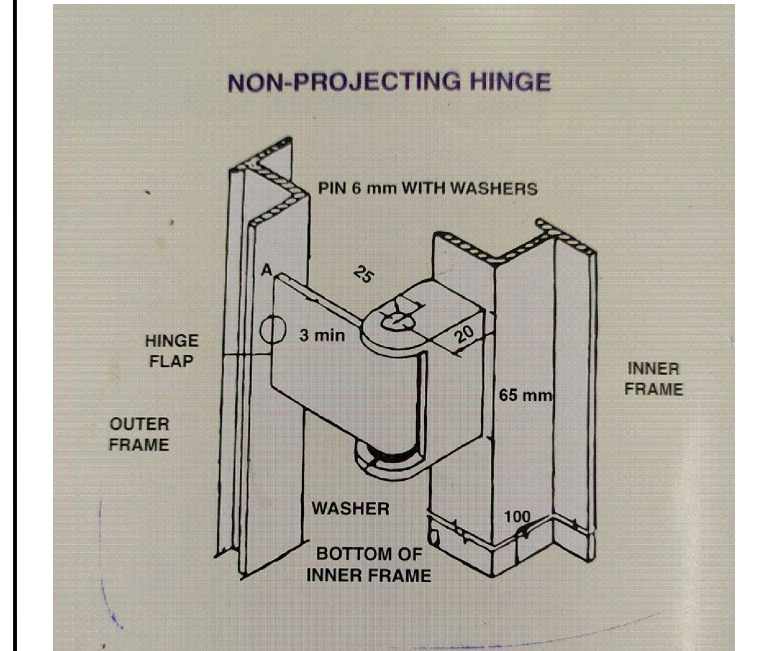


ELEVATION
TOILET
V1 - VENTILATOR 1
600 x 750



ELEVATION
KITCHEN
V2 - VENTILATOR 2
450 x 1050

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 - 3. WIRE MESH SHUTTER WILL OPEN INSIDE**
 - 4. WINDOW SHOULD BE FACTORY MADE TYPE WITH FLASH WELDING**
 - 5. NESTS/ CPWD APPROVED MAKE SHALL ONLY BE PROVIDED**



TYPICAL HINGE DETAIL

N.K.
 (NARENDRA KUMAR)
 p.k. Approved 10.3.23
 (Approved Approval)
 (can't 13/3/23)
 (R.K. Gang)
 8m 95 13/3/23.
 (SANDEEP SOOD)
A.P.K.

A D P Keshri
Chief Technical Consultant

CATEGORY :
DOOR WINDOW DETAIL

DRAWING TITLE :
WARDEN RESIDENCE- DOOR WINDOW DETAIL

DWG. NO.-
EMRS
NAME/WARDEN/DWD/AR_01

DATE - 09 MARCH 2023

TYPE-II QUARTER - DOOR WINDOW VENTILATOR DETAIL

PROJECT - EMRS

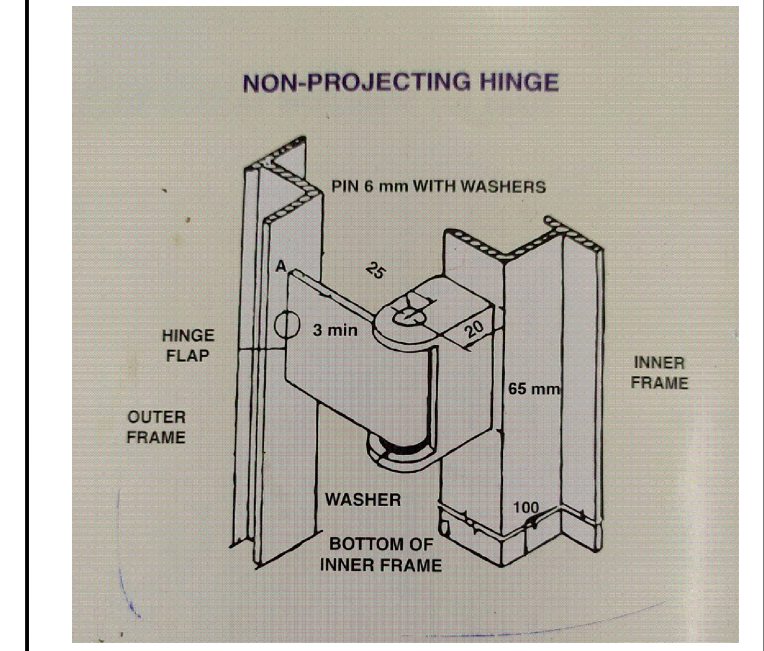
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



- NOTES -**
1. FIXTURES SHALL BE AS PER CPWD SPECIFICATION
 2. GLAZED SHUTTERS WILL OPEN OUTSIDE
 3. WIRE MESH SHUTTER WILL OPEN INSIDE
 4. WINDOW SHOULD BE FACTORY MADE TYPE WITH FLASH WELDING
 5. NESTS/ CPWD APPROVED MAKE SHALL ONLY BE PROVIDED



TYPICAL HINGE DETAIL

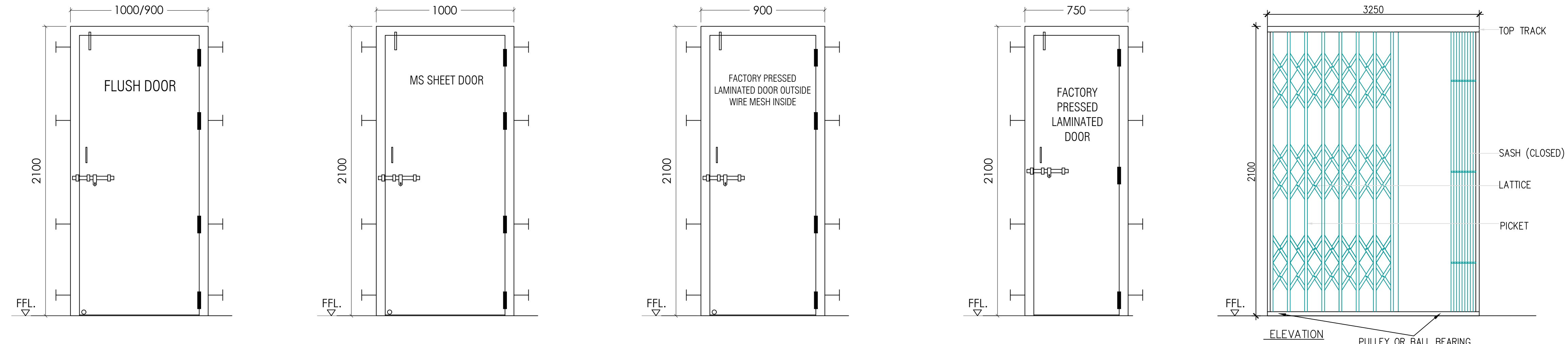
N.K.
 (NARENDRA KUMAR)
 P. Approved 10.3.23
 (Prasad Approval)
 Count 13/4/23
 (R.K. Gangi)
 Rev 05 13/3/2023.
 (SANDEEP SOOD)
A.P.K.
 A D P Keshri
 Chief Technical Consultant

CATEGORY : DOOR WINDOW DETAIL

DRAWING TITLE : TYPE-II QUARTER DOOR WINDOW DETAIL

DWG. NO.- EMRS NAME/TYPE II QUARTER/DWD/AR_01

DATE - 09 MARCH 2023



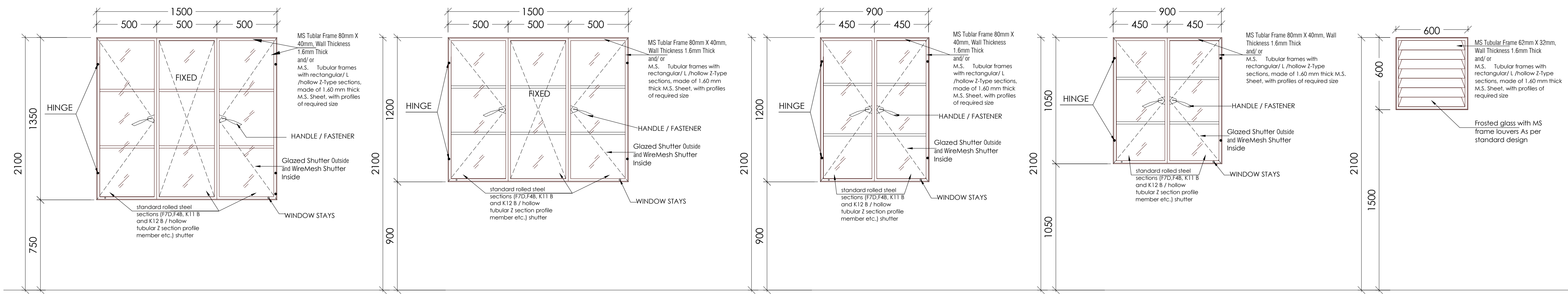
MAIN ENTRANCE & BEDROOM DOORS
 D1 - 1000 X 2100
 D2 - 900X2100

TERRACE DOOR
 D1 - 1000 X 2100

UTILITY & BALCONY DOOR
 D2 - 900 X 2100

TOILET DOOR
 D3- 750 X 2100

COLLAPSIBLE GATE
 (MAIN ENTRANCE DOOR)
 CG1 - 3250 X 2100



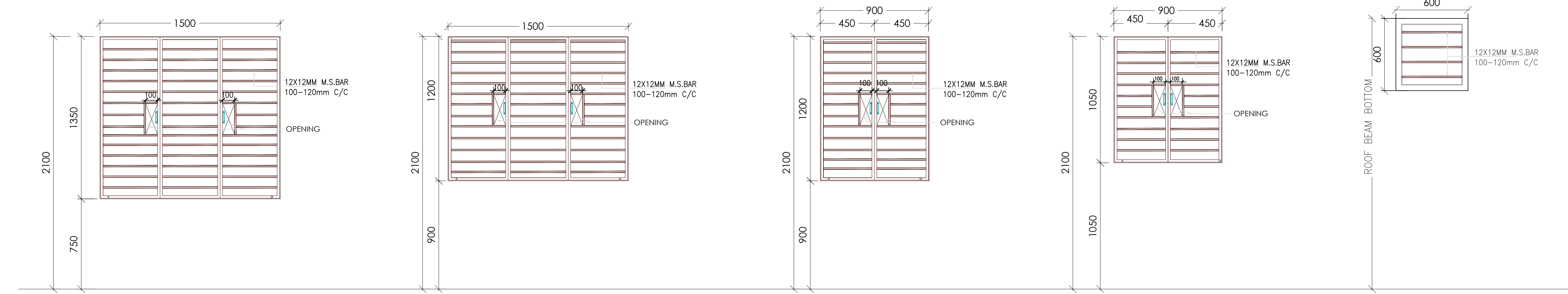
BEDROOM
 W1 - WINDOW 1
 1500 x 1350

LIVING / DINING HALL
 W2 - WINDOW 2
 1500 x 1200

LIVING / DINING HALL
 W3 - WINDOW 3
 900 x 1200

KITCHEN
 W4 - WINDOW 4
 900 x 1050

TOILET
 V1 - VENTILATOR1
 600 x 600



ELEVATION
 BEDROOM
 W1 - WINDOW 1
 1500 x 1350

ELEVATION
 LIVING / DINING HALL
 W2 - WINDOW 2
 1500 x 1200

ELEVATION
 LIVING / DINING HALL
 W3 - WINDOW 3
 900 x 1200

ELEVATION
 KITCHEN
 W4 - WINDOW 4
 900 x 1050

ELEVATION
 TOILET
 V1 - VENTILATOR1
 600 x 600

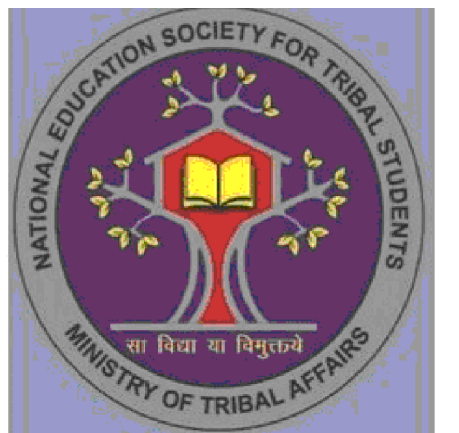
TYPE-III QUARTER - DOOR WINDOW VENTILATOR DETAIL

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

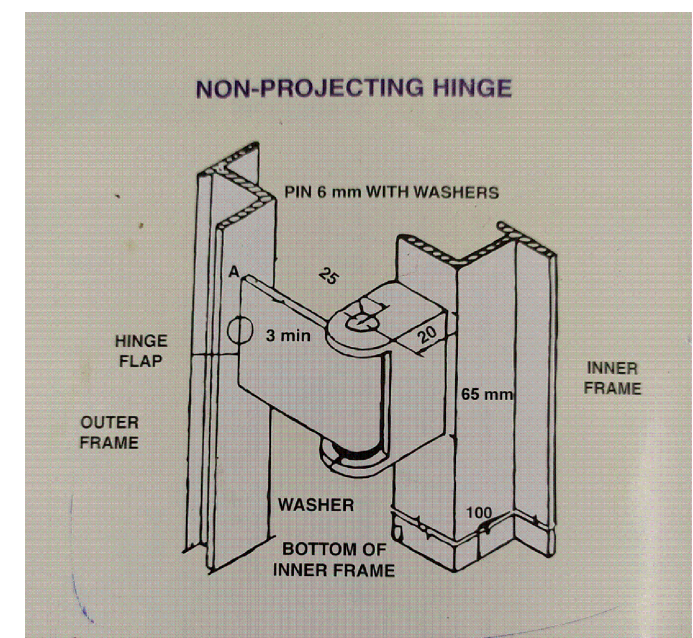
CLIENT -

GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



NOTES -

1. FIXTURES SHALL BE AS PER CPWD SPECIFICATION
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3. WIRE MESH SHUTTER WILL OPEN INSIDE
4. WINDOW SHOULD BE FACTORY MADE TYPE WITH FLASH WELDING
5. NESTS/ CPWD APPROVED MAKE SHALL ONLY BE PROVIDED



TYPICAL HINGE DETAIL

Handwritten notes:
N.K.
(NARENDRA KUMAR)
Checked 10.3.23
(Prasad Approval)
13/3/23
(Rk Gang)
21/3/23
(SANDEEP SOOD)

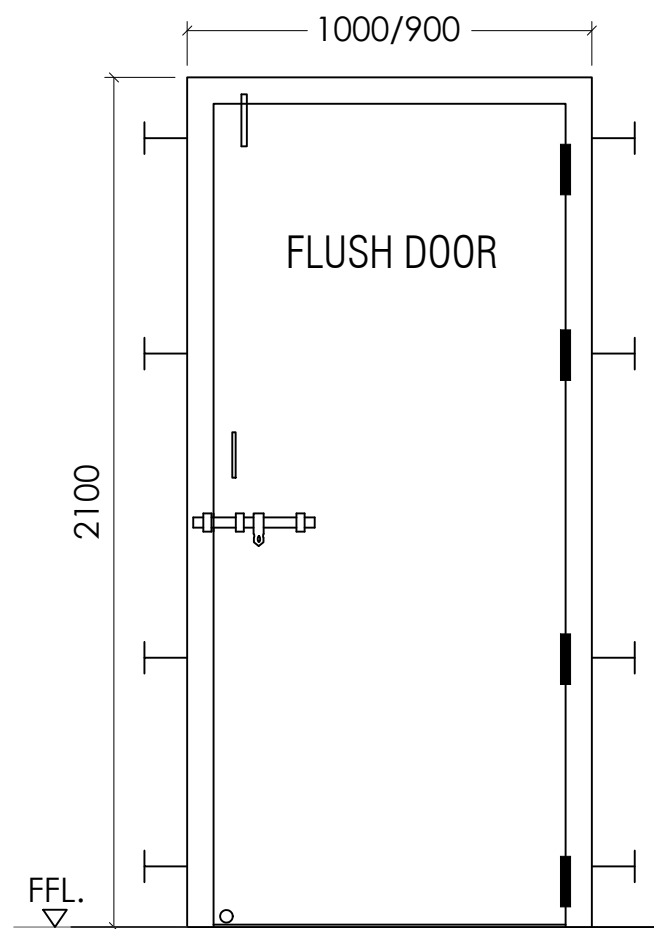
A D P Keshri
Chief Technical Consultant

CATEGORY : DOOR WINDOW DETAIL

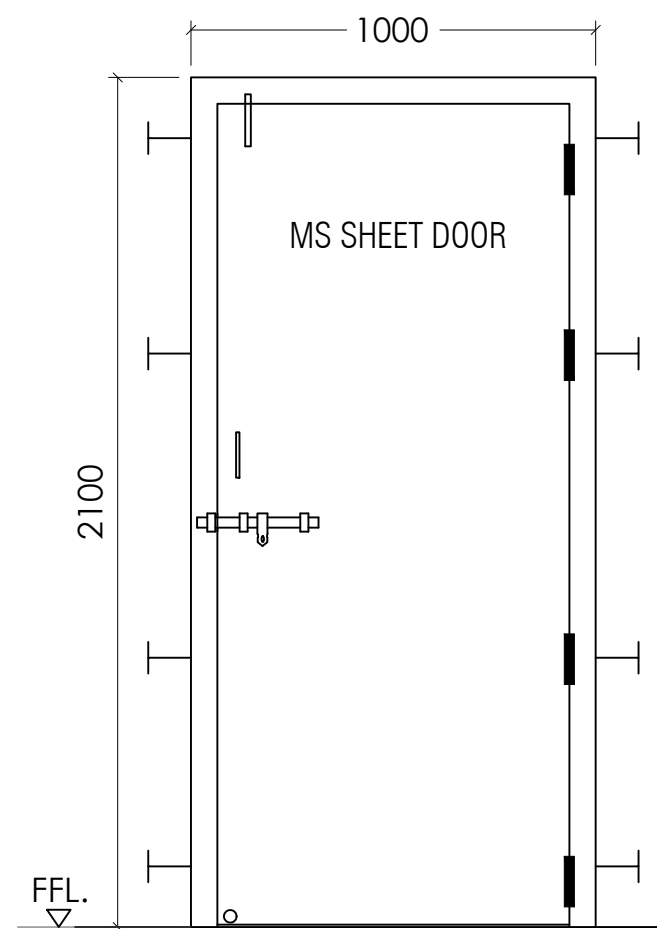
DRAWING TITLE : TYPE-III QUARTER DOOR WINDOW DETAIL

DWG. NO.- EMRS NAME/TYPE III QUARTER/DWD/AR_01

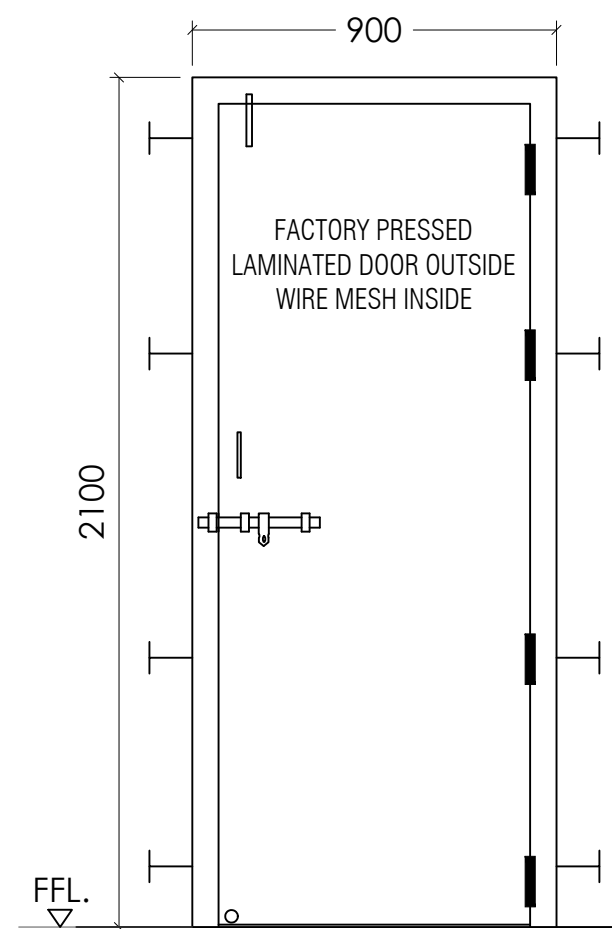
DATE - 09 MARCH 2023



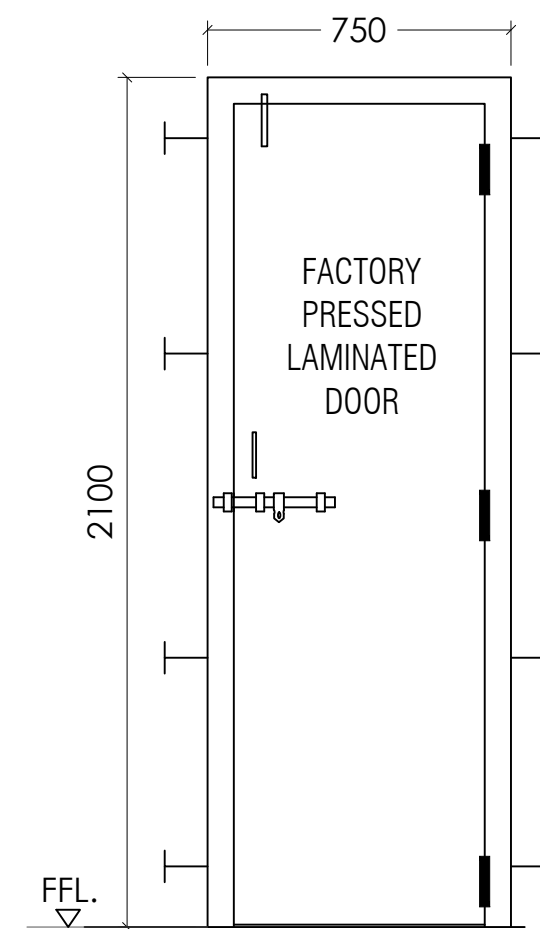
MAIN ENTRANCE & BEDROOM DOORS
D1 - 1000 X 2100
D2- 900X2100



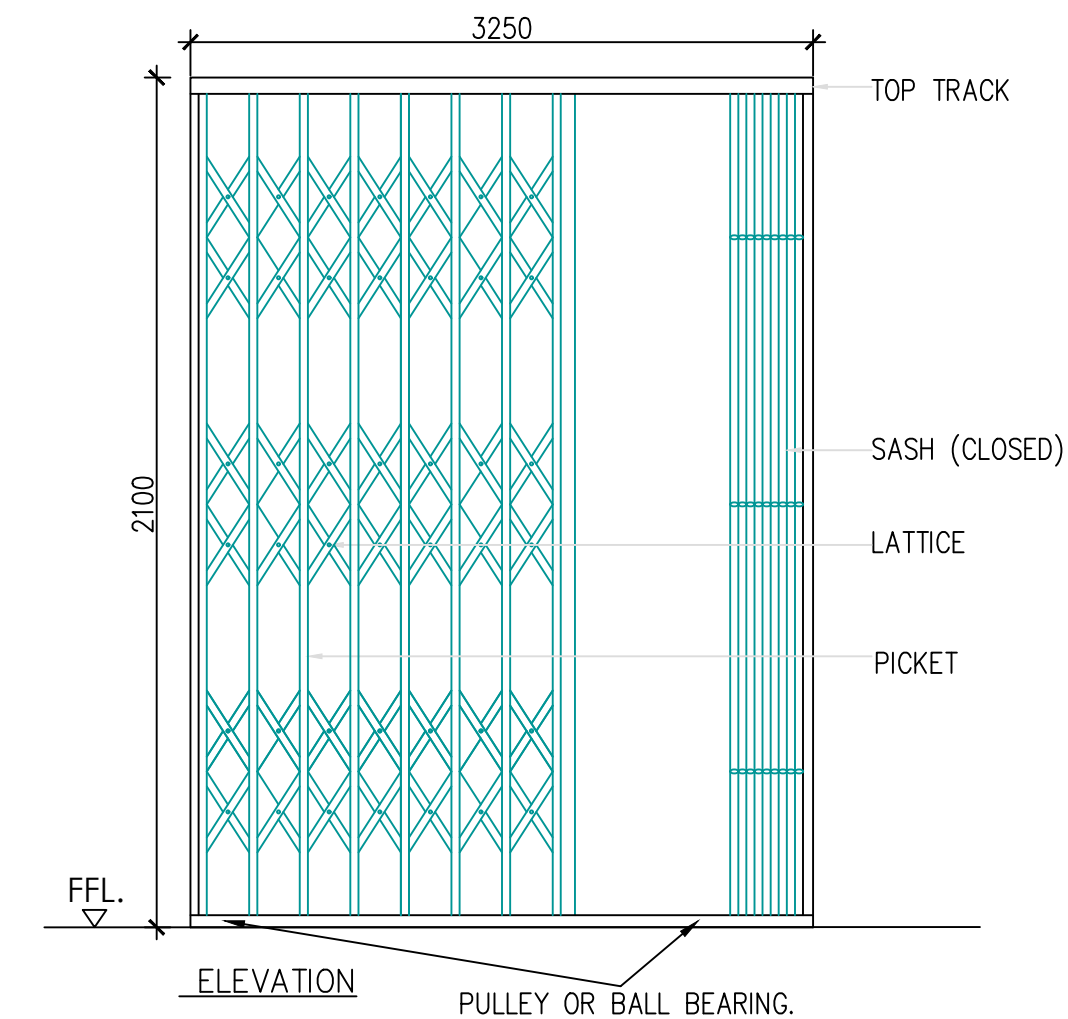
TERRACE DOOR
D1 - 1000 X 2100



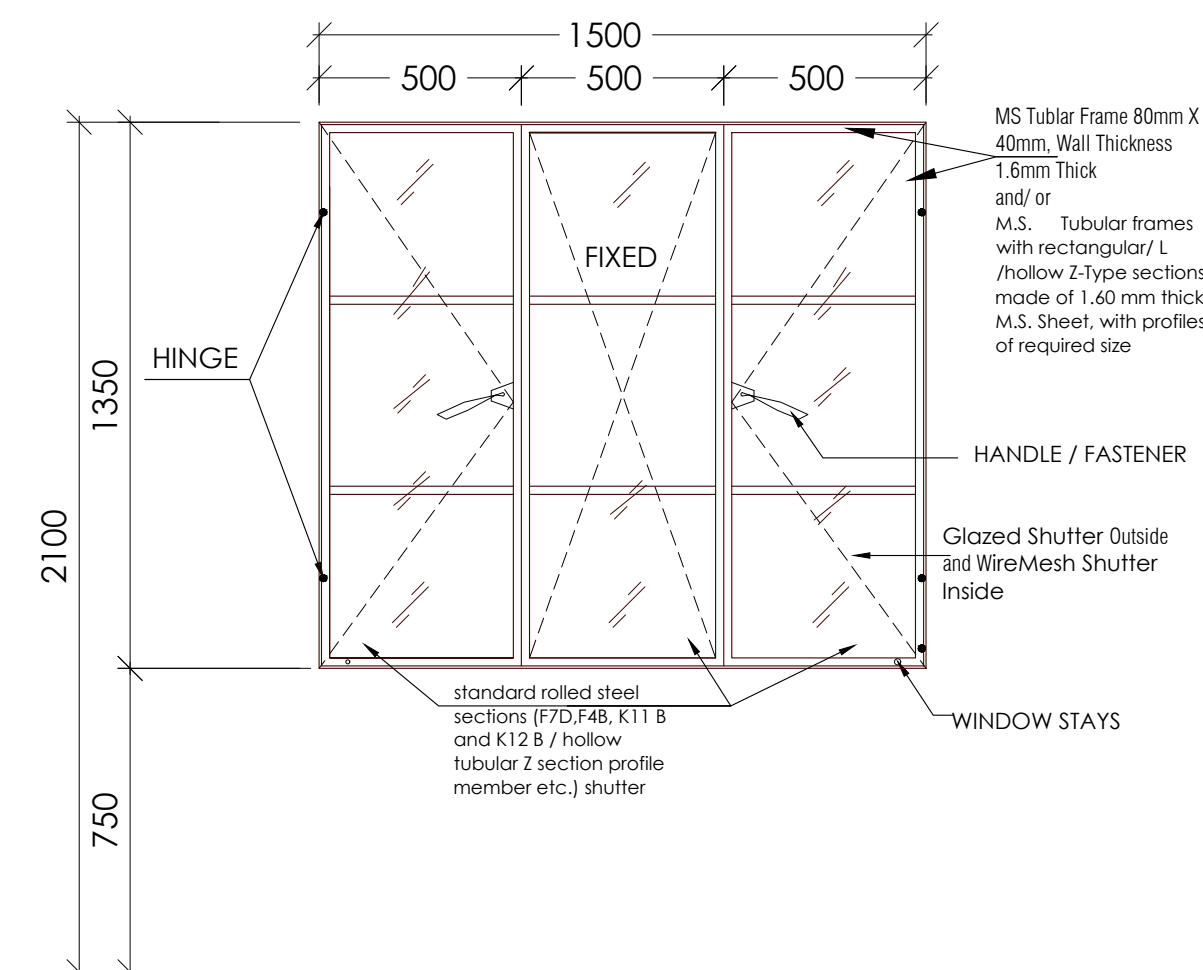
UTILITY & BALCONY DOOR
D2 - 900 X 2100



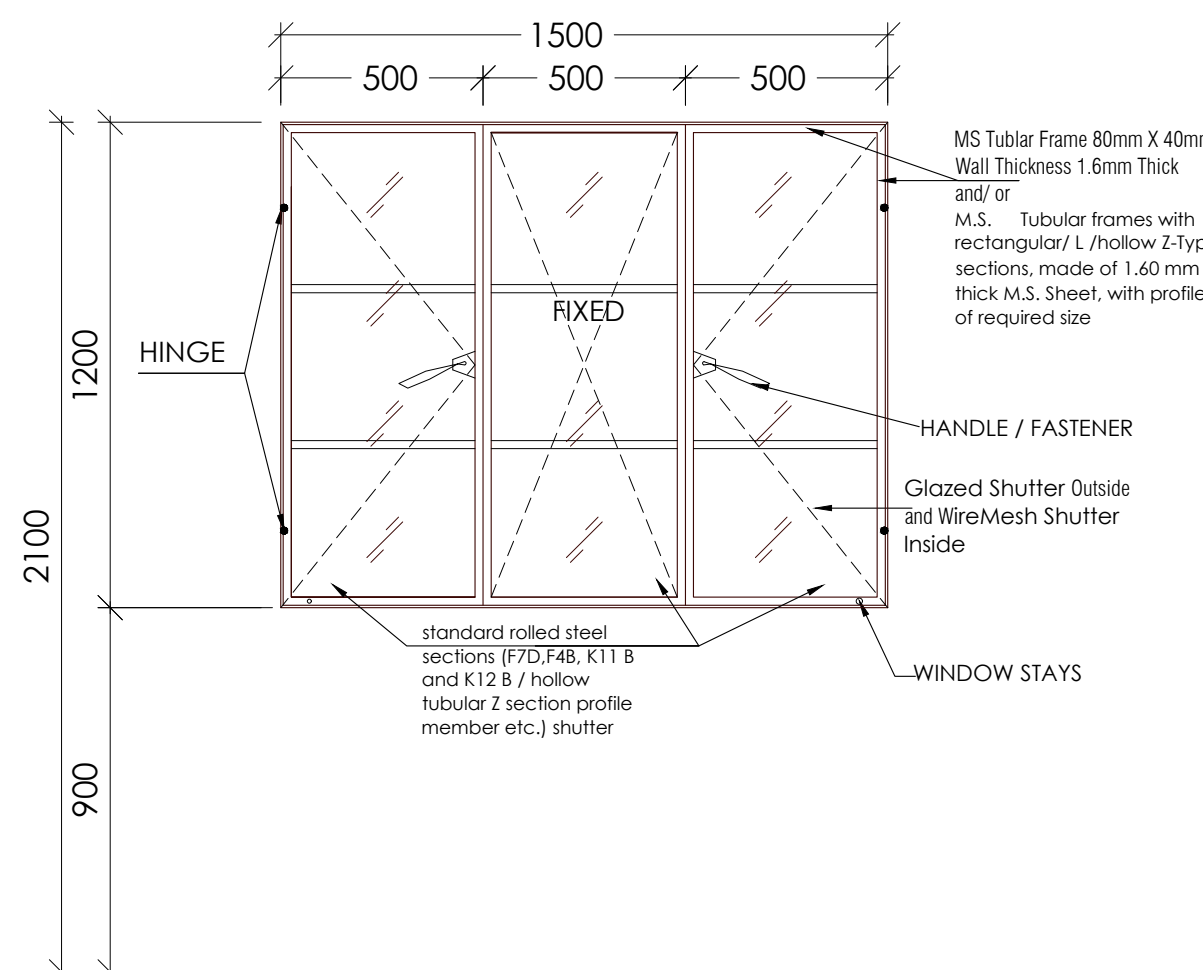
TOILET DOOR
D3- 750 X 2100



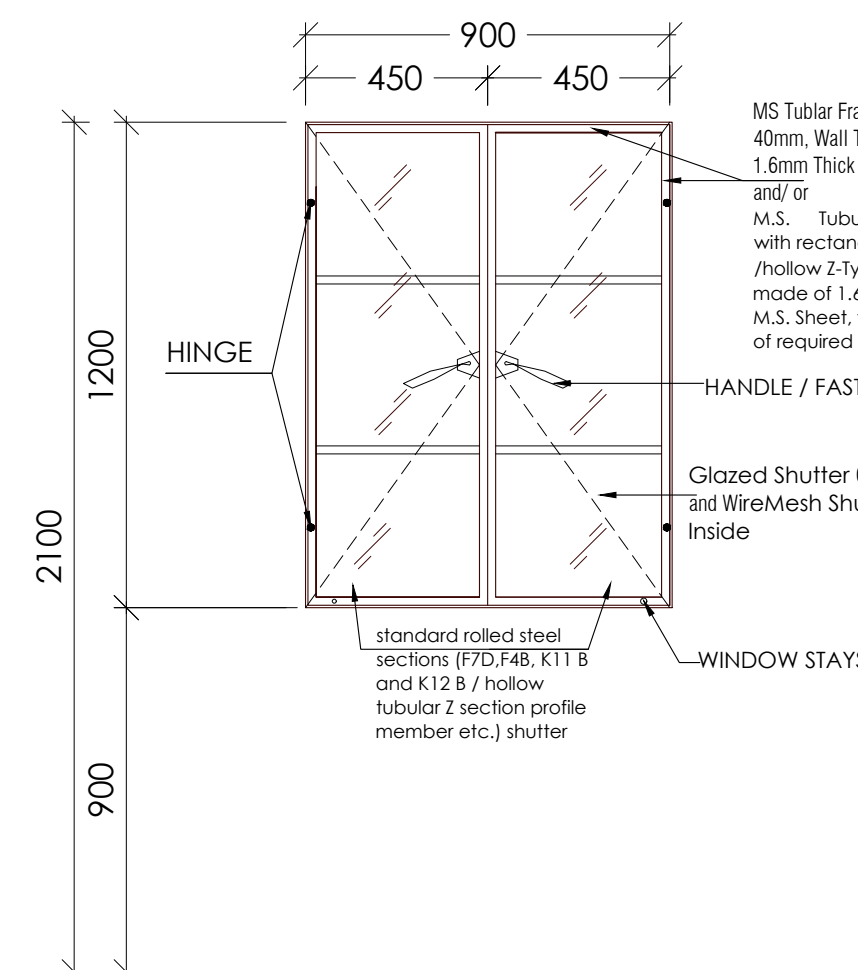
COLLAPSIBLE GATE
(MAIN ENTRANCE DOOR)
CG1 - 3250 X 2100



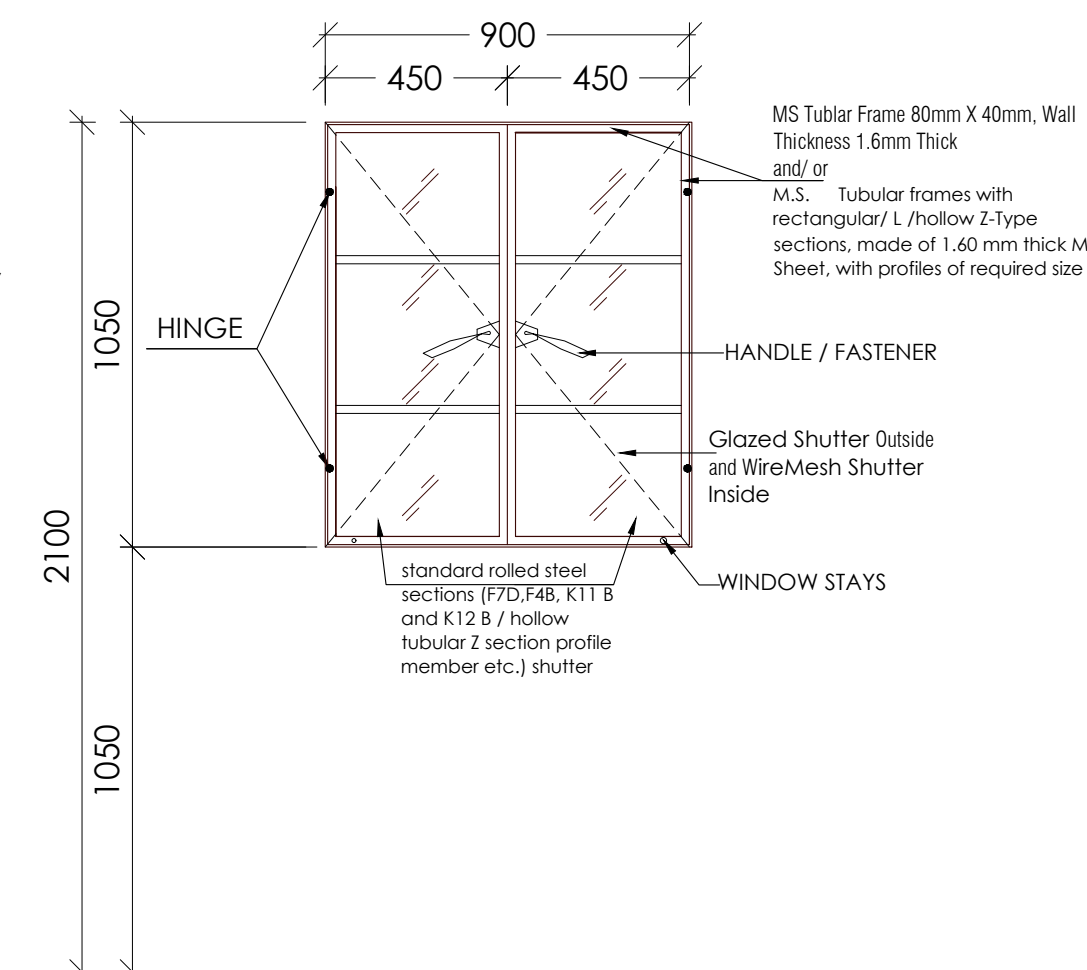
BEDROOM
W1 - WINDOW 1
1500 x 1350



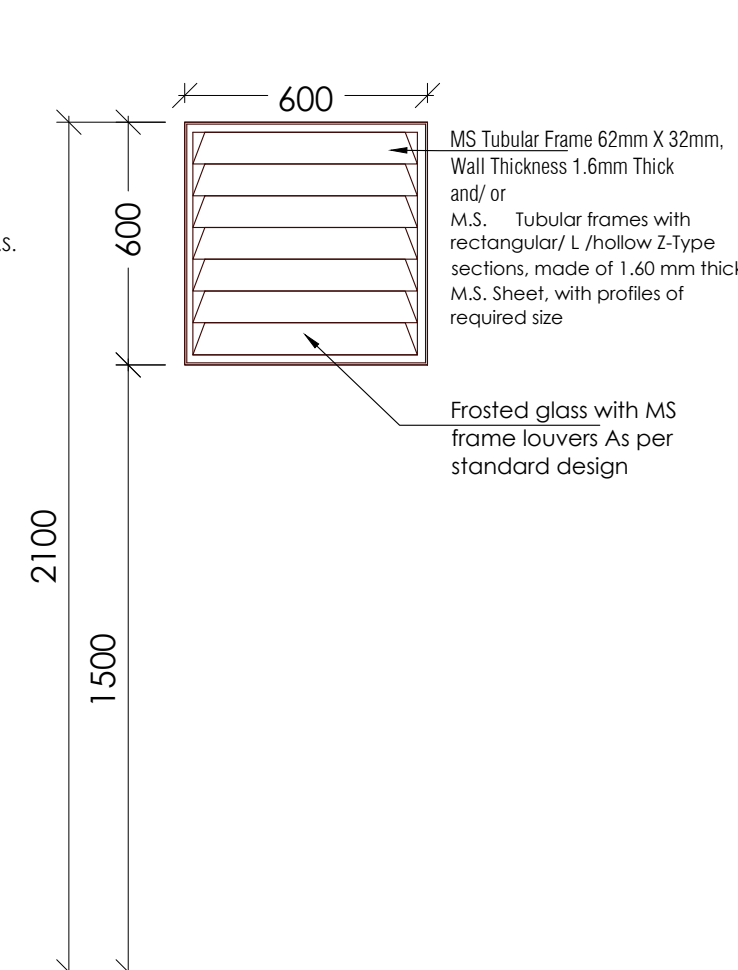
LIVING / DINING HALL
W2 - WINDOW 2
1500 x 1200



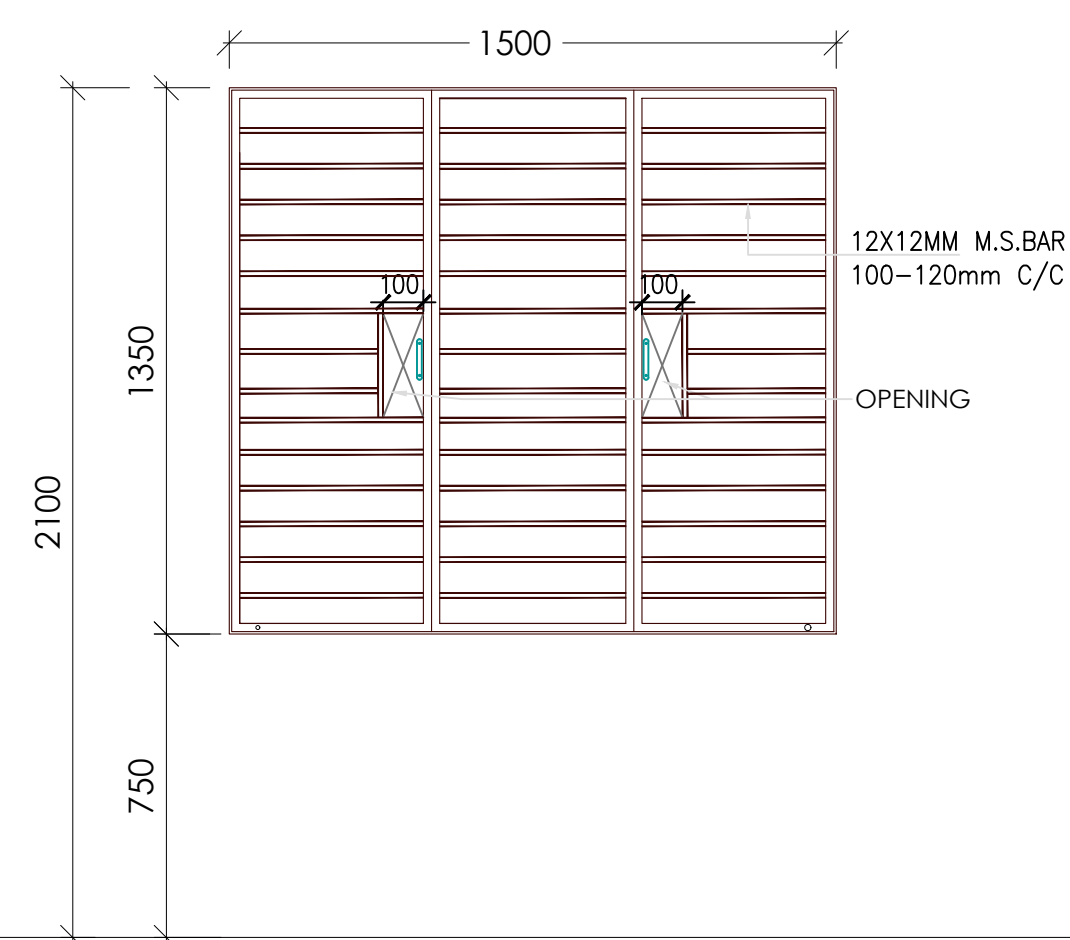
LIVING / DINING HALL
W3 - WINDOW 3
900 x 1200



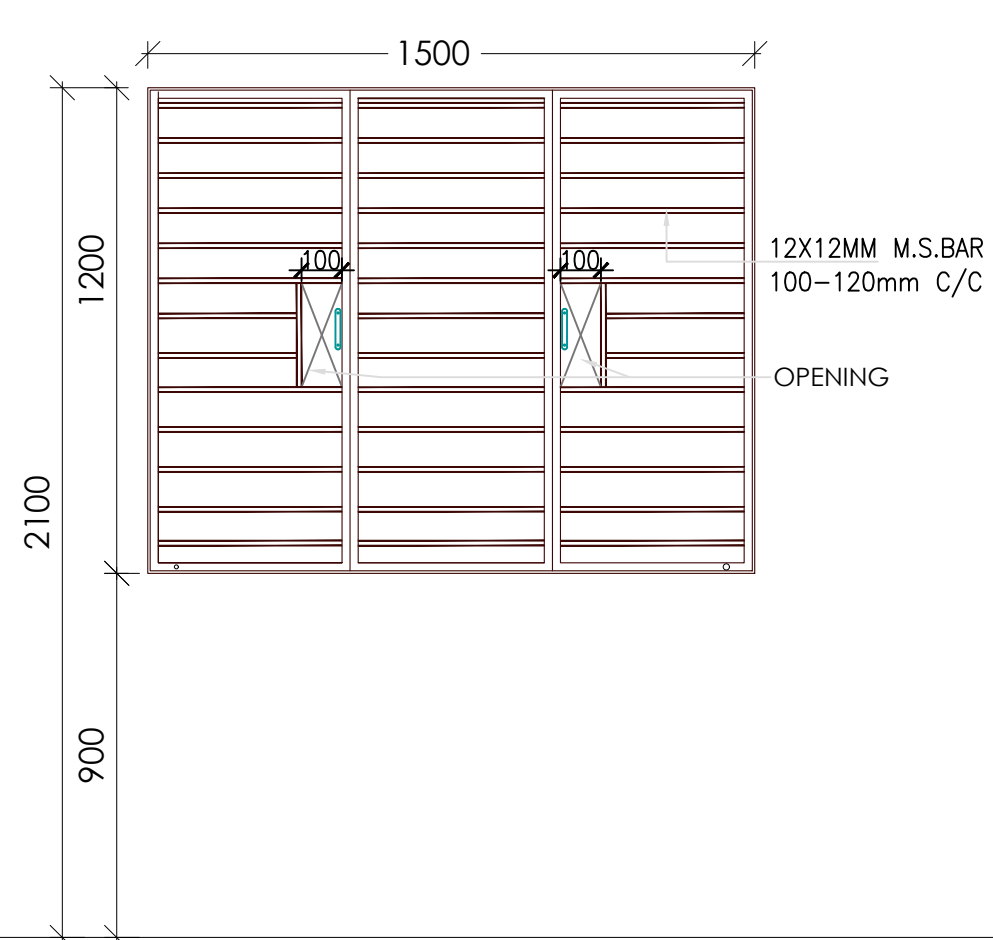
KITCHEN
W4 - WINDOW 4
900 x 1050



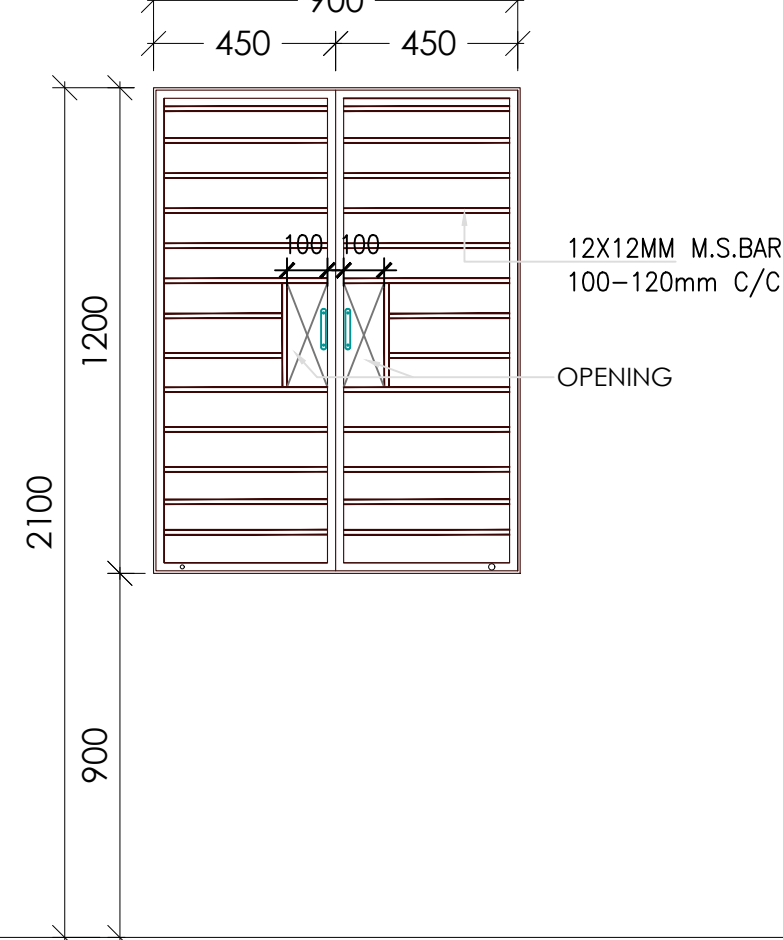
TOILET
V1 - VENTILATOR1
600 x 600



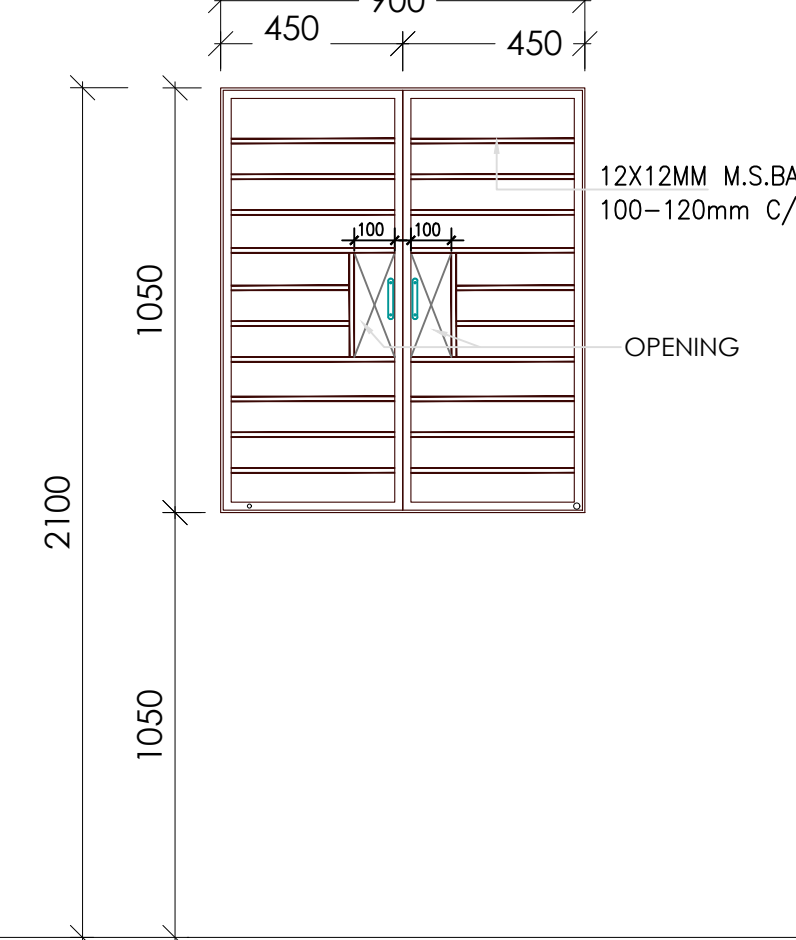
ELEVATION
BEDROOM
W1 - WINDOW 1
1500 x 1350



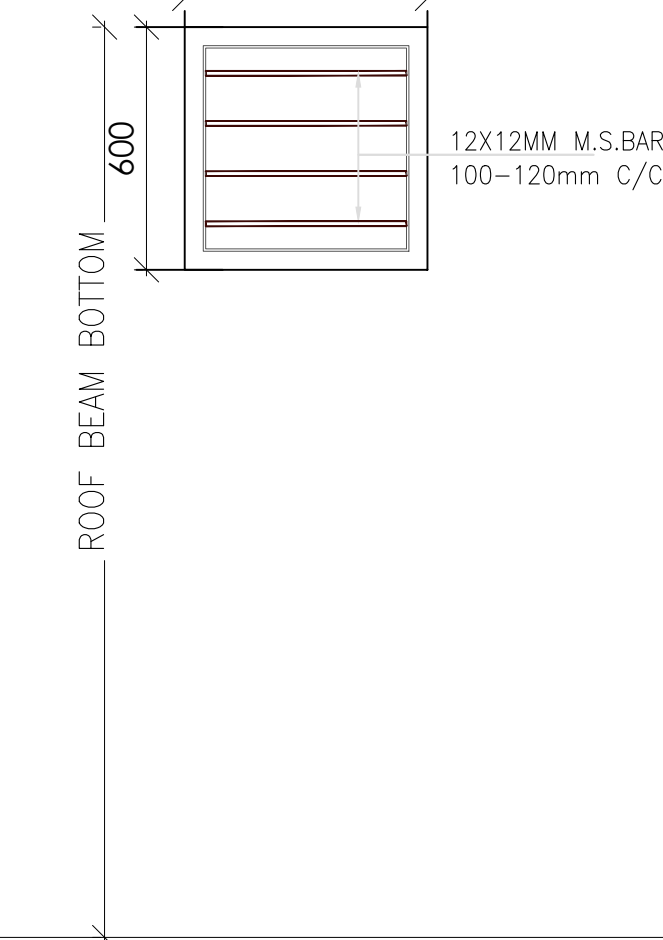
ELEVATION
LIVING / DINING HALL
W2 - WINDOW 2
1500 x 1200



ELEVATION
LIVING / DINING HALL
W3 - WINDOW 3
900 x 1200



ELEVATION
KITCHEN
W4 - WINDOW 4
900 x 1050



ELEVATION
TOILET
V1 - VENTILATOR1
600 x 600

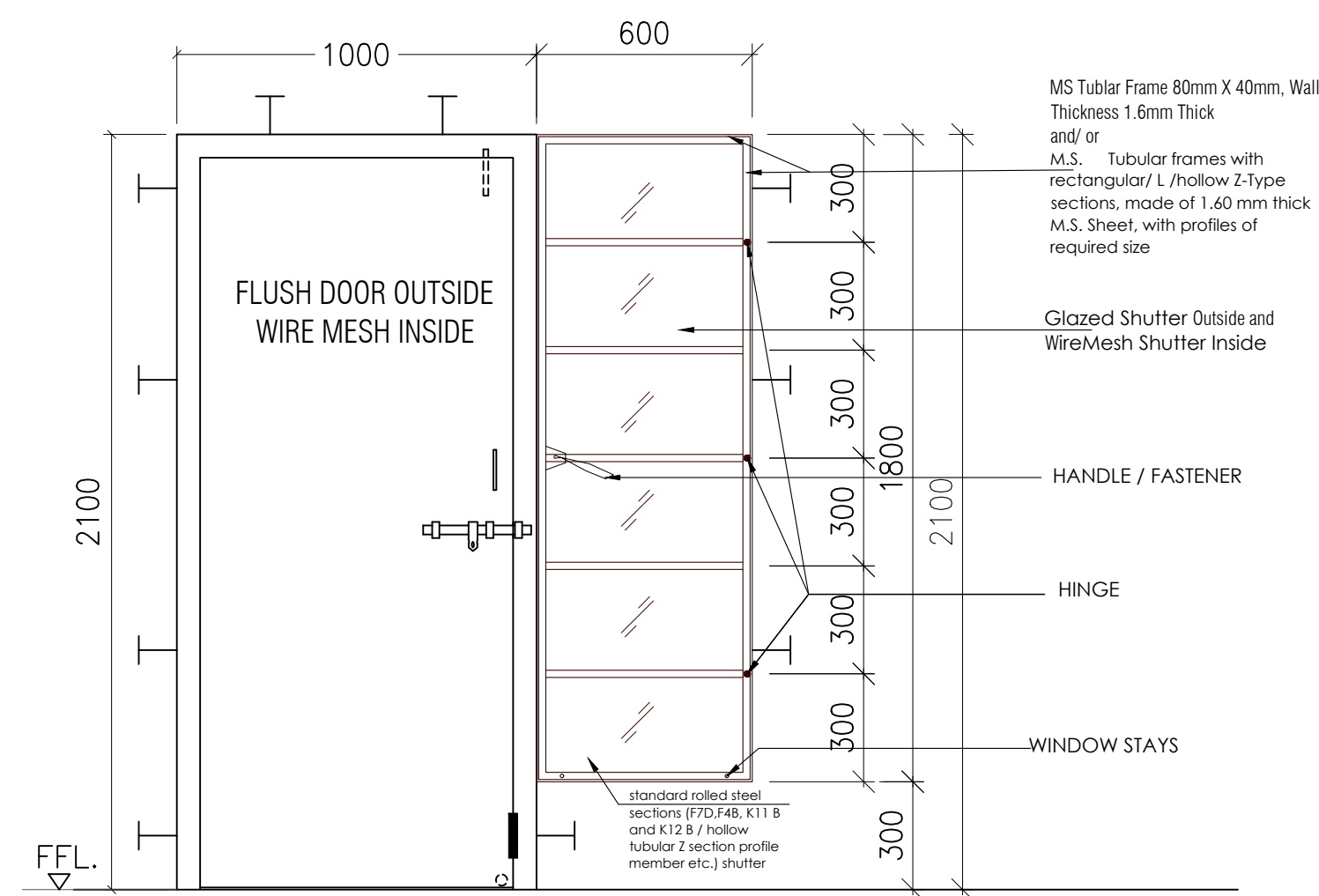
PRINCIPAL QUARTER - DOOR- WINDOW- VENTILATOR DETAIL

PROJECT - EMRS

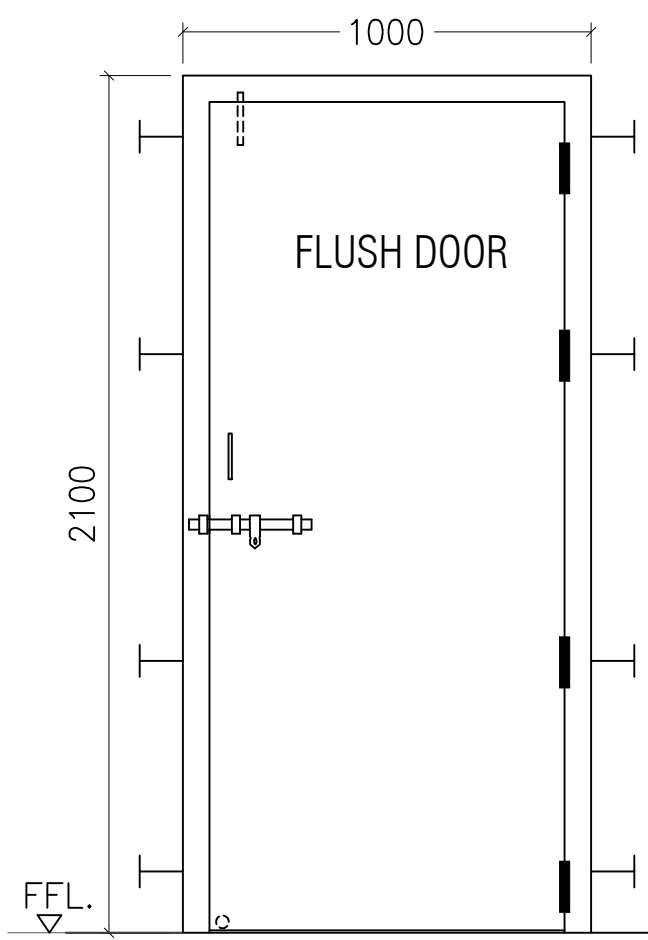
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

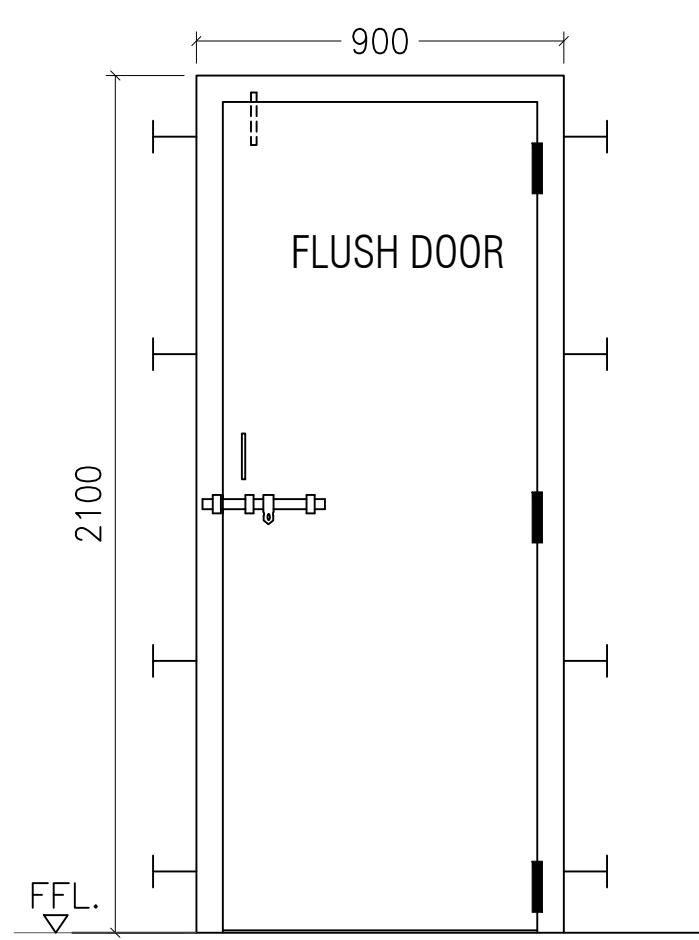
**GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS**



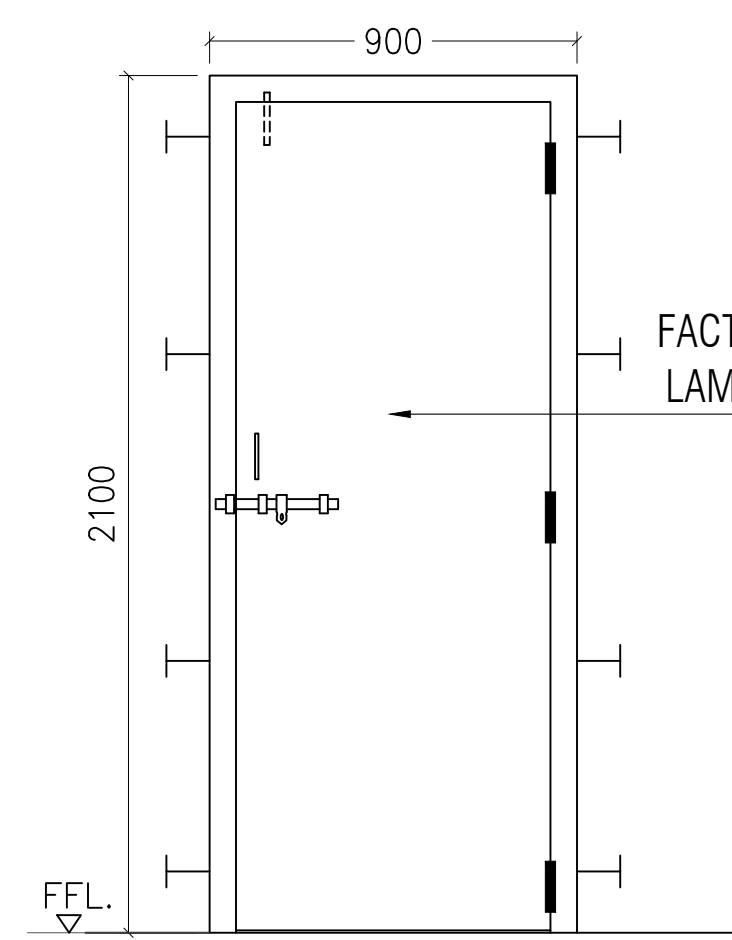
MAIN ENTRANCE DOOR
D1 - 1000 x 2100
W4 - WINDOW 4
W4 - 600 x 1800



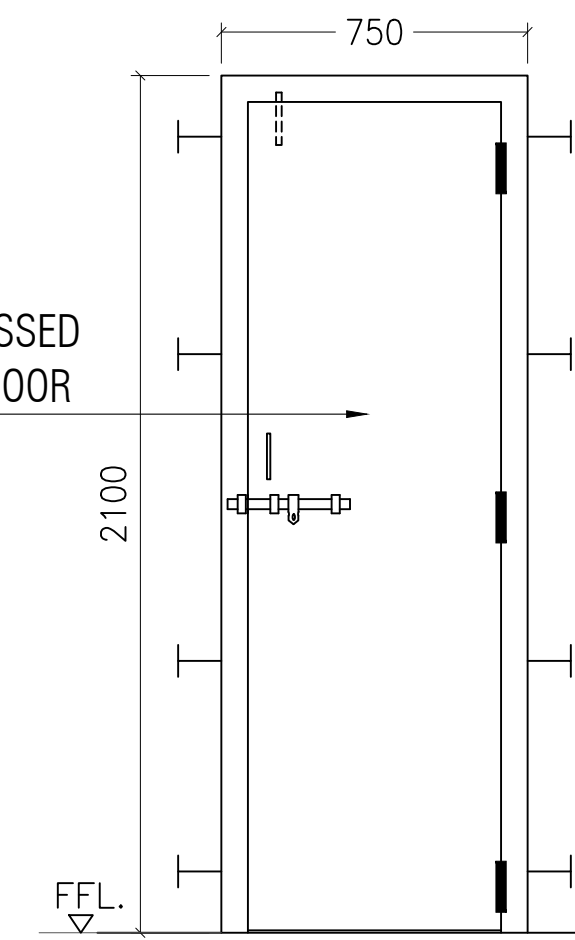
LIVING DINING DOOR
D1 - 1000 x 2100



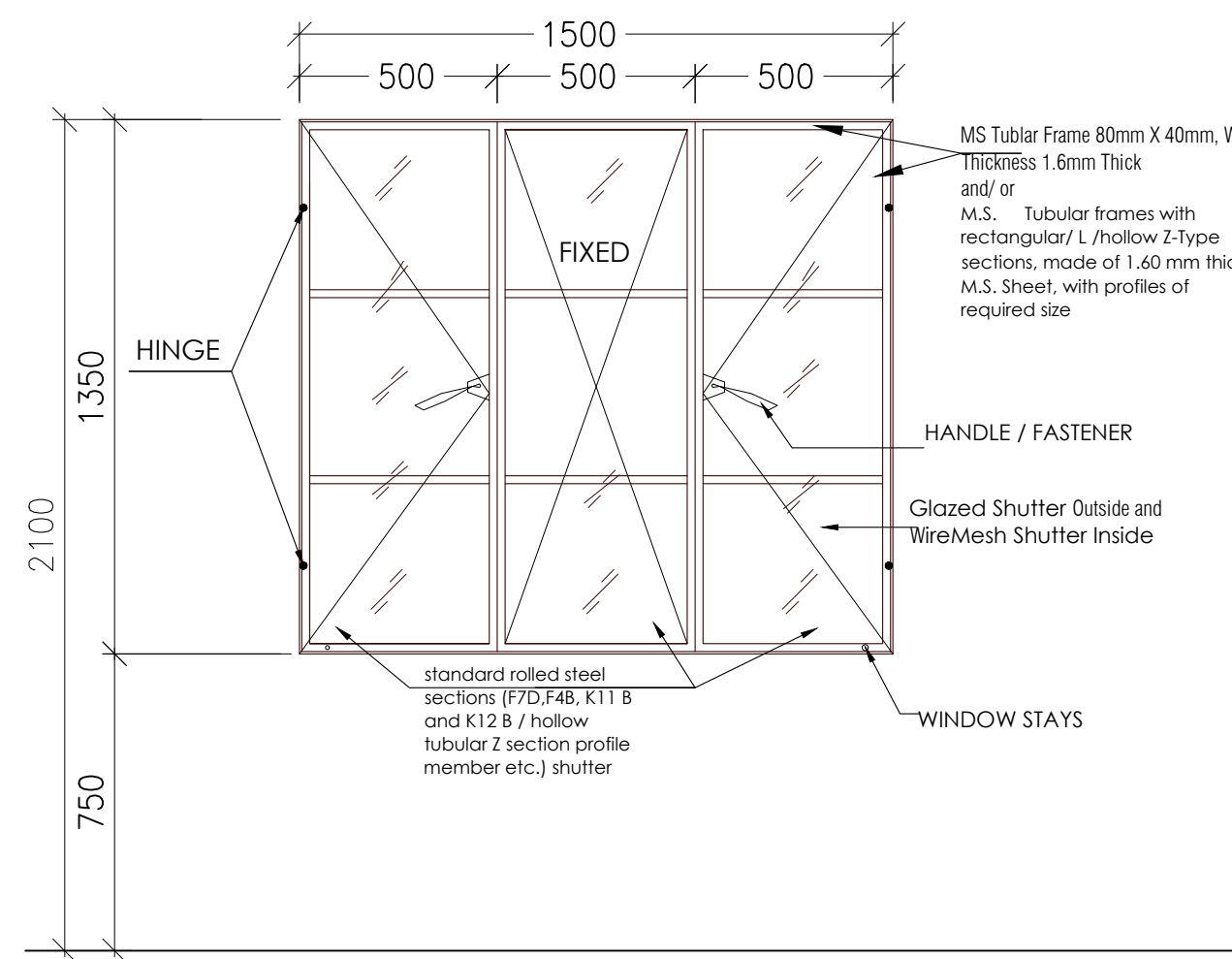
BEDROOM, KITCHEN & OFFICE DOOR
D2 - 900 X 2100



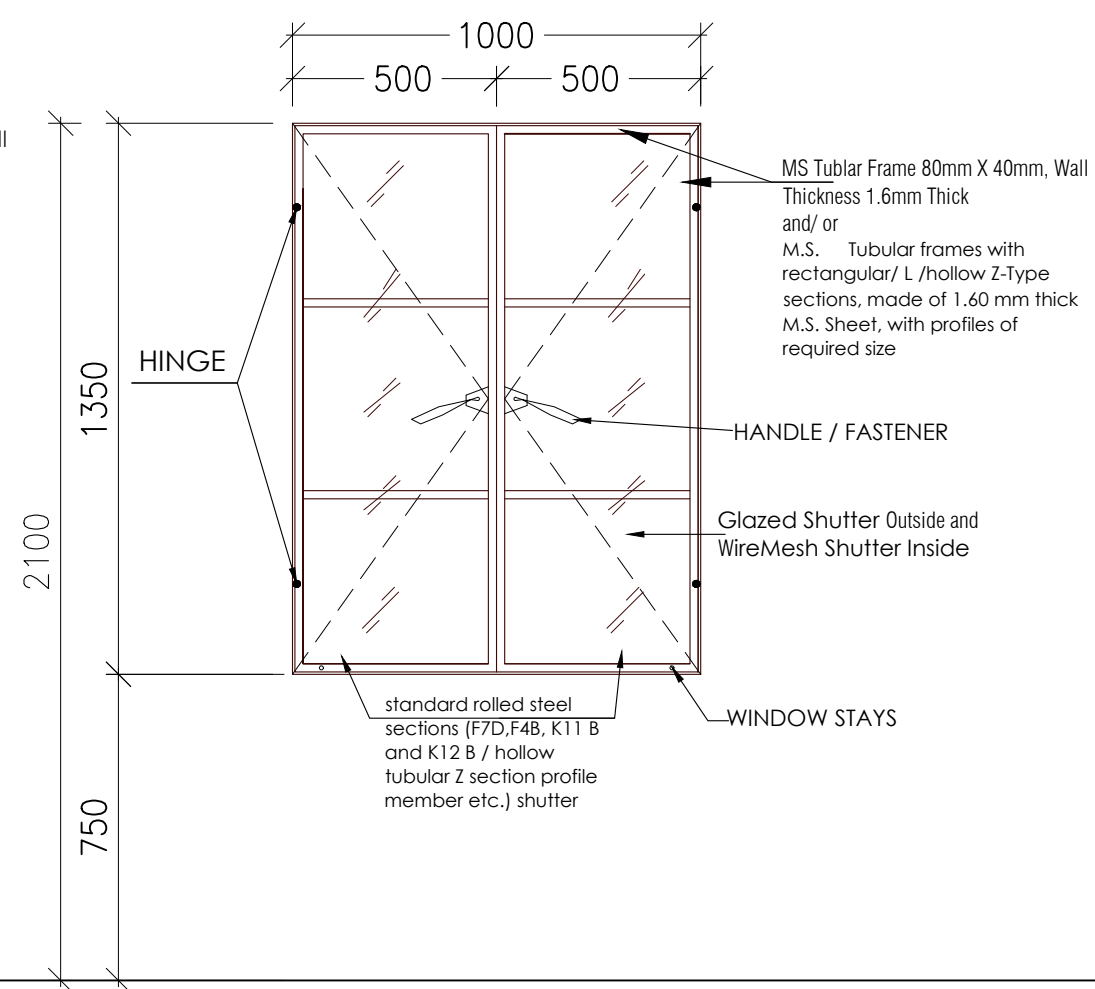
KITCHEN REAR ENTRY & UTILITY
D2 - 900 X 2100



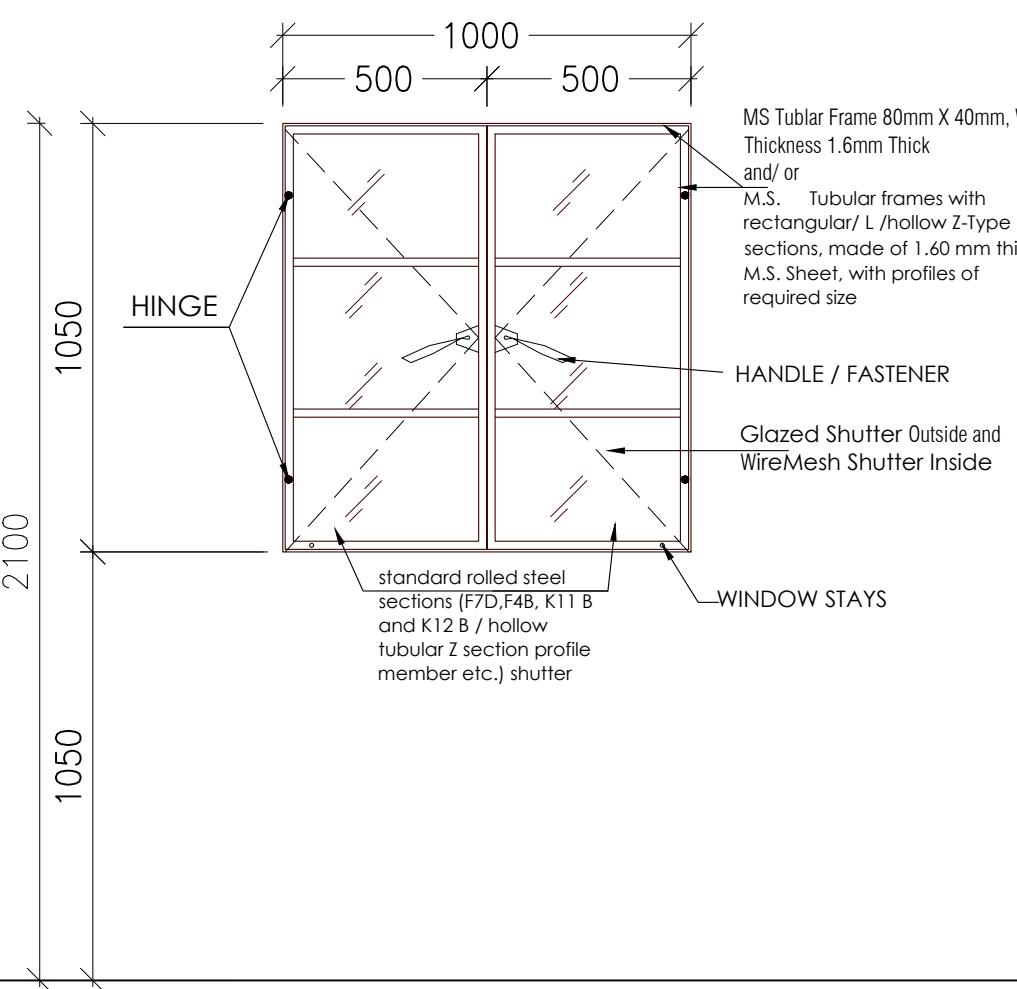
TOILET DOOR
D3 - 750 X 2100



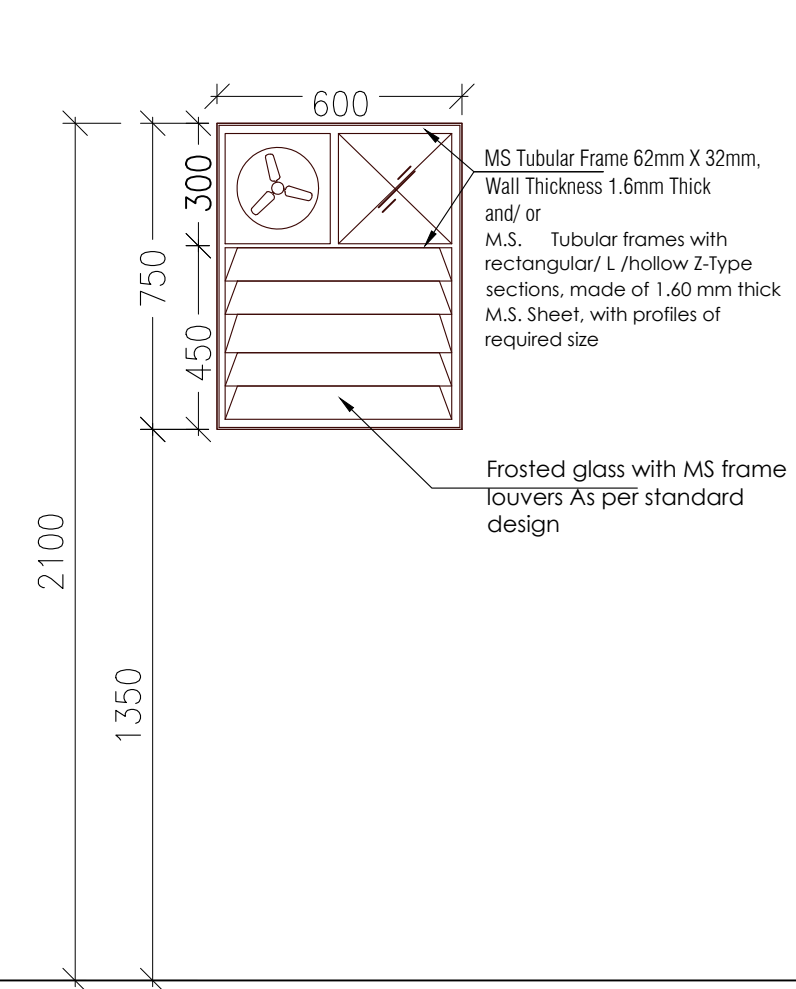
LIVING ROOM, BEDROOM-1, BEDROOM-2
W1 - WINDOW 1
1500 x 1350



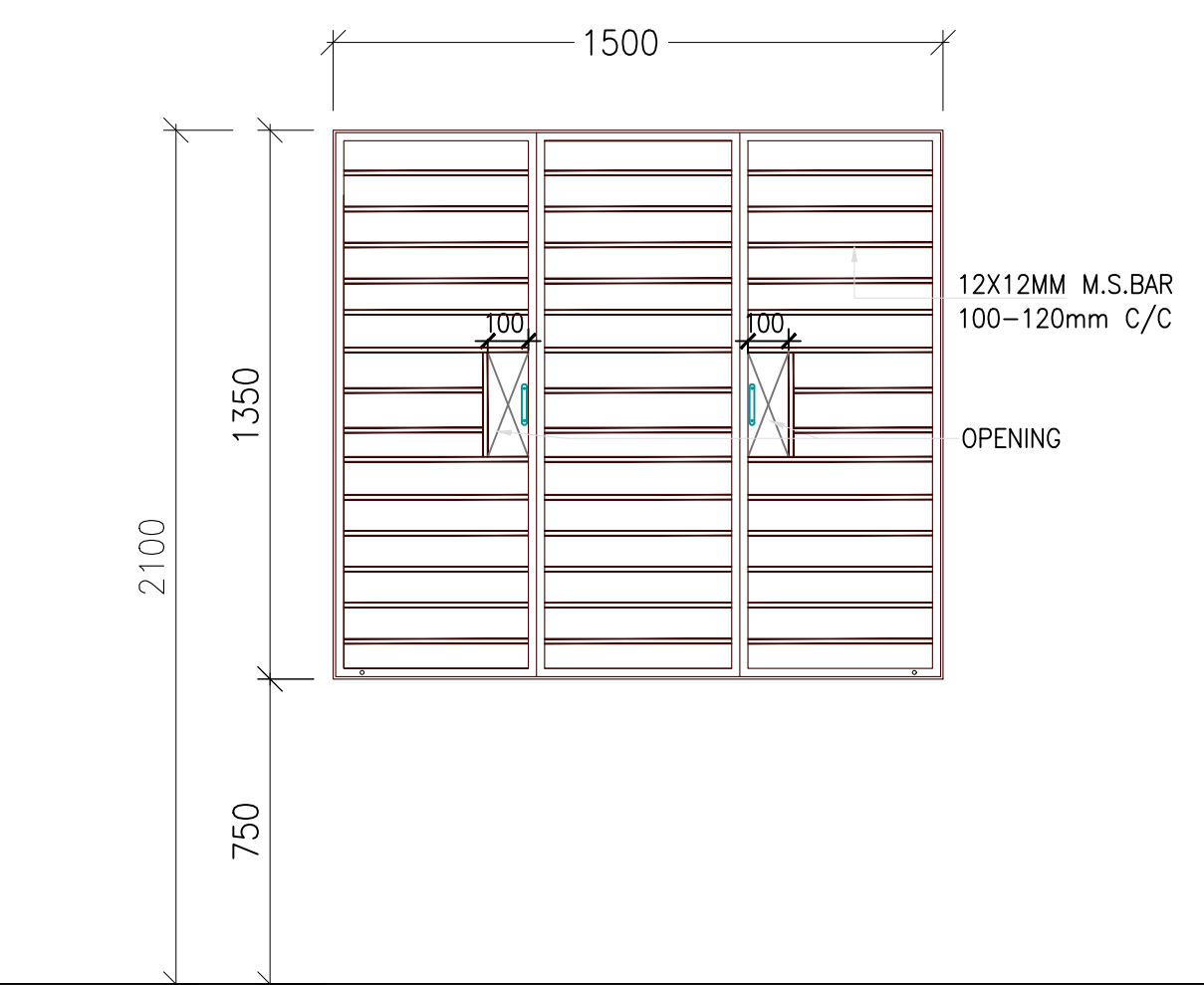
LIVING ROOM, BEDROOM-3
W2 - WINDOW 2
1000 x 1350



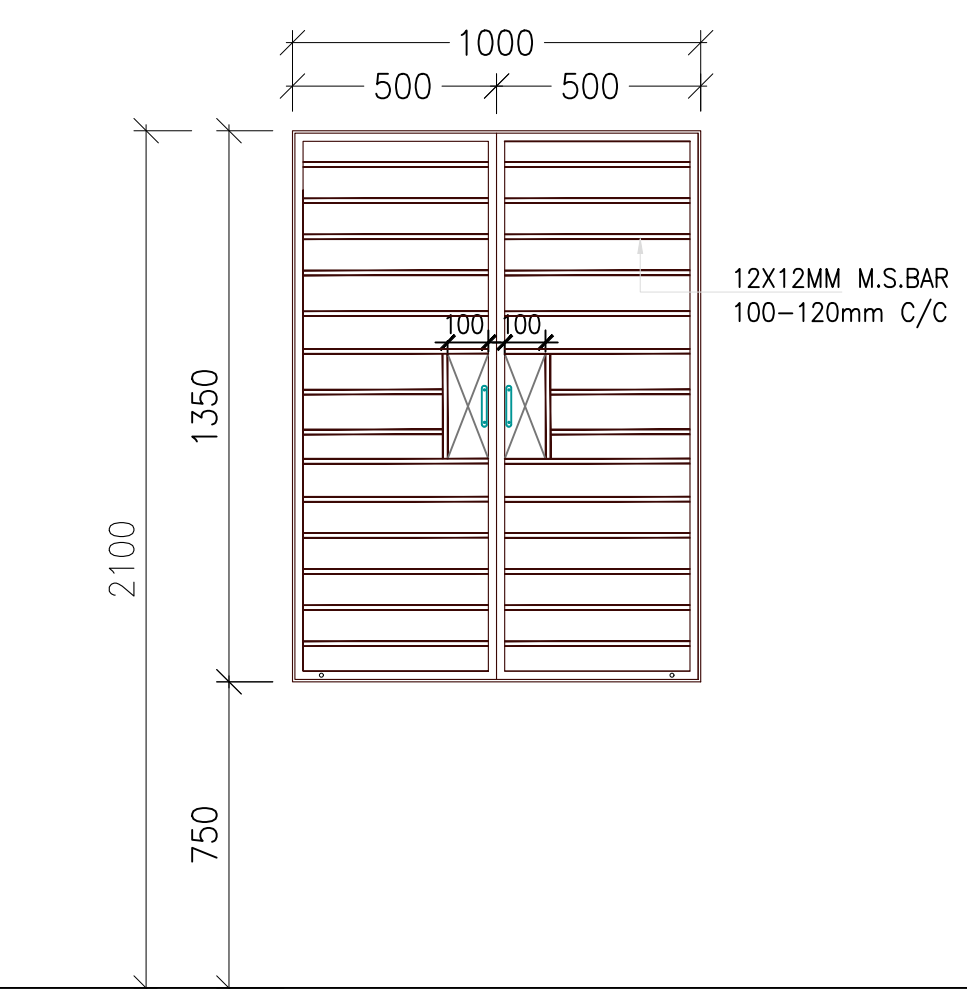
KITCHEN
W3 - WINDOW 3
1000 x 1050



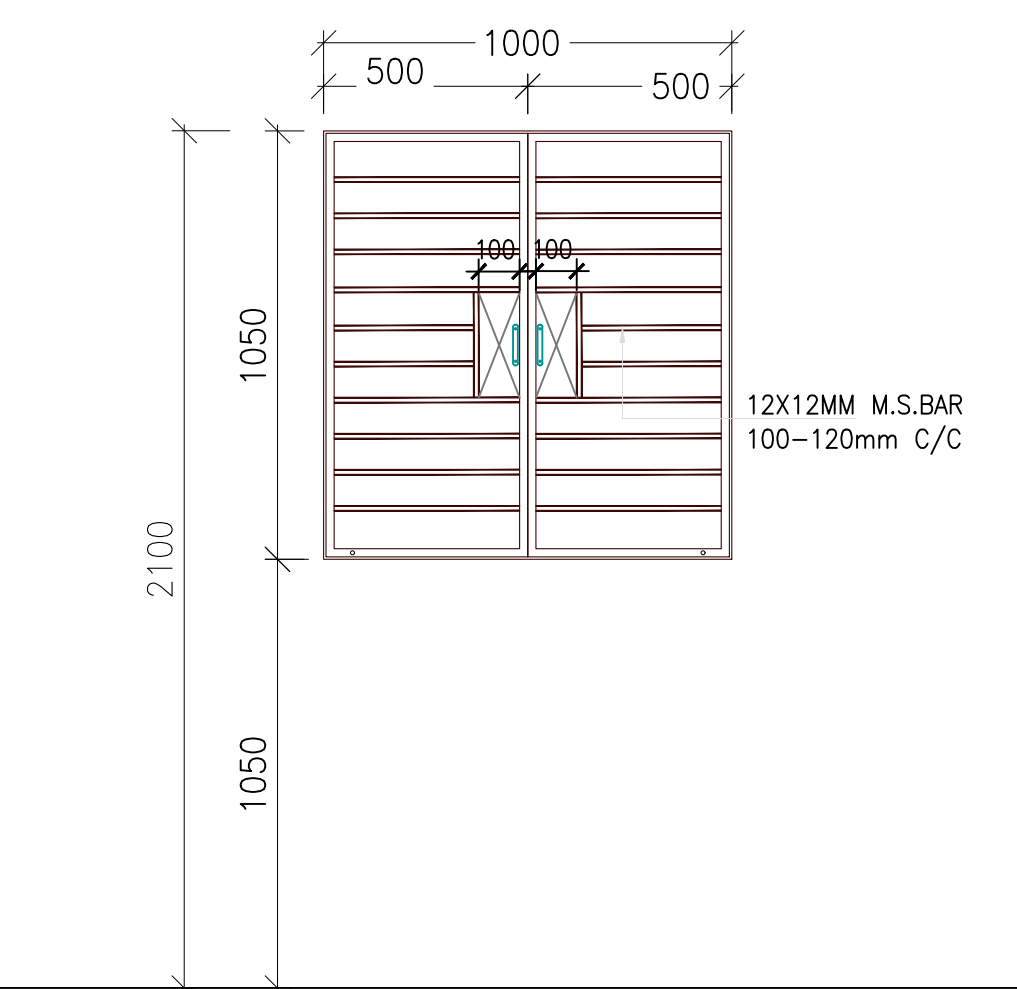
TOILET
V1 - VENTILATOR 1
600 x 750



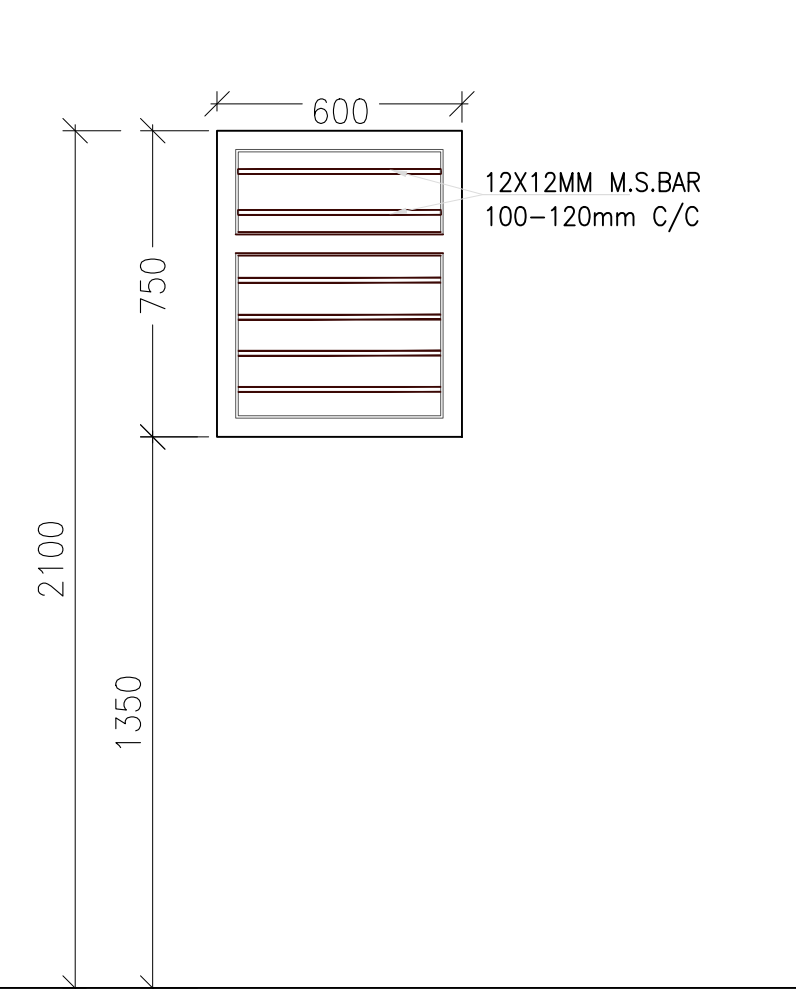
LIVING ROOM, BEDROOM-1, BEDROOM-2
W1 - WINDOW 1
1500 x 1350



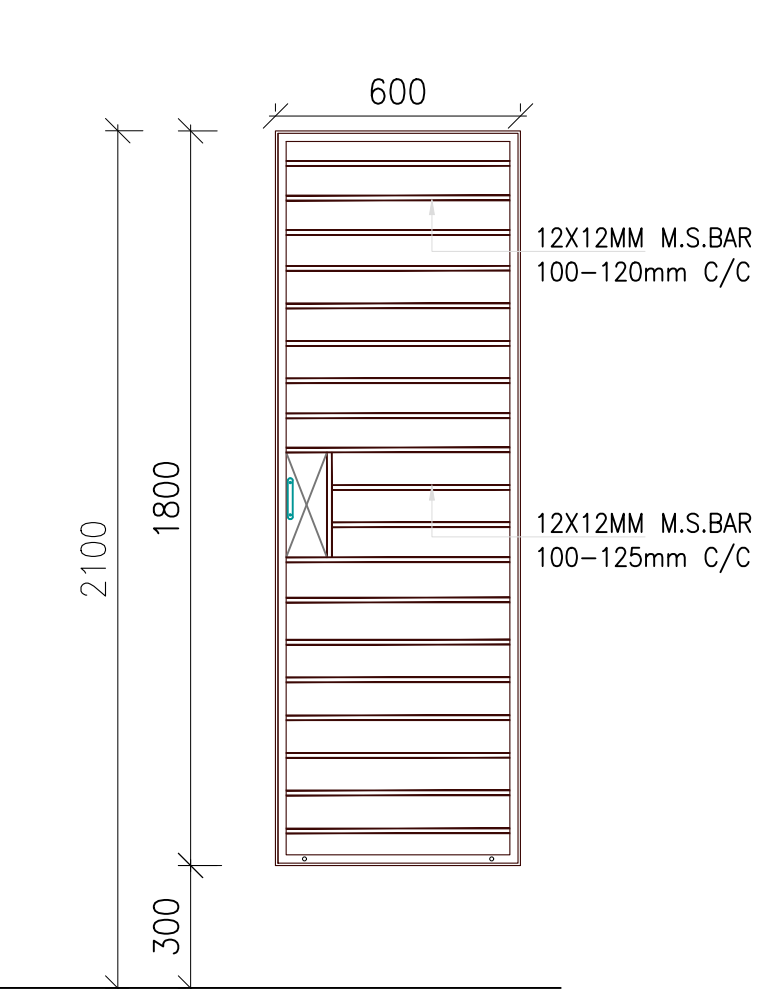
LIVING ROOM, BEDROOM-3
W2 - WINDOW 2
1000 x 1350



KITCHEN
W3 - WINDOW 3
1000 x 1050



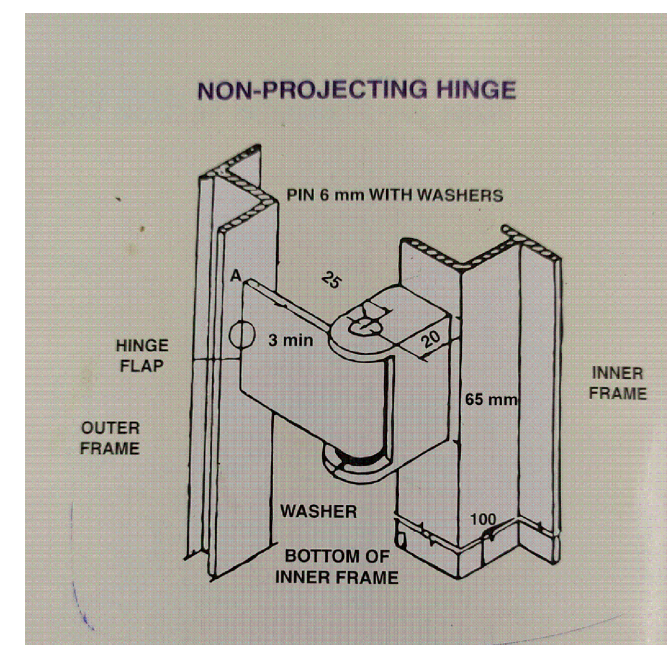
TOILET
V1 - VENTILATOR 1
600 x 750



ENTRANCE LOBBY
W4 - WINDOW 4
600 x 1800

NOTES -

1. FIXTURES SHALL BE AS PER CPWD SPECIFICATION
2. GLAZED SHUTTERS WILL OPEN OUTSIDE
3. WIRE MESH SHUTTER WILL OPEN INSIDE
4. WINDOW SHOULD BE FACTORY MADE TYPE WITH FLASH WELDING
5. NESTS/ CPWD APPROVED MAKE SHALL ONLY BE PROVIDED



TYPICAL HINGE DETAIL

N.K.
(NARENDRA KUMAR)
pl Approved 10.3.23
(Prasad Approved)
(CAUT 13/4/23
(Rk Gang)
Bm 23 13/3/2023.
(SANDEEP SOOD)
A.P.K.

A D P Keshri
Chief Technical Consultant

CATEGORY :
DOOR WINDOW DETAIL

DRAWING TITLE :
PRINCIPAL QUARTER- DOOR WINDOW DETAIL

DWG. NO.-
EMRS
NAME/PRINCIPAL/DWD/AR_01

DATE - 09 MARCH 2023

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVERNMENT OF INDIA MINISTRY OF TRIBAL AFFAIRS NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



Notes- Furniture in all the rooms except class rooms will be decided at later stage.

(VIRENDER KUMAR)

(R.K. SINGH)

(Signature)

A D P Keshri Chief Technical Consultant

LEGENDS :

Table with 2 columns: SYMBOL DESCRIPTION and Description. Includes items like 16-25A POWER PLUG POINT FOR AC UNIT, 15/16A POWER PLUG POINT, 5/6A LIGHT PLUG POINT, etc.

LEGENDS :

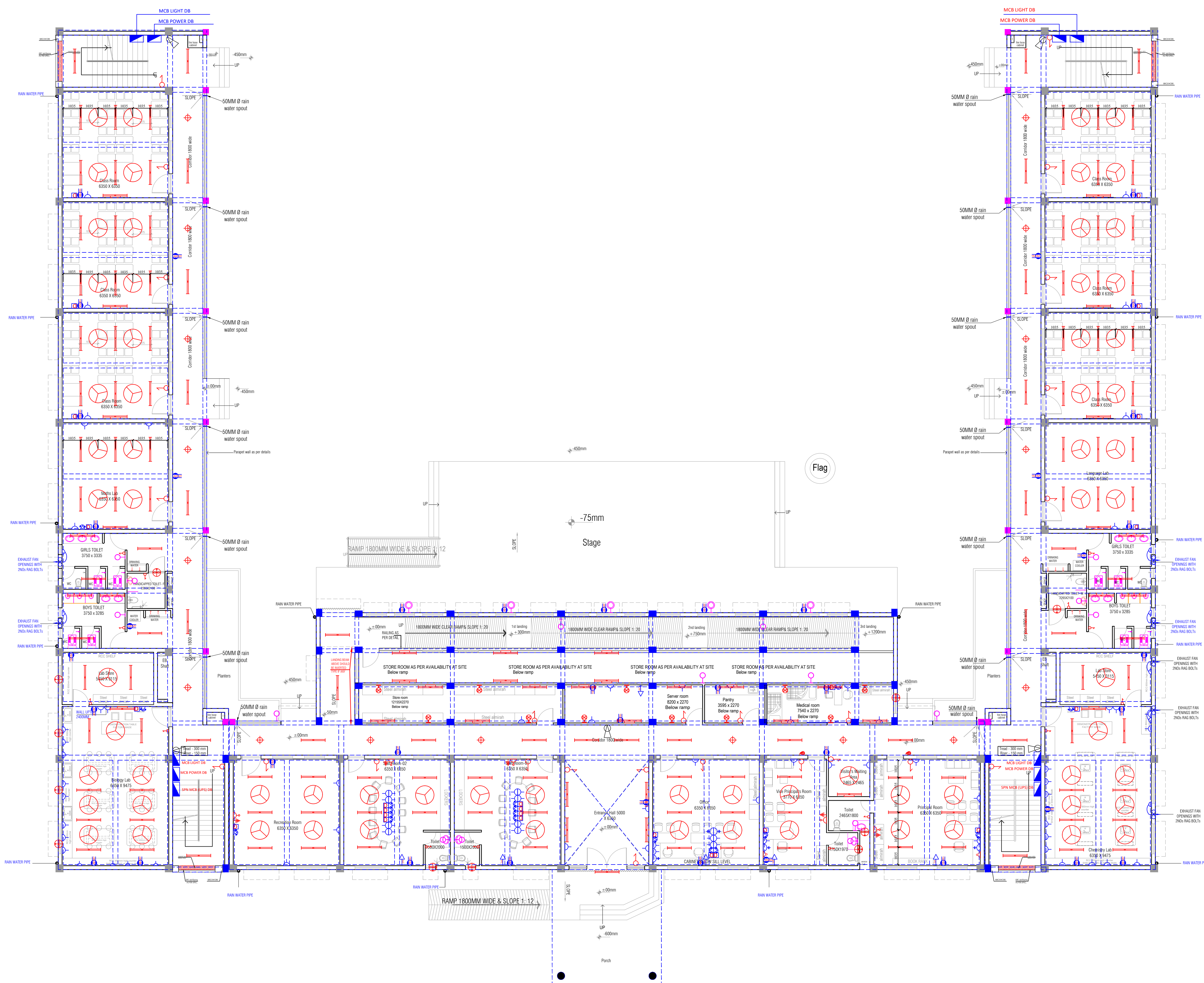
Table with 2 columns: SYMBOL DESCRIPTION and Description. Includes items like SWITCH BOARD, 12W LED DOWN LIGHTER, 20W LED WALL MOUNTED TUBE LIGHT, etc.

CATEGORY : SCHOOL BUILDING

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.- EMRS NAME/SCH/AR_01

DATE - 09 MARCH 2023



GROUND FLOOR PLAN

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT - GOVERNMENT OF INDIA MINISTRY OF TRIBAL AFFAIRS NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



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(VIRENDER KUMAR)

(R.K. SIMOLAN)

(A.P. KESHRI)

A D P Keshri Chief Technical Consultant

LEGENDS :

Table with 2 columns: SYMBOL DESCRIPTION and Description. Includes items like 16-25A POWER PLUG POINT FOR AC UNIT, 15/16A POWER PLUG POINT, 5/6A LIGHT PLUG POINT, etc.

LEGENDS :

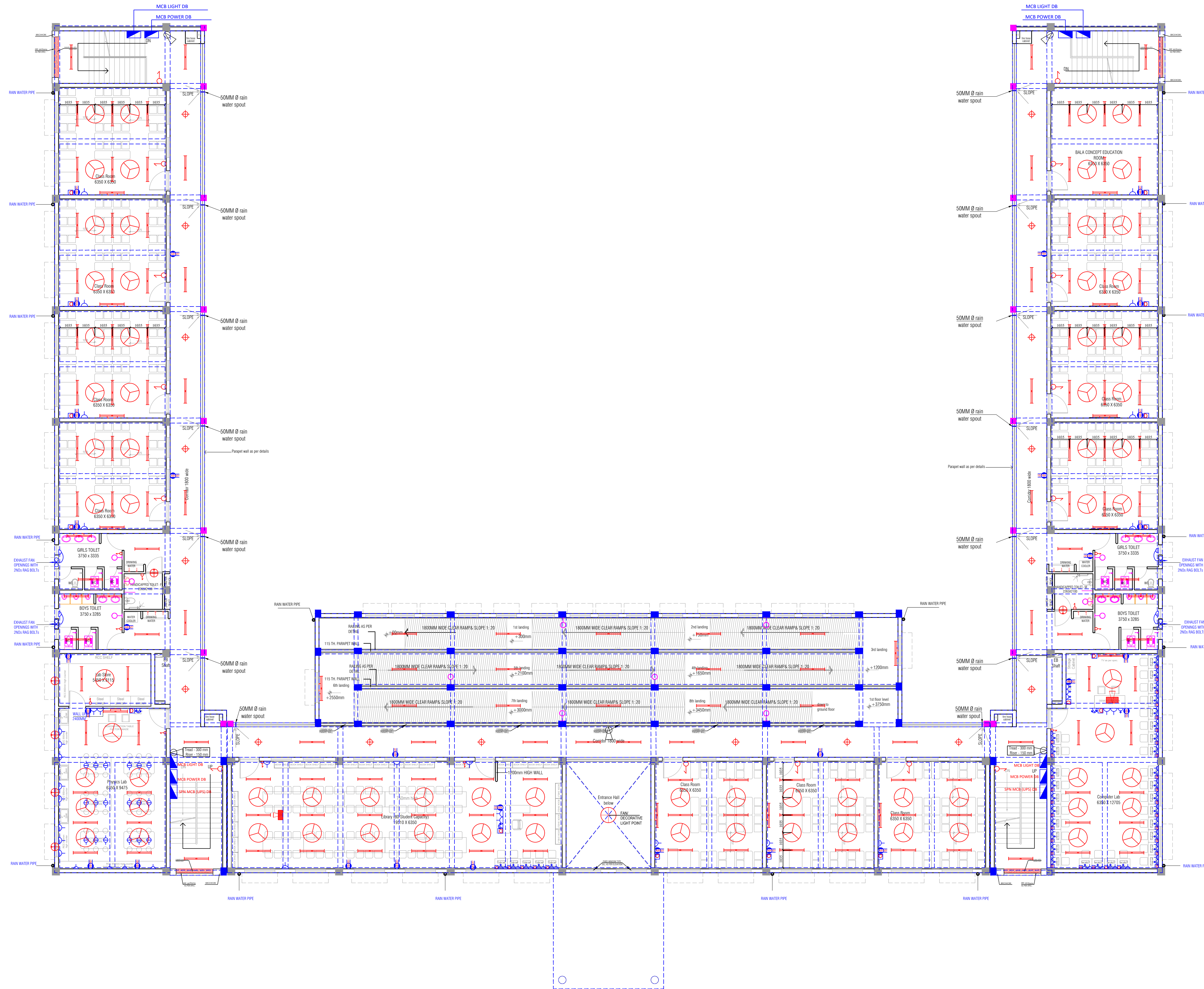
Table with 2 columns: SYMBOL DESCRIPTION and Description. Includes items like SWITCH BOARD, 12W LED DOWN LIGHTER, 20W LED WALL MOUNTED TUBE LIGHT, etc.

CATEGORY : SCHOOL BUILDING

DRAWING TITLE : FIRST FLOOR PLAN

DWG. NO.- EMRS NAME/SCH/AR_02

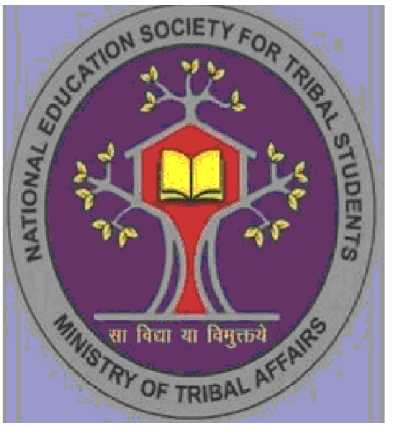
DATE - 09 MARCH 2023



FIRST FLOOR PLAN

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -
GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS

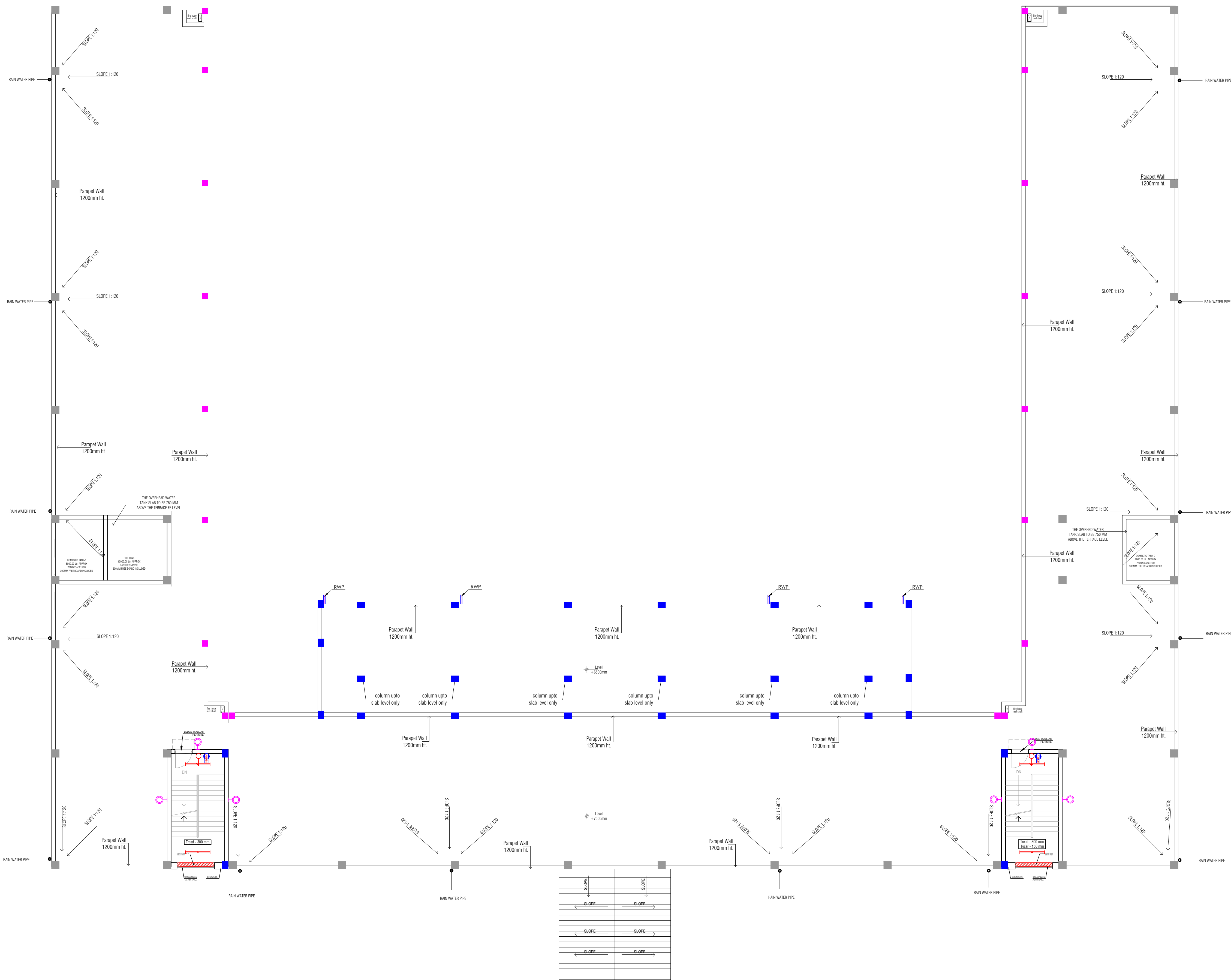


(Signature)
 (VIJAYENDR KUMAR)

(Signature)
 (R.K. SINGH)

(Signature)

A D P Keshri
Chief Technical Consultant



LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT
	2x6A UPS PLUG POINT
	TELEPHONE OUTLET
	DATA OUTLET

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200mm
	EXHAUST FAN 300mm DIA METAL BODY
	MCB DISTRIBUTION BOARD
	2X6A PLUG POINT FOR TV
	TELEVISION POINT
	BATTEN HOLDER WITH 20W LED BULB
	BELL
	DOME/BULLET CAMERA
	WALL FAN
	20W LED BULKHEAD FITTING
	POWER/PLUG POINT FOR PROJECTOR IN CEILING

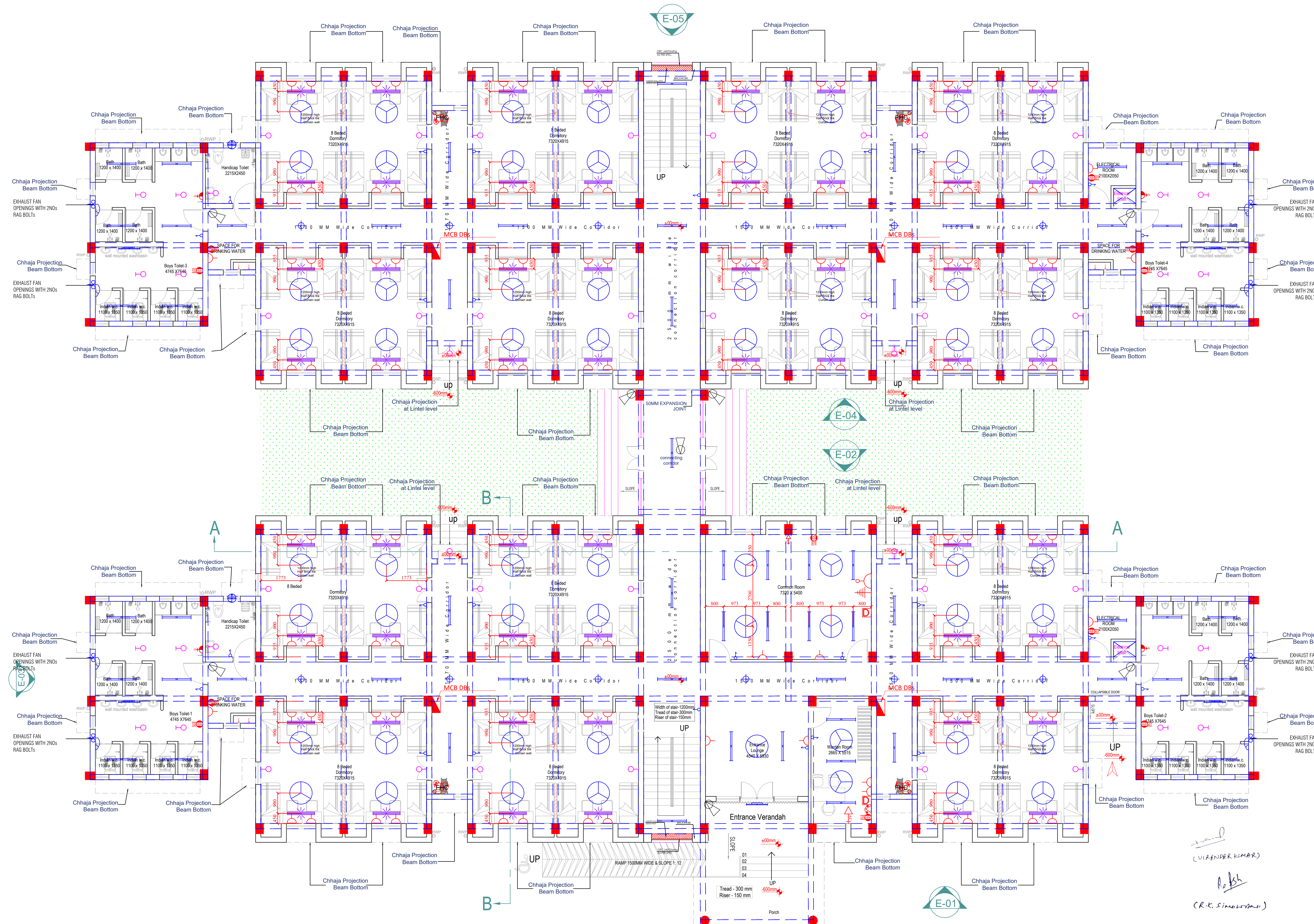
CATEGORY : SCHOOL BUILDING

DRAWING TITLE : TERRACE FLOOR PLAN

DWG. NO.- EMRS NAME/SCH/AR_03

DATE - 09 MARCH 2023

TERRACE FLOOR PLAN



LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT FOR TV
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT WITH SWITCH BOARD
	TELEPHONE OUTLET
	DATA OUTLET
	15/16A POWER PLUG POINT FOR GEYSER

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	40W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 300mm DIA METAL BODY
	MCB DISTRIBUTION BOARD
	BATTEN HOLDER WITH LED BULB
	BULKHEAD LIGHT
	DOME/BULLET CAMERA

CATEGORY : BOYS HOSTEL

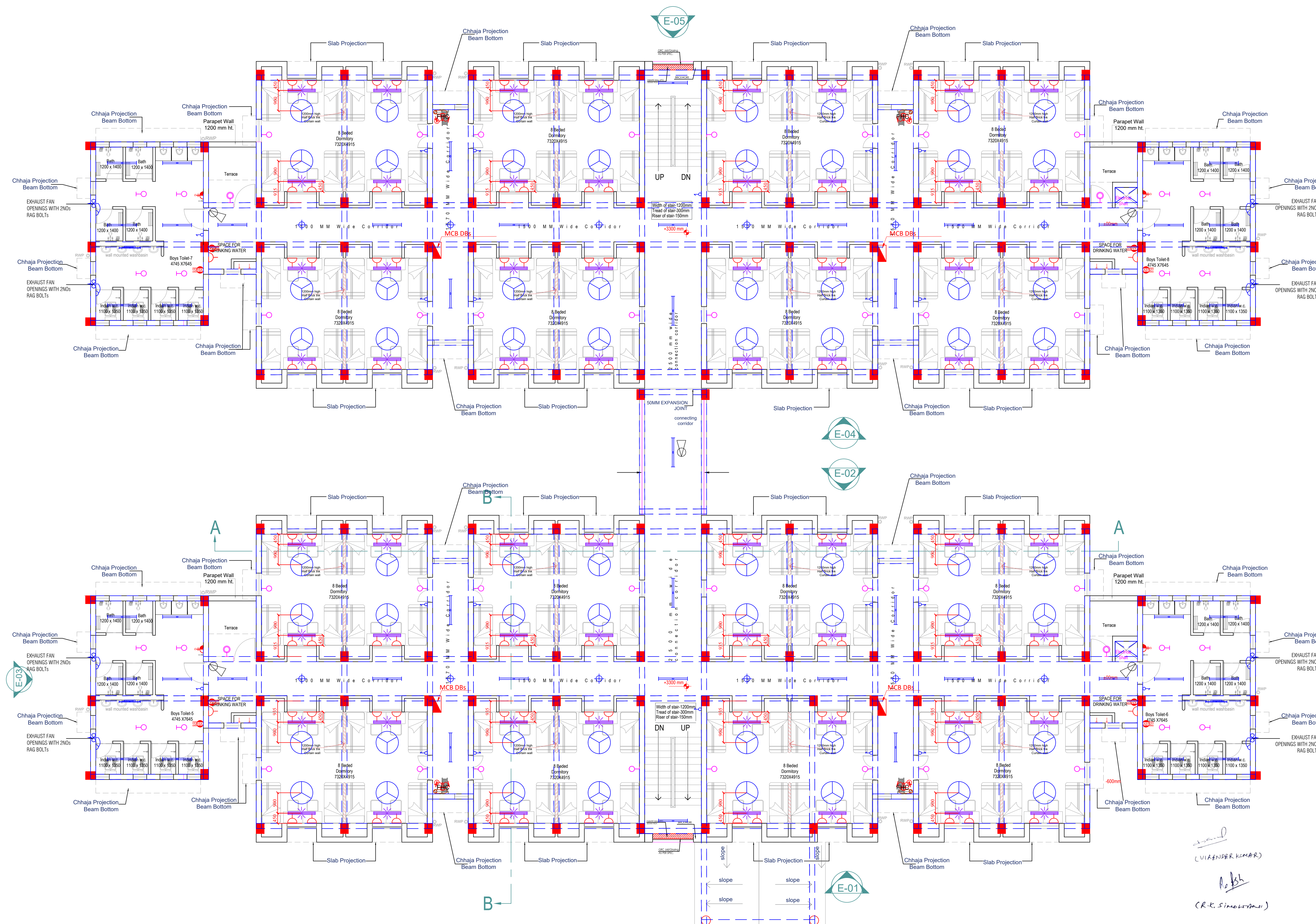
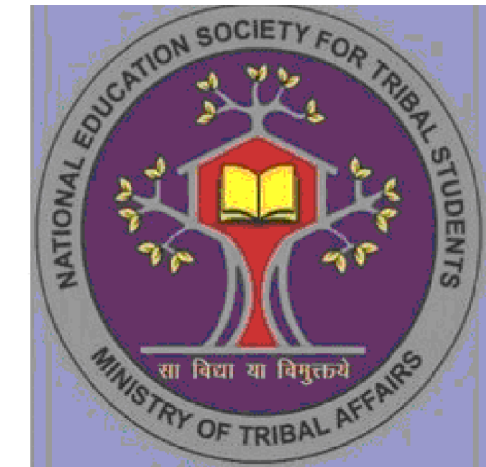
DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO. - EMRS NAME/BH/AR_01

DATE - 09 MARCH 2023

A D P Keshri
Chief Technical Consultant

GROUND FLOOR PLAN ±00mm



FIRST FLOOR PLAN +3300mm

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT FOR TV
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT WITH SWITCH BOARD
	TELEPHONE OUTLET
	DATA OUTLET
	15/16A POWER PLUG POINT FOR GEYSER

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	40W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 300mm DIA METAL BODY
	MCB DISTRIBUTION BOARD
	BATTEN HOLDER WITH LED BULB
	BULKHEAD LIGHT
	DOME/BULLET CAMERA

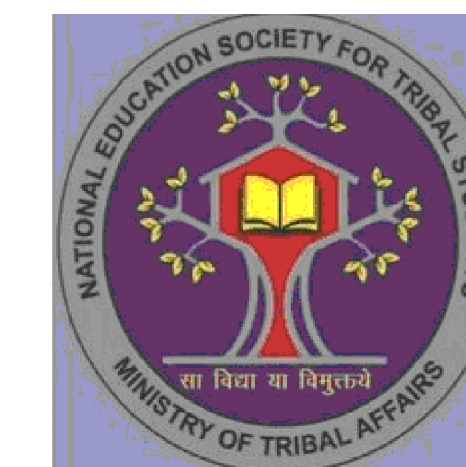
CATEGORY : BOYS HOSTEL

DRAWING TITLE : FIRST FLOOR PLAN

DWG. NO.- EMRS NAME/BH/AR_02

DATE - 09 MARCH 2023

(Signature)
A D P Keshri
Chief Technical Consultant



LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT FOR TV
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT WITH SWITCH BOARD
	TELEPHONE OUTLET
	DATA OUTLET
	15/16A POWER PLUG POINT FOR GEYSER

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	40W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 300mm DIA METAL BODY
	MCB DISTRIBUTION BOARD
	BATTEN HOLDER WITH LED BULB
	BULKHEAD LIGHT
	DOME/BULLET CAMERA

CATEGORY : BOYS HOSTEL

DRAWING TITLE : TERRACE FLOOR PLAN

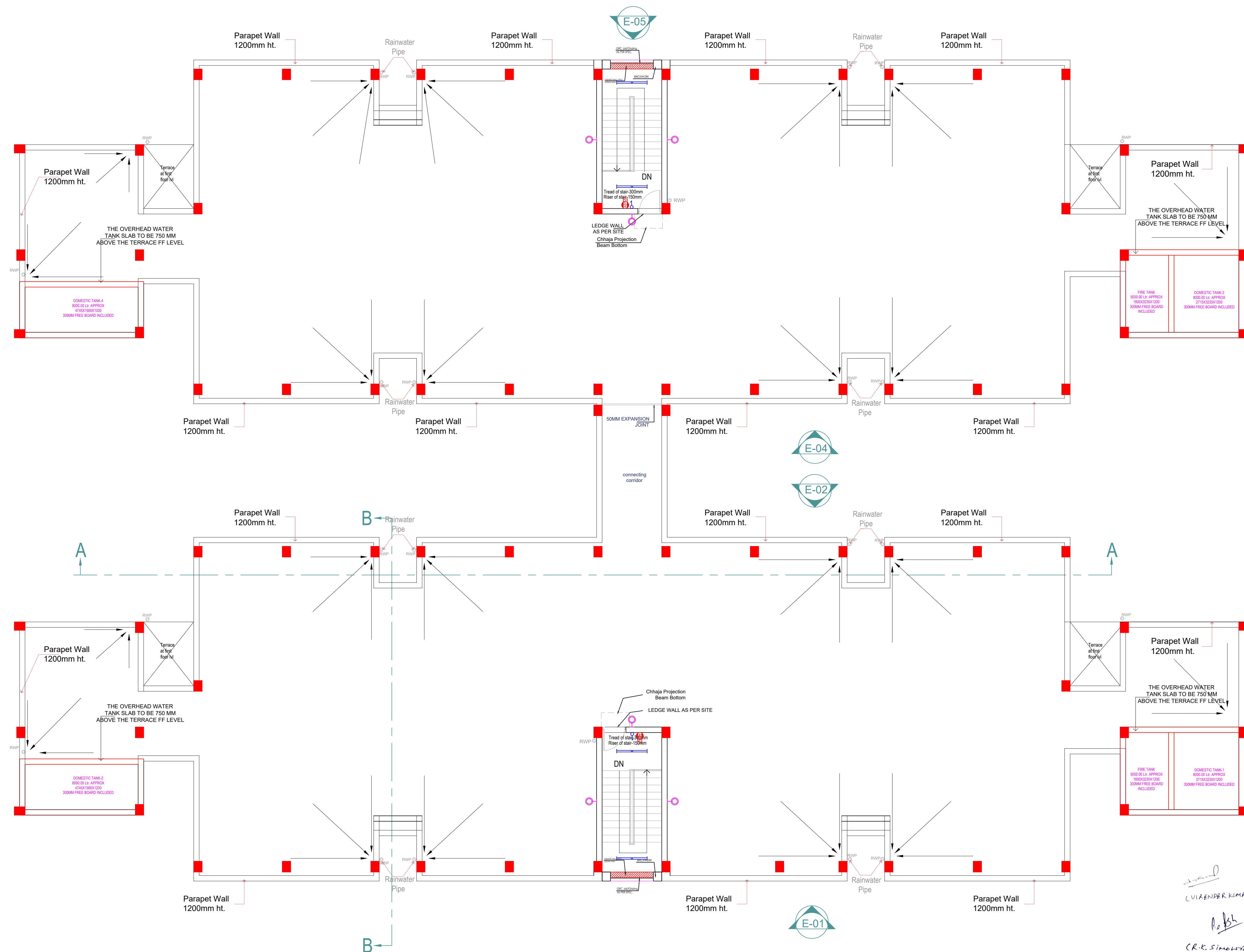
DWG. NO.-
EMRS NAME/BH/AR_03

DATE - 09 MARCH 2023

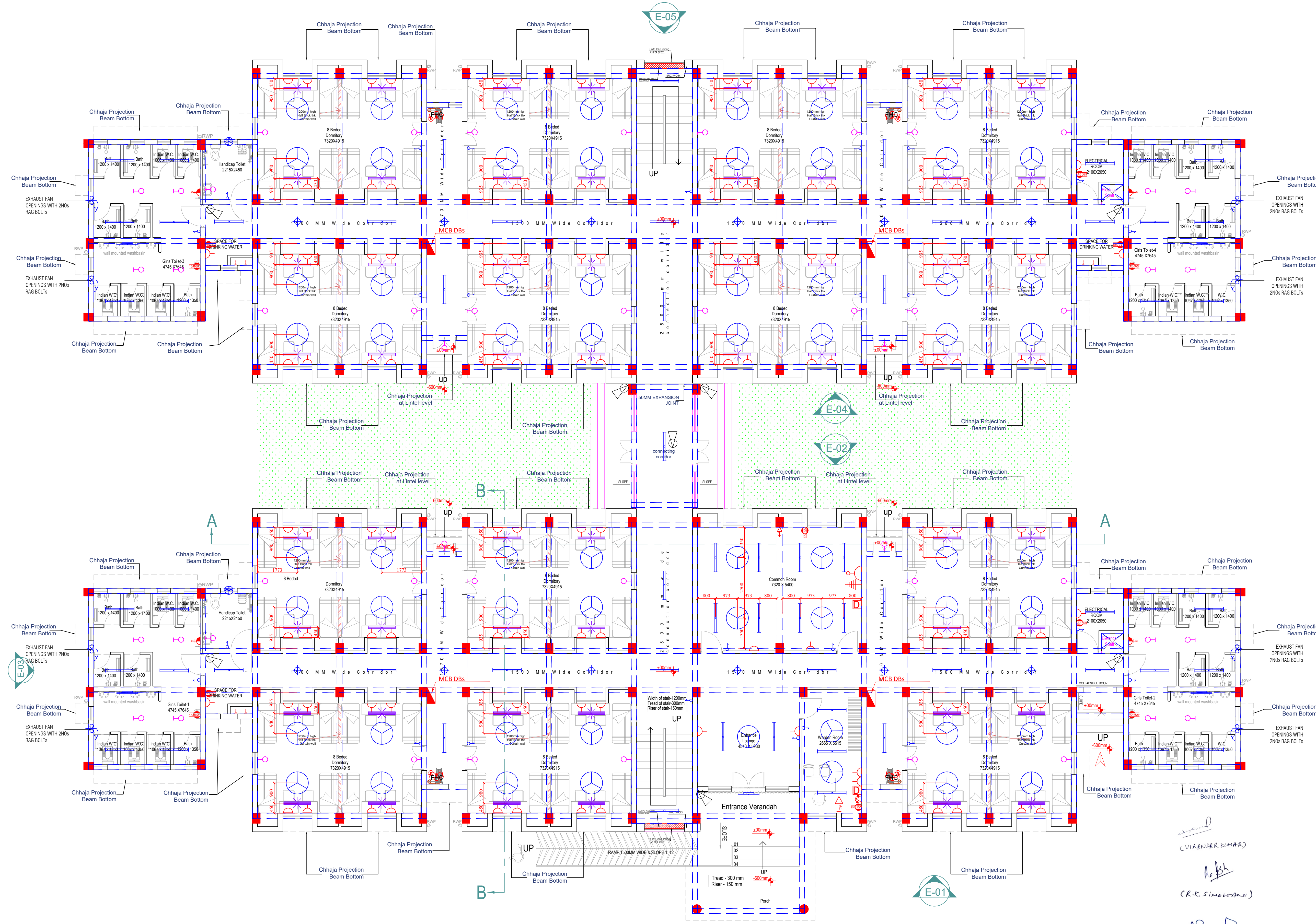
(Signature)
(VIASUNDER KUMAR)

(Signature)
(R.K. SINGH)

(Signature)
A D P Keshri
Chief Technical Consultant



TERRACE FLOOR PLAN +6600 mm



LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT FOR TV
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT WITH SWITCH BOARD
	TELEPHONE OUTLET
	DATA OUTLET
	15/16A POWER PLUG POINT FOR GEYSER

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	40W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 300mm DIA METAL BODY
	MCB DISTRIBUTION BOARD
	BATTEN HOLDER WITH LED BULB
	BULKHEAD LIGHT
	DOME/BULLET CAMERA

CATEGORY : GIRLS HOSTEL

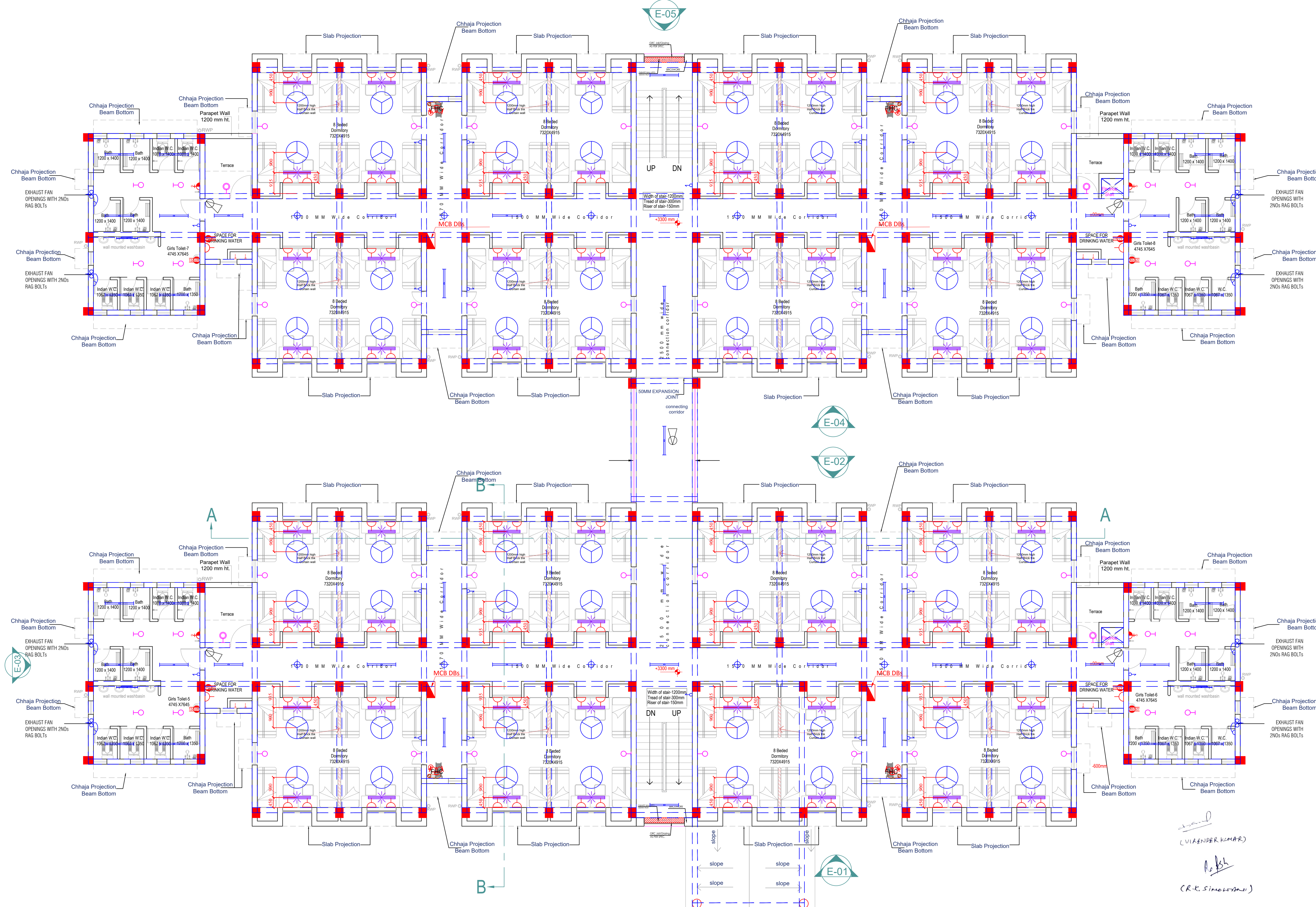
DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO. - EMRS NAME/GH/AR_01

DATE - 09 MARCH 2023

(Signature)
A D P Keshri
Chief Technical Consultant

GROUND FLOOR PLAN ±00mm



FIRST FLOOR PLAN +3300mm

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT FOR TV
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT WITH SWITCH BOARD
	TELEPHONE OUTLET
	DATA OUTLET
	15/16A POWER PLUG POINT FOR GEYSER

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	40W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 300mm DIA METAL BODY
	MCB DISTRIBUTION BOARD
	BATTEN HOLDER WITH LED BULB
	BULKHEAD LIGHT
	DOME/BULLET CAMERA

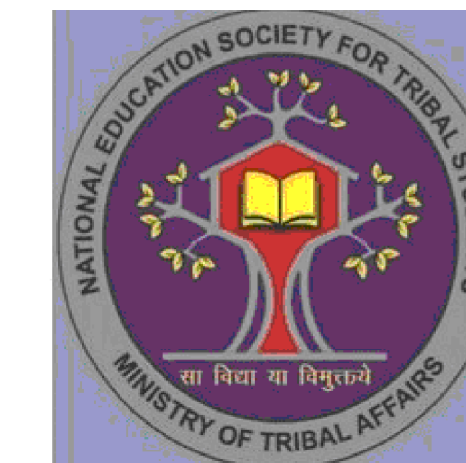
CATEGORY : GIRLS HOSTEL

DRAWING TITLE : FIRST FLOOR PLAN

DWG. NO.- EMRS NAME/GH/AR_02

DATE - 09 MARCH 2023

A D P Keshri
Chief Technical Consultant



LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT FOR TV
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT WITH SWITCH BOARD
	TELEPHONE OUTLET
	DATA OUTLET
	15/16A POWER PLUG POINT FOR GEYSER

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	40W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 300mm DIA METAL BODY
	MCB DISTRIBUTION BOARD
	BATTEN HOLDER WITH LED BULB
	BULKHEAD LIGHT
	DOME/BULLET CAMERA

CATEGORY : GIRLS HOSTEL

DRAWING TITLE : TERRACE FLOOR PLAN

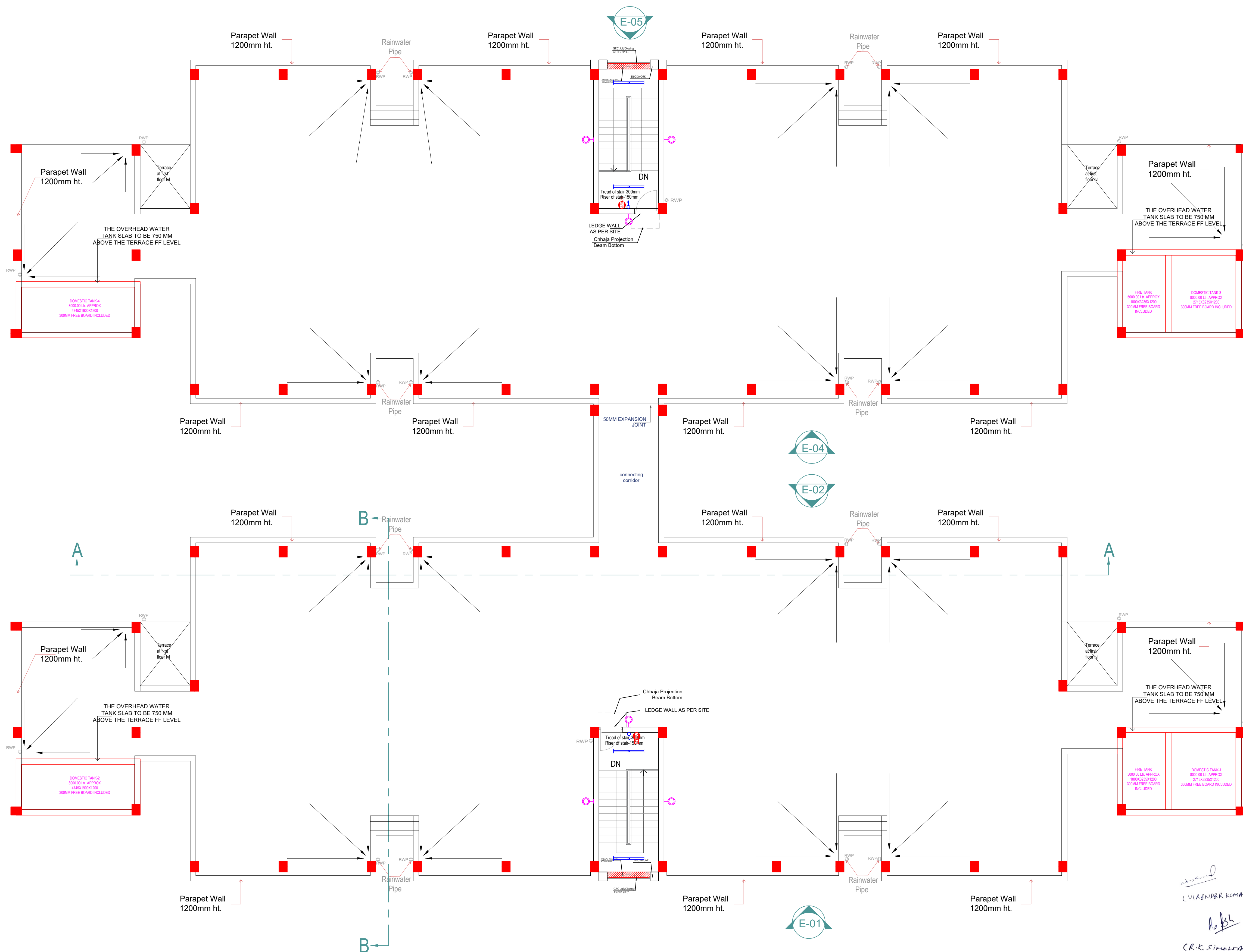
DWG. NO.-
EMRS NAME/GH/AR_03

DATE - 09 MARCH 2023

(Signature)
(VIASUNDER KUMAR)

(Signature)
(R.K. SINGH)

(Signature)
A D P Keshri
Chief Technical Consultant



TERRACE FLOOR PLAN +6600 mm



NOTES -

**FRONT ENTRANCE RAMP
SHALL BE AS PER SITE**

EXHAUST FAN OPENINGS
WITH 2NOs RAG BOLTS

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	15/16A POWER PLUG POINT IN KITCHEN
	15/16A POWER PLUG POINT FOR GEYSER
	5/6A LIGHT PLUG POINT FOR TV
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT FOR RO
	DATA OUTLET
	50 MM X 50 MM GI RACE WAY / MS CHANNEL WITH JUNCTION BOX

SYMBOL	DESCRIPTION
	SWITCH BOARD
	20W LED TUBE LIGHT
	40W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200MM
	EXHAUST FAN 300MM DIA PLASTIC BODY
	EXHAUST FAN 450MM DIA METAL BODY
	MCB DISTRIBUTION BOARD
	BATTEN HOLDER WITH LED BULB
	DOME/BULLET CAMERA

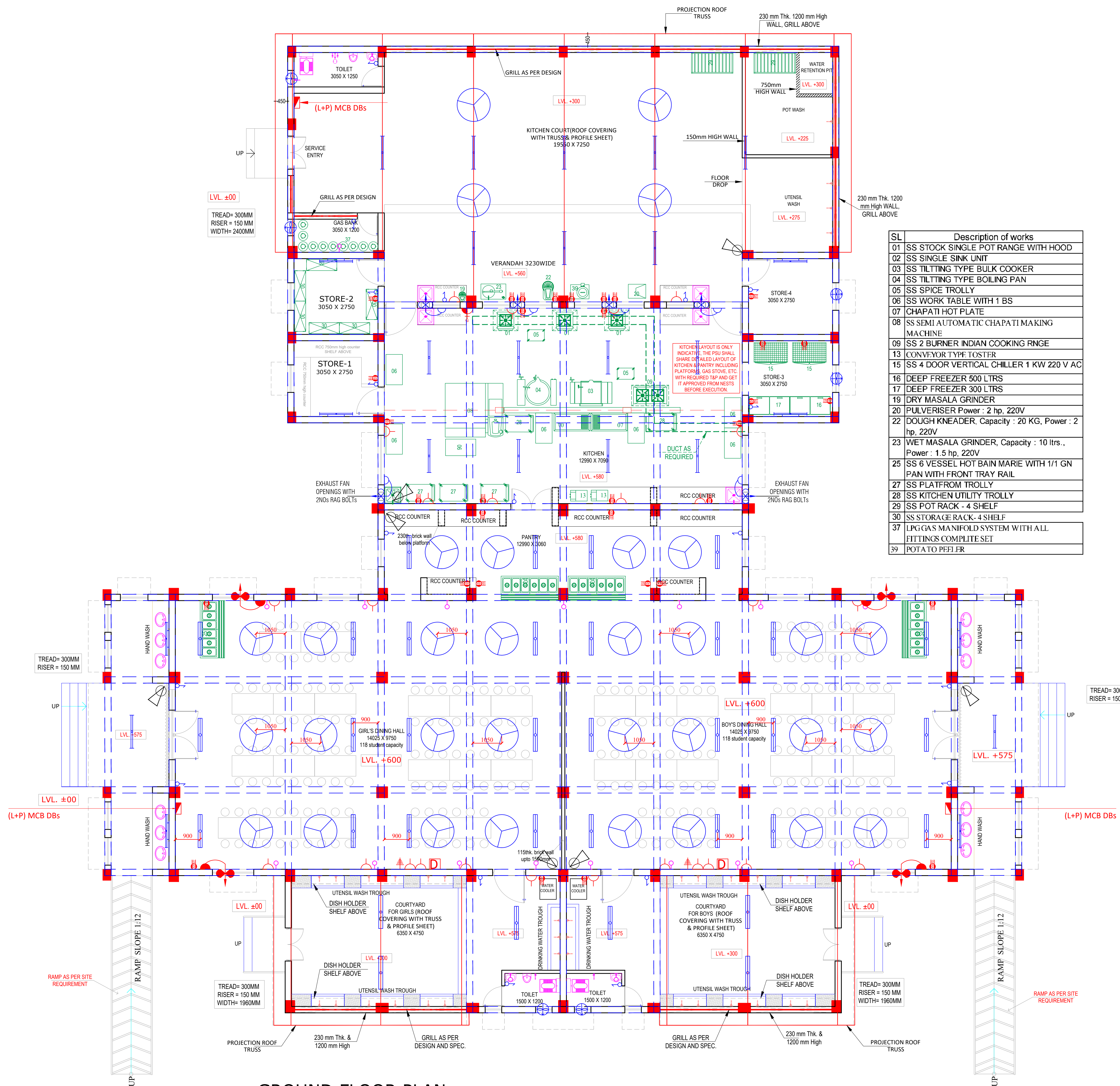
CATEGORY : KITCHEN & DINING BLOCK

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.-
EMRS NAME/K&D/AR_01

DATE - 09 MARCH 2023

A D P Keshri
Chief Technical Consultant



SL	Description of works
01	SS STOCK SINGLE POT RANGE WITH HOOD
02	SS SINGLE SINK UNIT
03	SS TILTING TYPE BULK COOKER
04	SS TILTING TYPE BOILING PAN
05	SS SPICE TROLLEY
06	SS WORK TABLE WITH 1 BS
07	CHAPATHI HOT PLATE
08	SS SEMI AUTOMATIC CHAPATI MAKING MACHINE
09	SS 2 BURNER INDIAN COOKING RANGE
13	CONVEYOR TYPE TOSTER
15	SS 4 DOOR VERTICAL CHILLER 1 KW 220 V AC
16	DEEP FREEZER 500 LTRS
17	DEEP FREEZER 300 LTRS
19	DRY MASALA GRINDER
20	PULVERISER Power : 2 hp, 220V
22	DOUGH KNEADER, Capacity : 20 KG, Power : 2 hp, 220V
23	WET MASALA GRINDER, Capacity : 10 ltrs., Power : 1.5 hp, 220V
25	SS 6 VESSEL HOT BAIN MARIE WITH 1/1 GN PAN WITH FRONT TRAY RAIL
27	SS PLATFORM TROLLEY
28	SS KITCHEN UTILITY TROLLEY
29	SS POT RACK - 4 SHELF
30	SS STORAGE RACK- 4 SHELF
37	LPG GAS MANIFOLD SYSTEM WITH ALL FITTINGS COMPLETE SET
39	POTATO PEELER

GROUND FLOOR PLAN 71

PROJECT - EMRS
 CONSTRUCTION OF SCHOOL BUILDING
 FOR EKLAVYA MODEL RESIDENTIAL
 SCHOOL (EMRS)

CLIENT -
GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION
SOCIETY FOR TRIBAL STUDENTS



(Signature)
 (V. R. SINGH)

(Signature)
 (R. K. SINGH)

(Signature)

A D P Keshri
 Chief Technical Consultant

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	TELEPHONE OUTLET
	15/16A POWER PLUG POINT IN KITCHEN
	DATA
	15/16A POWER PLUG POINT FOR GEYSER
	5/6A LIGHT PLUG POINT FOR TV
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT FOR RO
	BELL

LEGENDS :

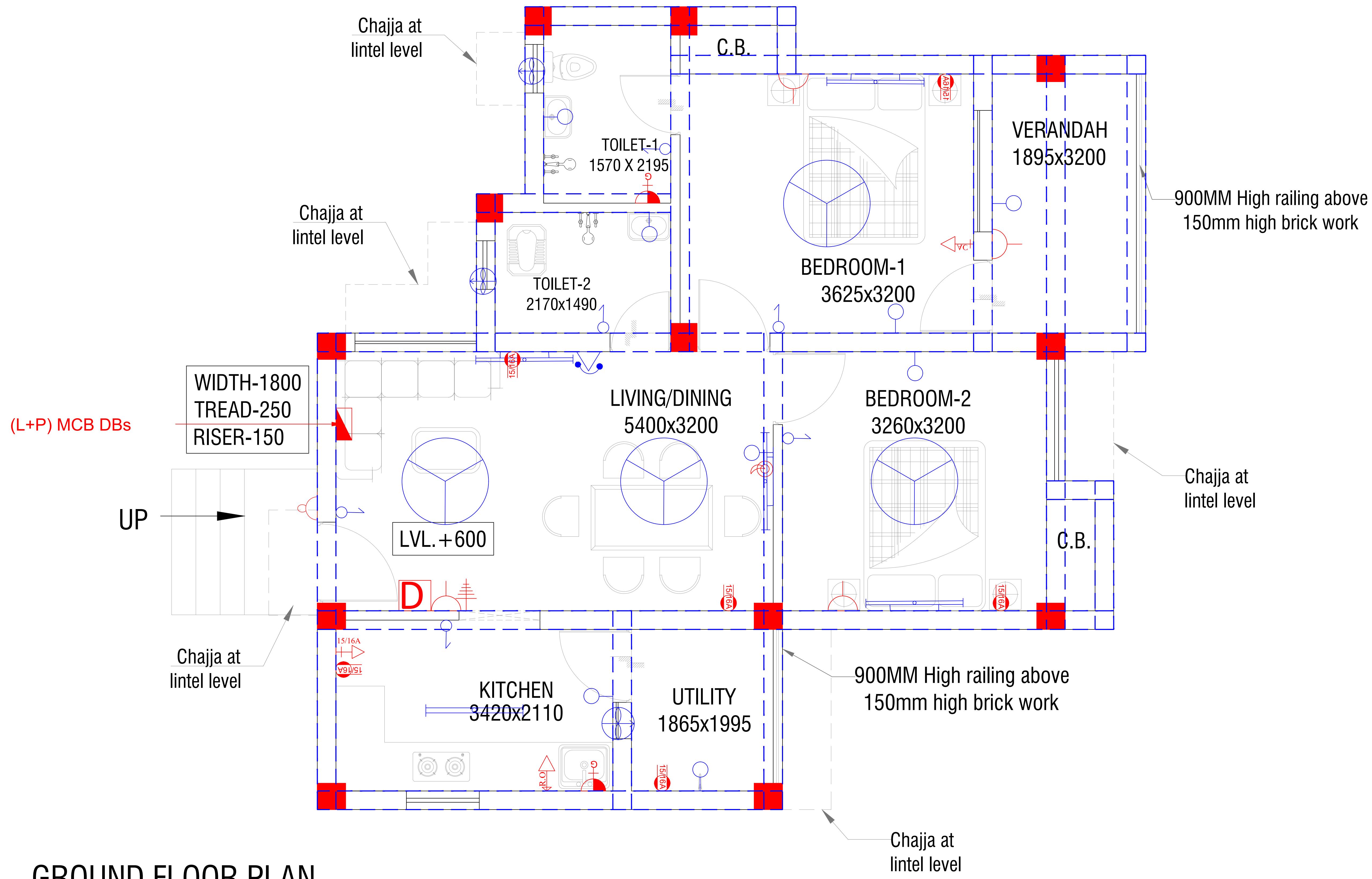
SYMBOL	DESCRIPTION
	SWITCH BOARD
	BATTEN HOLDER WITH LED BULB
	20W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200mm
	MCB DISTRIBUTION BOARD

CATEGORY : **WARDEN RESIDENCE**

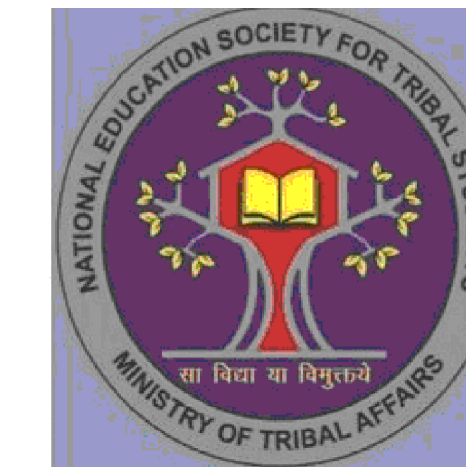
DRAWING TITLE : **GROUND FLOOR PLAN**

DWG. NO.-
 EMRS NAME/WR/AR_01

DATE - 09 MARCH 2023



GROUND FLOOR PLAN

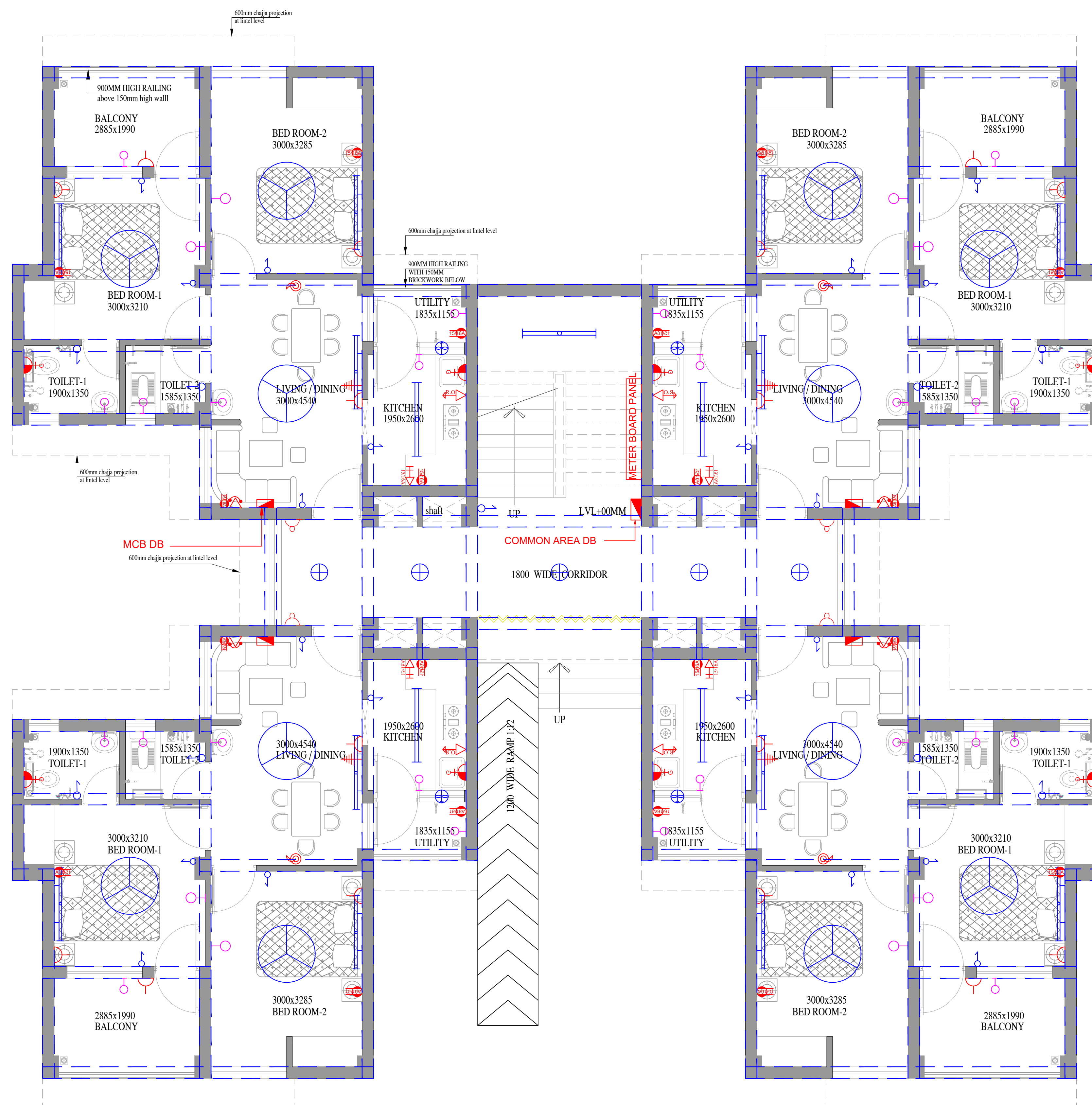


(Signature)
VIRENDER KUMAR

(Signature)
R.K. SIMALPURI

(Signature)

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Chief Technical Consultant



GROUND FLOOR PLAN.

LEGENDS :

SYMBOL	DESCRIPTION
	15/16A POWER PLUG POINT
	15/16A POWER PLUG POINT IN KITCHEN
	15/16A POWER PLUG POINT FOR GEYSER
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT FOR RO
	TELEPHONE OUTLET
	BELL

SYMBOL	DESCRIPTION
	SWITCH BOARD
	15W LED DOWN LIGHTER
	BATTEN HOLDER WITH LED BULB
	20W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200MM
	MCB DISTRIBUTION BOARD
	20W LED BULKHEAD FITTING

CATEGORY : TYPE II QUARTER

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.- EMRS NAME/TYPE-II/AR_01

DATE - 09 MARCH 2023

CONSTRUCTION OF SCHOOL BUILDING
FOR EKLAVYA MODEL RESIDENTIAL
SCHOOL (EMRS)

CLIENT -

GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION
SOCIETY FOR TRIBAL STUDENTS

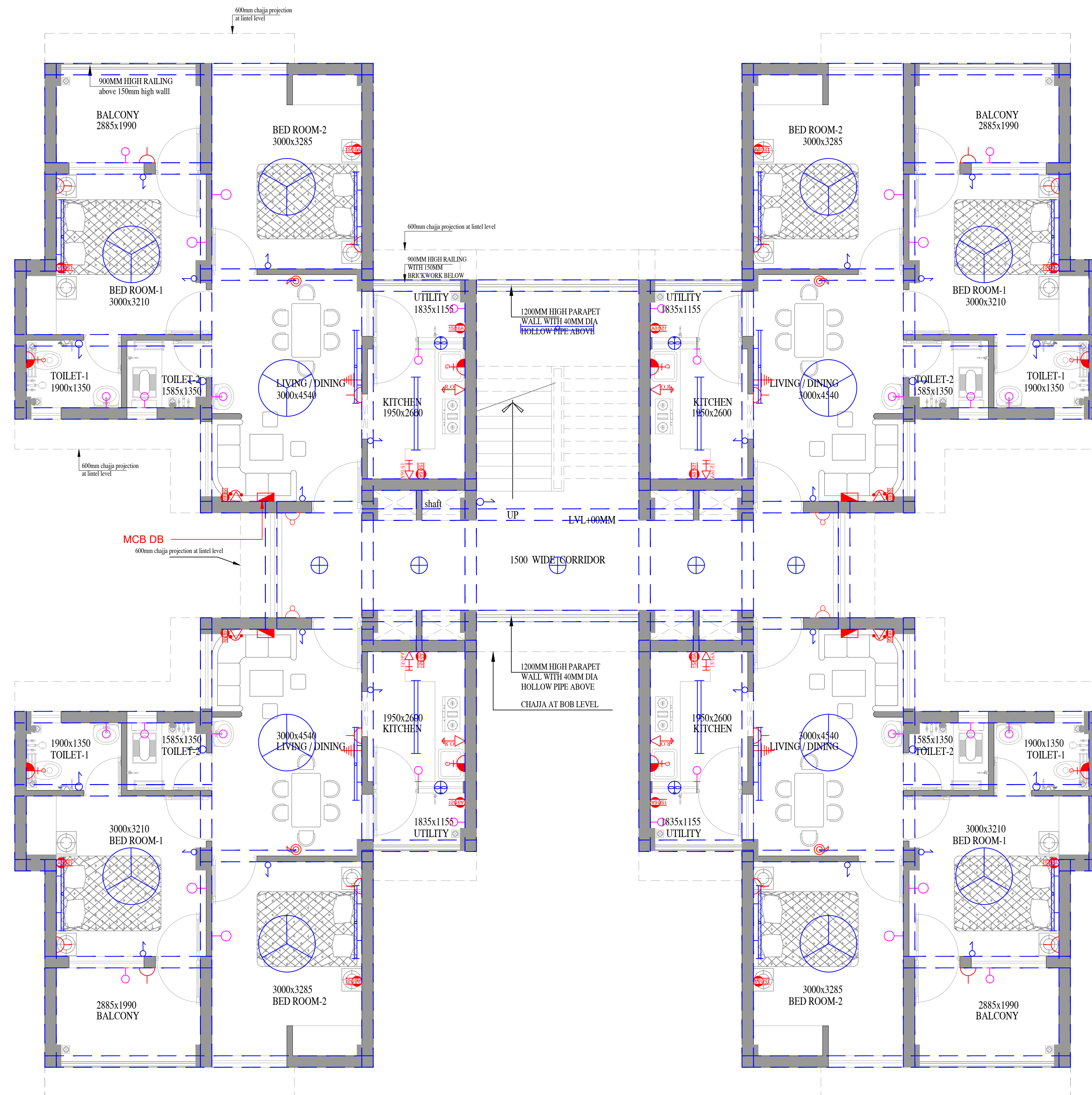


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VIRENDER KUMAR

(Signature)
R.K. SIMHANTHINI

(Signature)

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Chief Technical Consultant



FIRST FLOOR PLAN.

LEGENDS :

SYMBOL	DESCRIPTION
	15/16A POWER PLUG POINT
	15/16A POWER PLUG POINT IN KITCHEN
	15/16A POWER PLUG POINT FOR GEYSER
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT FOR RO
	TELEPHONE OUTLET
	BELL

SYMBOL	DESCRIPTION
	SWITCH BOARD
	15W LED DOWN LIGHTER
	BATTEN HOLDER WITH LED BULB
	20W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200MM
	MCB DISTRIBUTION BOARD
	20W LED BULKHEAD FITTING

CATEGORY : TYPE II QUARTER

DRAWING TITLE : FIRST FLOOR PLAN

DWG. NO.-
EMRS NAME/TYPE-II/AR_02

DATE - 09 MARCH 2023

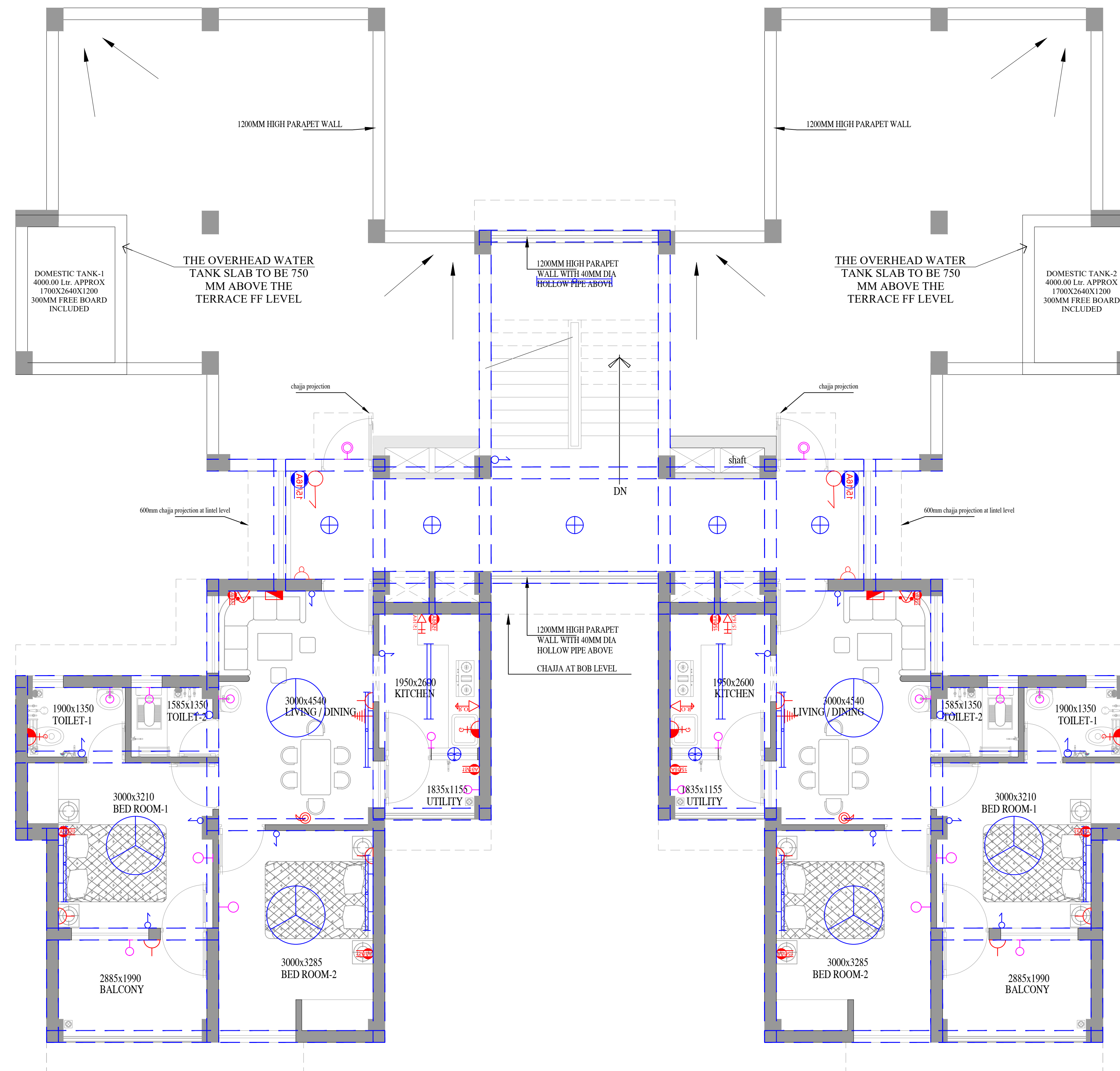


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VIRENDER KUMAR

(Signature)
R.K. SINGH

(Signature)

A D P Keshri
Chief Technical Consultant



SECOND FLOOR PLAN.

LEGENDS :

SYMBOL	DESCRIPTION
	15/16A POWER PLUG POINT
	15/16A POWER PLUG POINT IN KITCHEN
	15/16A POWER PLUG POINT FOR GEYSER
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT FOR RO
	TELEPHONE OUTLET
	BELL

SYMBOL	DESCRIPTION
	SWITCH BOARD
	15W LED DOWN LIGHTER
	BATTEN HOLDER WITH LED BULB
	20W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200MM
	MCB DISTRIBUTION BOARD
	20W LED BULKHEAD FITTING

CATEGORY : TYPE II QUARTER

DRAWING TITLE : SECOND FLOOR PLAN

DWG. NO.-
EMRS NAME/TYPE-II/AR_03

DATE - 09 MARCH 2023

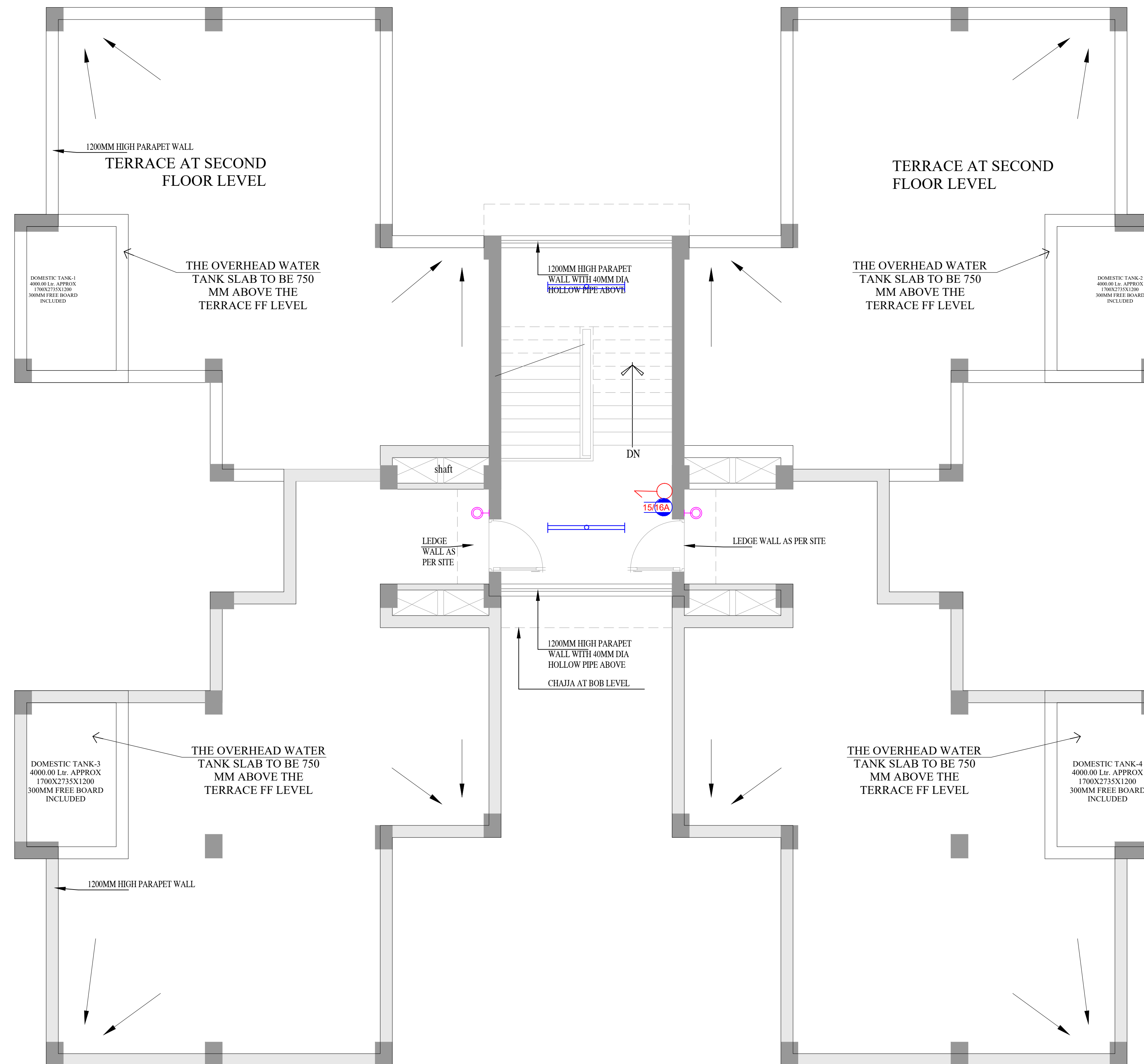


(Signature)
L. R. S. (L. R. S. SINGH)

(Signature)
R. K. S. (R. K. SINGH)

(Signature)

A D P Keshri
Chief Technical Consultant



TERRACE FLOOR PLAN.

LEGENDS :

SYMBOL	DESCRIPTION
	15/16A POWER PLUG POINT
	15/16A POWER PLUG POINT IN KITCHEN
	15/16A POWER PLUG POINT FOR GEYSER
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT FOR RO
	TELEPHONE OUTLET
	BELL

SYMBOL	DESCRIPTION
	SWITCH BOARD
	15W LED DOWN LIGHTER
	BATTEN HOLDER WITH LED BULB
	20W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200MM
	MCB DISTRIBUTION BOARD
	20W LED BULKHEAD FITTING

CATEGORY : TYPE II QUARTER

DRAWING TITLE : TERRACE FLOOR PLAN

DWG. NO.- EMRS NAME/TYPE-II/AR_04

DATE - 09 MARCH 2023



(Signature)
V. R. K. SINGH

(Signature)
R. K. SINGH

(Signature)

A D P Keshri
Chief Technical Consultant

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	15/16A POWER PLUG POINT IN KITCHEN
	15/16A POWER PLUG POINT FOR GEYSER
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT FOR RO
	TELEPHONE OUTLET
	BELL

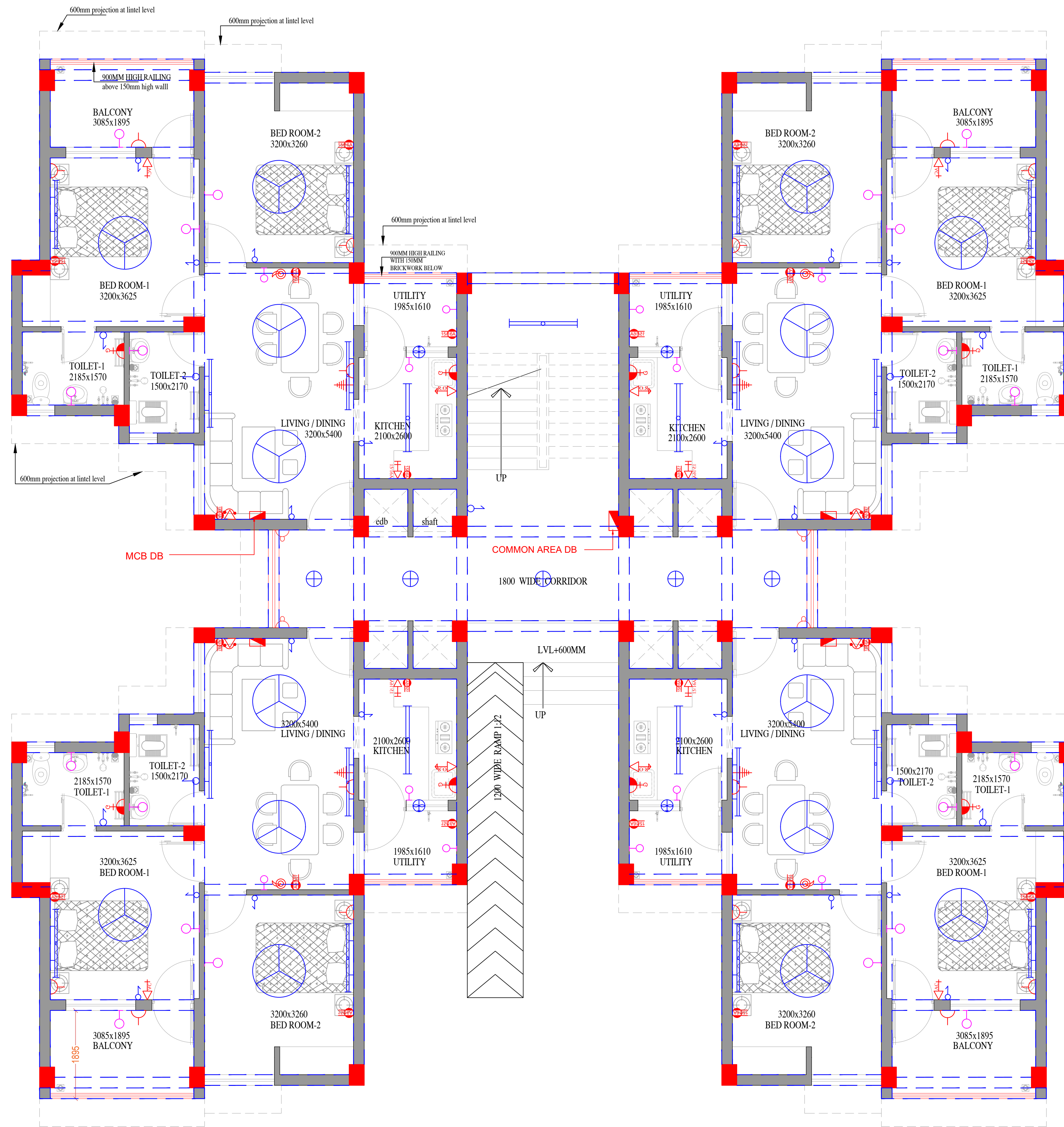
SYMBOL	DESCRIPTION
	SWITCH BOARD
	15W LED DOWN LIGHTER
	BATTEN HOLDER WITH LED BULB
	20W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200MM
	MCB DISTRIBUTION BOARD
	20W LED BULKHEAD FITTING

CATEGORY : TYPE III QUARTER

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.- EMRS NAME/TYPE-III/AR_01

DATE - 09 MARCH 2023



GROUND FLOOR PLAN.

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



(Signature)
V. R. K. SINGH

(Signature)
R. K. SINGH

(Signature)

A D P Keshri
Chief Technical Consultant

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	15/16A POWER PLUG POINT IN KITCHEN
	15/16A POWER PLUG POINT FOR GEYSER
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT FOR RO
	TELEPHONE OUTLET
	BELL

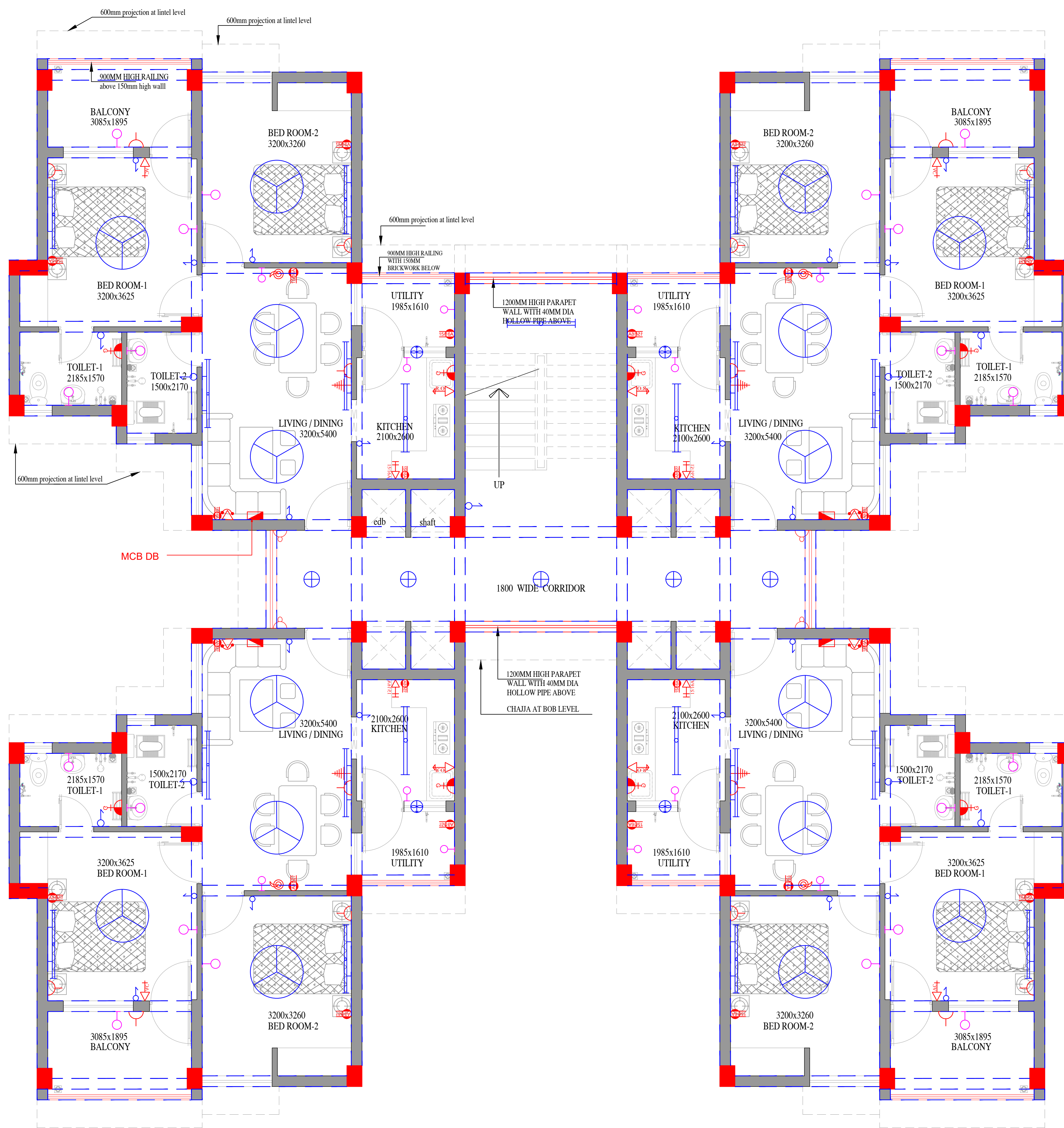
SYMBOL	DESCRIPTION
	SWITCH BOARD
	15W LED DOWN LIGHTER
	BATTEN HOLDER WITH LED BULB
	20W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200MM
	MCB DISTRIBUTION BOARD
	20W LED BULKHEAD FITTING

CATEGORY : TYPE III QUARTER

DRAWING TITLE : FIRST FLOOR PLAN

DWG. NO.- EMRS NAME/TYPE-III/AR_02

DATE - 09 MARCH 2023



FIRST FLOOR PLAN.



(Signature)
(VIRENDER KUMAR)

(Signature)
(R.K. SIMOLASAR)

(Signature)

A D P Keshri
Chief Technical Consultant

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	15/16A POWER PLUG POINT IN KITCHEN
	15/16A POWER PLUG POINT FOR GEYSER
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT FOR RO
	TELEPHONE OUTLET
	BELL

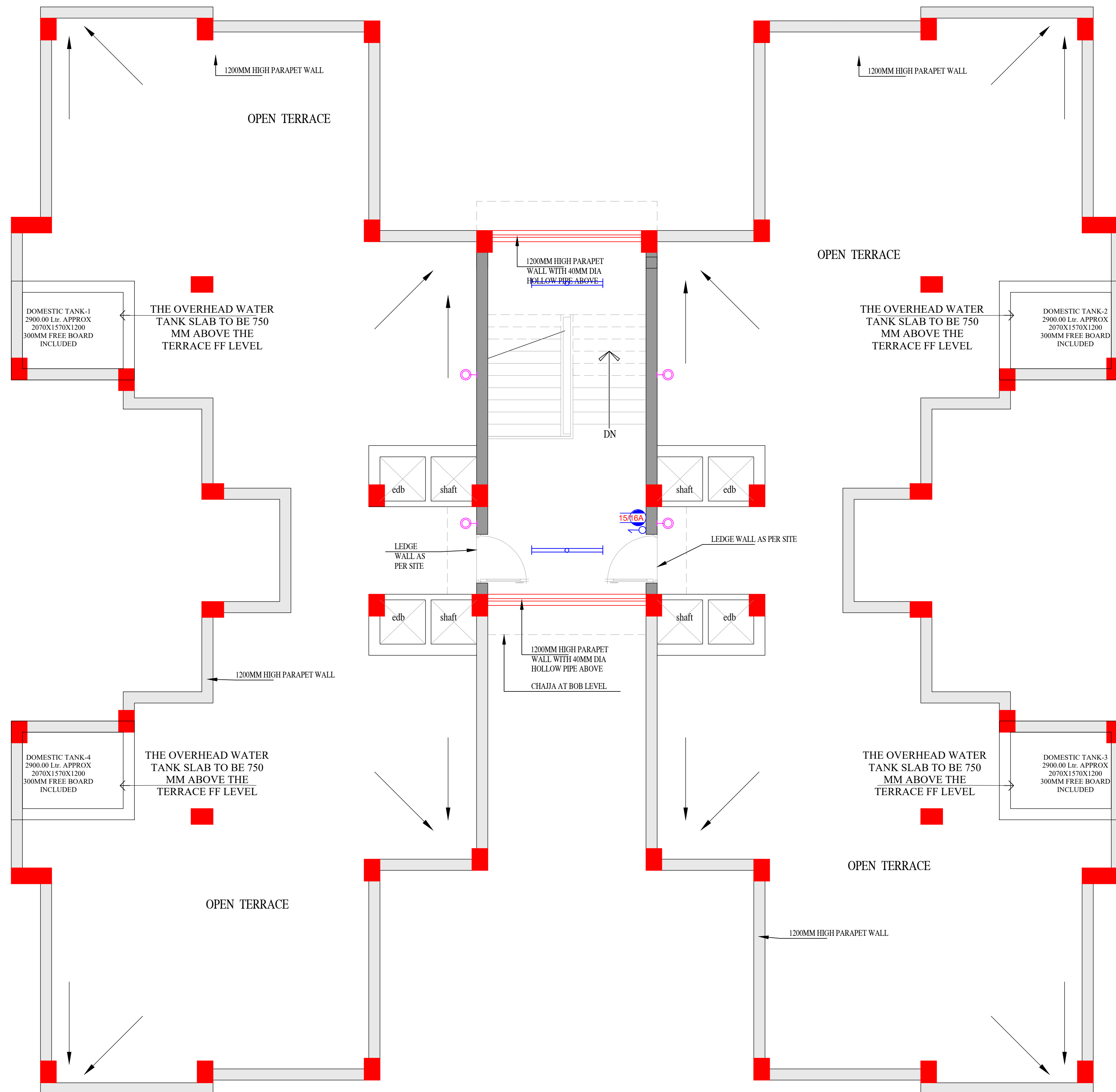
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	SWITCH BOARD
	15W LED DOWN LIGHTER
	BATTEN HOLDER WITH LED BULB
	20W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200MM
	MCB DISTRIBUTION BOARD
	20W LED BULKHEAD FITTING

CATEGORY : TYPE III QUARTER

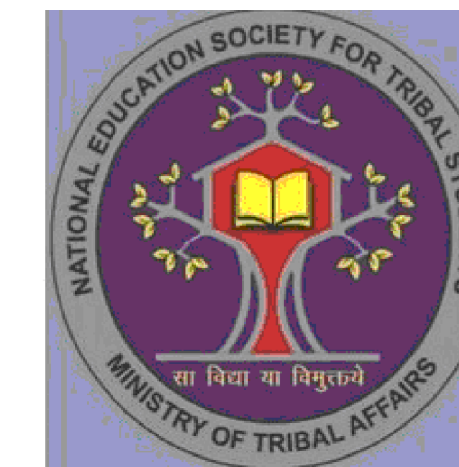
DRAWING TITLE : TERRACE FLOOR PLAN

DWG. NO.- EMRS NAME/TYPE-III/AR_03

DATE - 09 MARCH 2023



TERRACE FLOOR PLAN.



(Signature)
VIRENDER KUMAR

(Signature)
R.K. SIMHAPURAN

(Signature)

A D P Keshri
Chief Technical Consultant

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	15/16A POWER PLUG POINT IN KITCHEN
	15/16A POWER PLUG POINT FOR GEYSER
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT FOR RO
	TELEPHONE OUTLET
	DATA OUTLET
	BELL

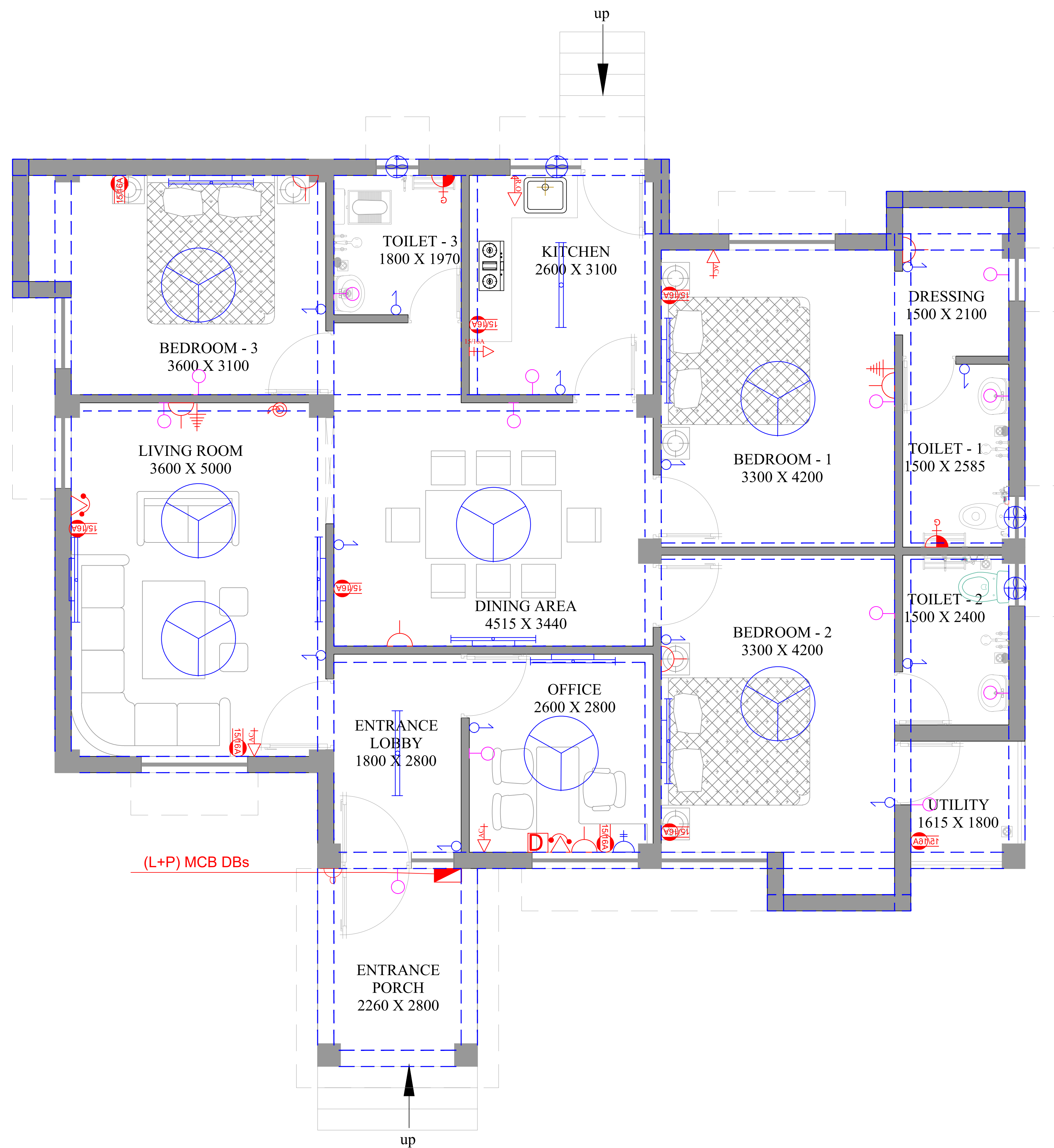
SYMBOL	DESCRIPTION
	SWITCH BOARD
	BATTEN HOLDER WITH LED BULB
	20W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200MM
	MCB DISTRIBUTION BOARD
	2x6A UPS PLUG POINT

CATEGORY : PRINCIPAL QUARTER

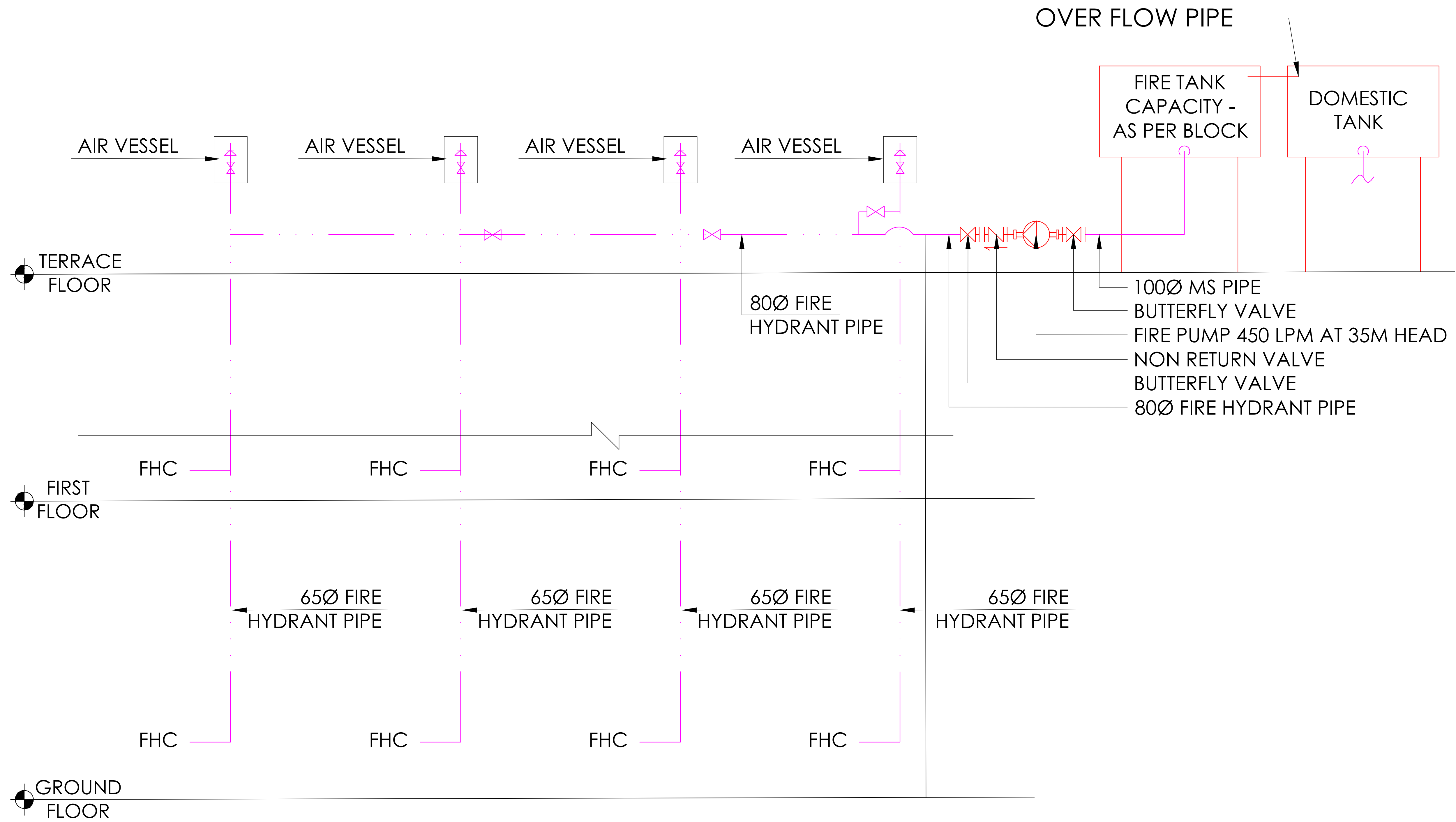
DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.-
EMRS NAME/PQ/AR_01

DATE - 09 MARCH 2023



GROUND FLOOR PLAN



- 100Ø MS PIPE
- BUTTERFLY VALVE
- FIRE PUMP 450 LPM AT 35M HEAD
- NON RETURN VALVE
- BUTTERFLY VALVE
- 80Ø FIRE HYDRANT PIPE

S.NO.	DESCRIPTION	SYMBOL
1.	FIRE HYDRANT PIPE	
2.	FHC (FIRST HOSE CABINET HAVING 30M FIRST AID HOSE REEL I/C ACCESSORIES)	FHC
3.	NON RETURN VALVE	
4.	BUTTERFLY VALVE	
5.	PRESSURE GAUGE	PG

(Signature)
 (VIRENDER KUMAR)
(Signature)
 (R.K. SIMOLSONI)
(Signature)
A D P Keshri
 Chief Technical Consultant

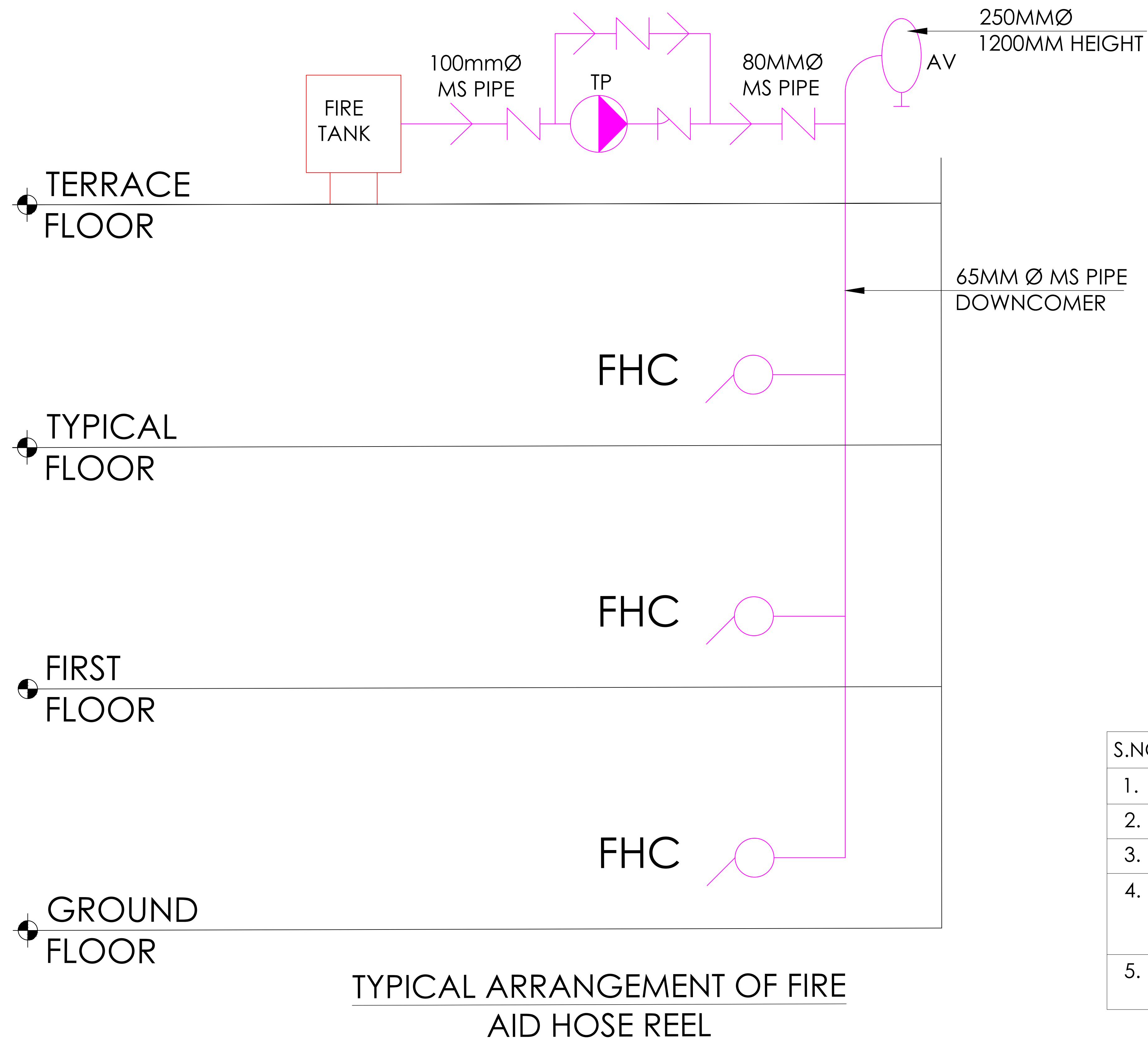
DATE - 09 MARCH 2023

DWG. NO.-
 EMRS NAME/SCH/AR_01

SCALE:

MINISTRY OF TRIBAL AFFAIRS
 NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

**FIRE SUPPLY
 SCHEMATIC DIAGRAM**



(Signature)
(VIRENDER KUMAR)

(Signature)
(R.K. SIMHAPATI)

(Signature)
A D P Keshri
Chief Technical Consultant

S.NO.	DESCRIPTION	SYMBOL
1.	TERRACE PUMP	
2.	BUTTERFLY / SLUICE VALVE	
3.	NON-RETURN VALVE	
4.	FHC (FIRST HOSE CABINET HAVING 30M FIRST AID HOSE REEL I/C ACCESSORIES)	
5.	AIR VESSEL (250MM Ø, 1200MM HEIGHT)	

DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_01

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

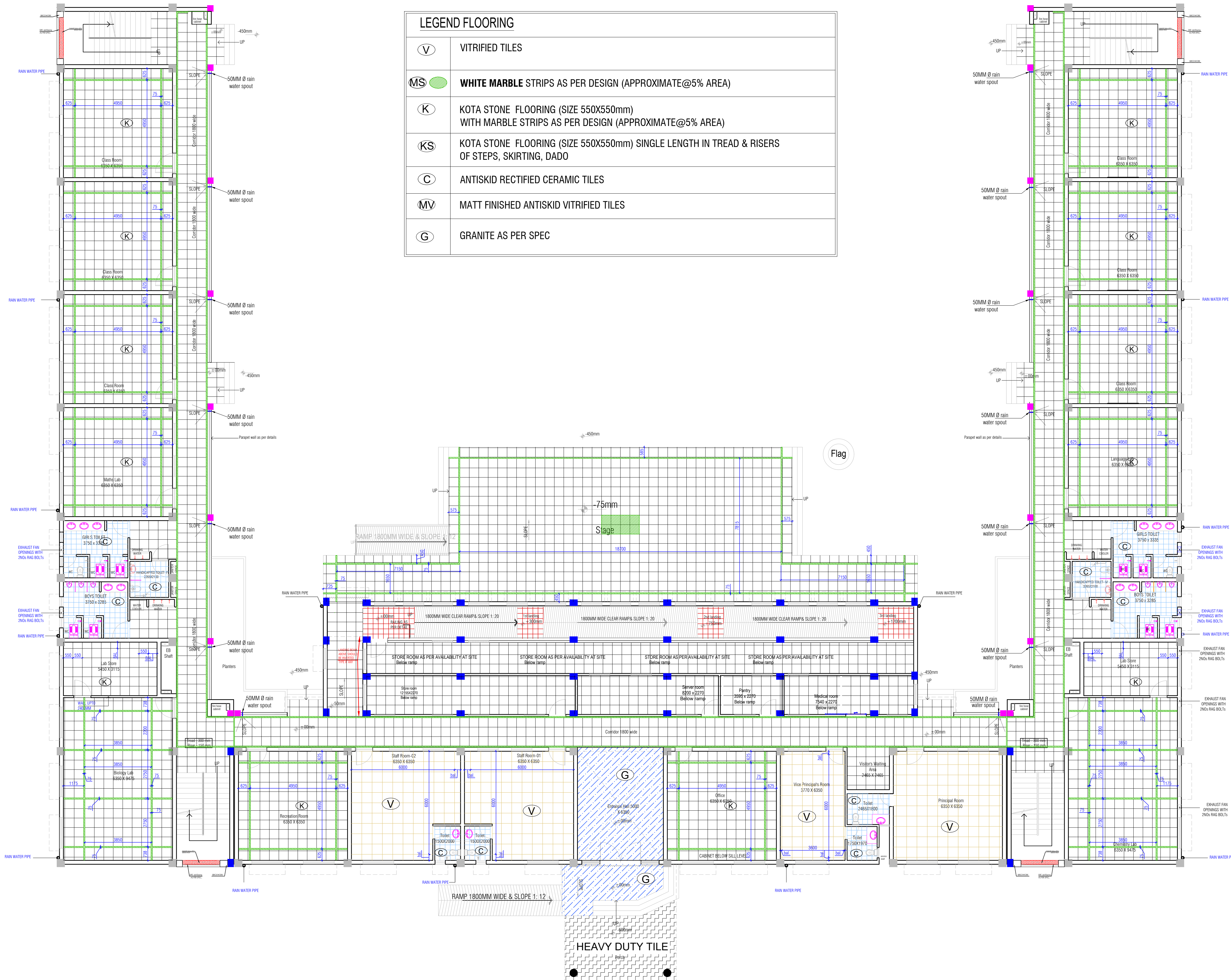
TYPICAL ARRANGEMENT OF
FIRE AID HOSE REEL



Notes- Furniture in all the rooms except class rooms will be decided at later stage.

KOTA STONE FLOORING (SIZE 550X550mm) SINGLE LENGTH IN TREAD & RISERS OF STEPS, SKIRTING, DADO

LEGEND FLOORING	
(V)	VITRIFIED TILES
(MS)	WHITE MARBLE STRIPS AS PER DESIGN (APPROXIMATE@5% AREA)
(K)	KOTA STONE FLOORING (SIZE 550X550mm) WITH MARBLE STRIPS AS PER DESIGN (APPROXIMATE@5% AREA)
(KS)	KOTA STONE FLOORING (SIZE 550X550mm) SINGLE LENGTH IN TREAD & RISERS OF STEPS, SKIRTING, DADO
(C)	ANTISKID RECTIFIED CERAMIC TILES
(MV)	MATT FINISHED ANTISKID VITRIFIED TILES
(G)	GRANITE AS PER SPEC



GROUND FLOOR PLAN

N.K.
(NARENDRA KUMAR)
pk approval 10.3.23
(Prasad Approval)
Count 13/1/23
(R.K. Gang)
2nd SS 15/3/2023.
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : SCHOOL BUILDING
DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.-
EMRS NAME/SCH/AR_01

DATE - 09 MARCH 2023

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT - GOVERNMENT OF INDIA MINISTRY OF TRIBAL AFFAIRS NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



Notes- Furniture in all the rooms except class rooms will be decided at later stage.

KOTA STONE FLOORING (SIZE 550X550mm) SINGLE LENGTH IN TREAD & RISERS OF STEPS, SKIRTING, DADO

Handwritten notes: N.K. (NARENDRA KUMAR), p.k. Approval 10.1.23 (Prasad Approval), (CAUT 13/1/23 (R.K. Gang)), 8th SS 15/3/2023. (SANDEEP SOOD)

Signature: A D P Keshri, Chief Technical Consultant

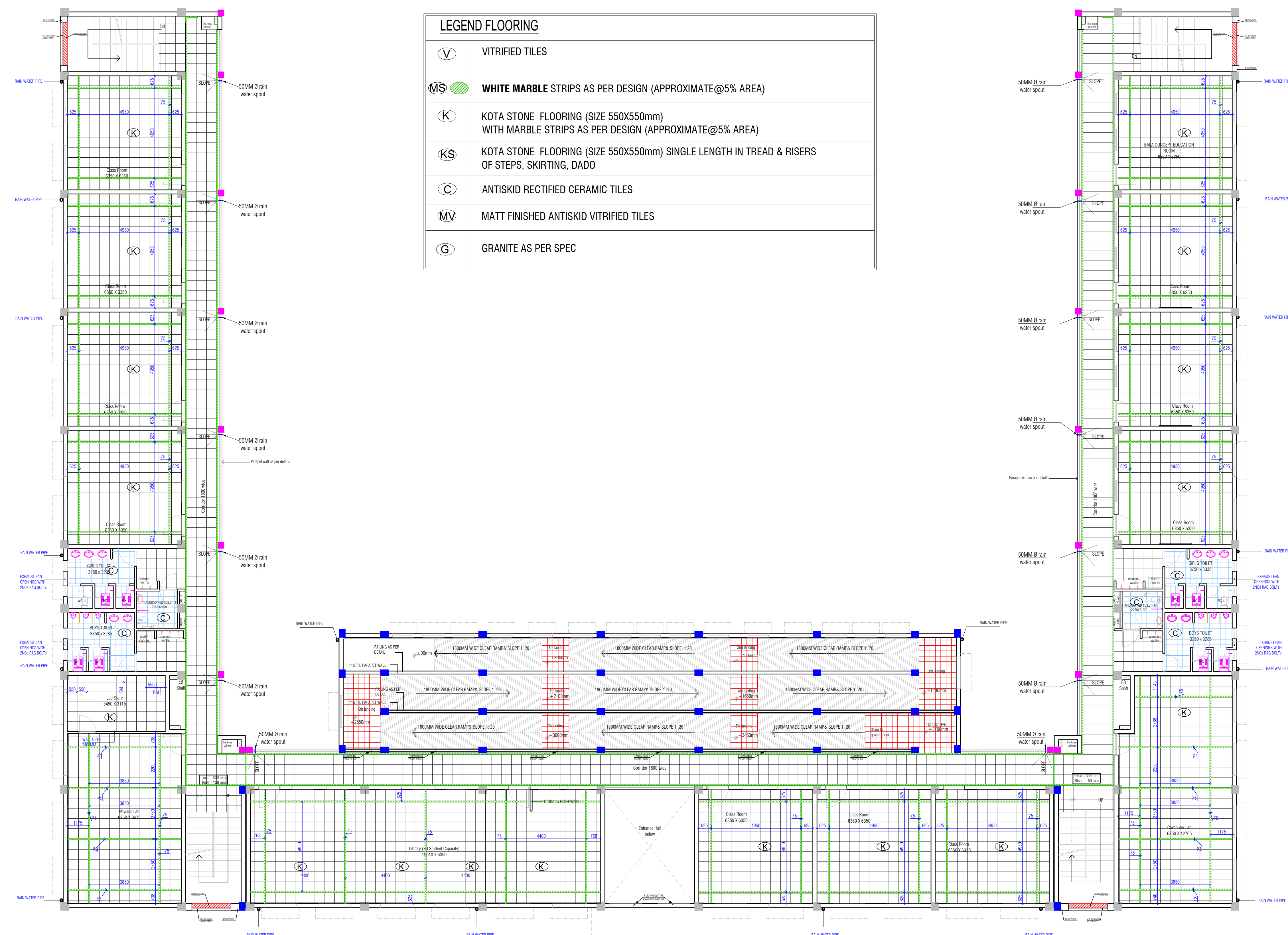
CATEGORY : SCHOOL BUILDING

DRAWING TITLE : FIRST FLOOR PLAN

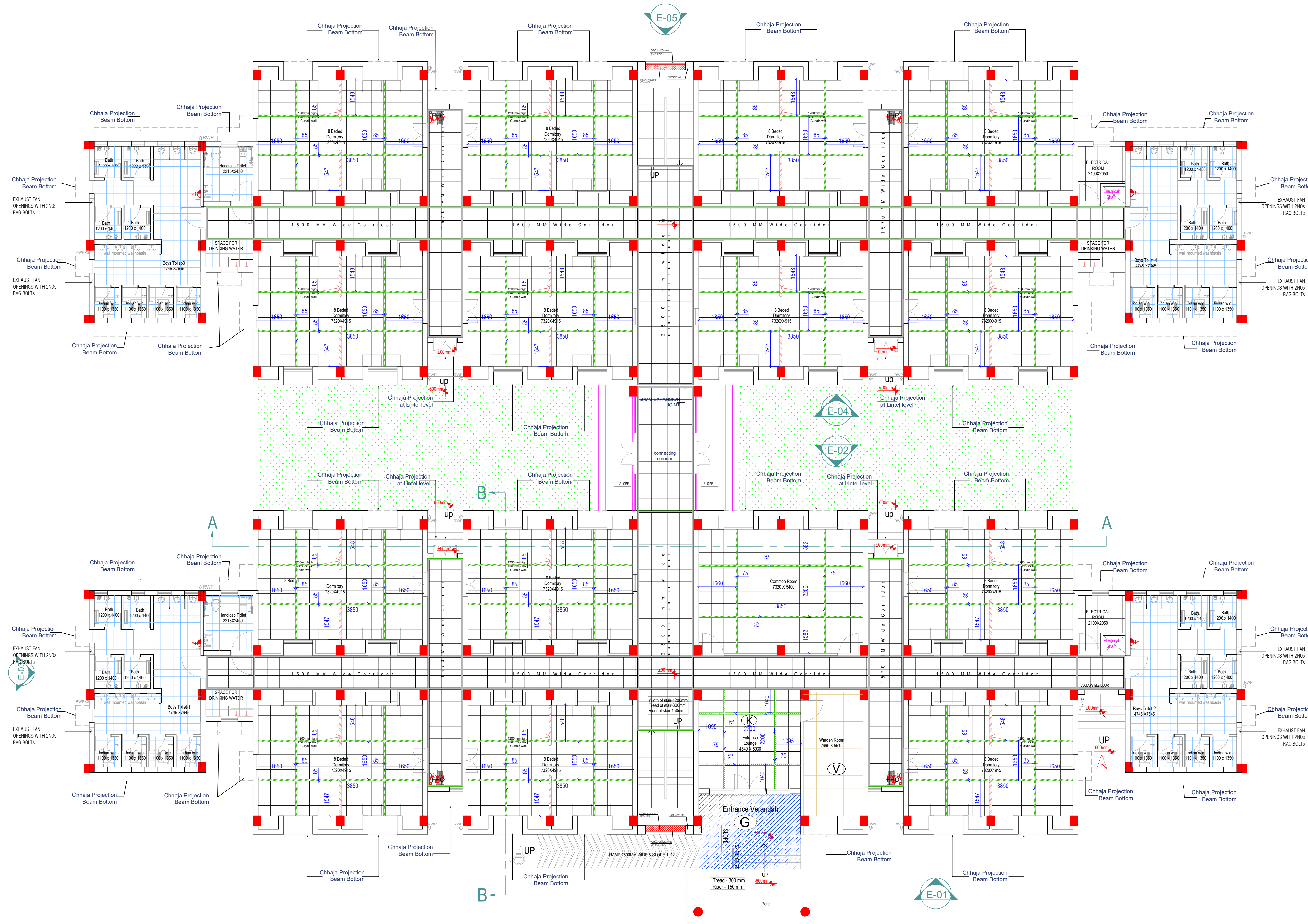
DWG. NO.- EMRS NAME/SCH/AR_02

DATE - 09 MARCH 2023

LEGEND FLOORING	
(V)	VITRIFIED TILES
(MS)	WHITE MARBLE STRIPS AS PER DESIGN (APPROXIMATE@5% AREA)
(K)	KOTA STONE FLOORING (SIZE 550X550mm) WITH MARBLE STRIPS AS PER DESIGN (APPROXIMATE@5% AREA)
(KS)	KOTA STONE FLOORING (SIZE 550X550mm) SINGLE LENGTH IN TREAD & RISERS OF STEPS, SKIRTING, DADO
(C)	ANTISKID RECTIFIED CERAMIC TILES
(MV)	MATT FINISHED ANTISKID VITRIFIED TILES
(G)	GRANITE AS PER SPEC



FIRST FLOOR PLAN



LEGEND FLOORING

- (V) FULL BODY (HOMOGENEOUS) VITRIFIED TILE FLOORING
- (K) KOTA STONE FLOORING WITH WHITE MARBLE STRIPS AS PER DESIGN (APPROXIMATE @ 5% AREA)
- (C) ANTISKID RECTIFIED CERAMIC TILE FLOORING
- (G) GRANITE AS PER SPEC
- (MV) MATT FINISHED ANTISKID VITRIFIED TILES

NDK.
 (NARENDRA KUMAR)
 P.K. Agrawal 10.3.23
 (Pranod Agrawal)
 13/3/23
 (R.K. Gang)
 8.3.23
 13/3/2023
 (SANDEEP SOOD)

A.P. Keshri
A P Keshri
 Chief Technical Consultant

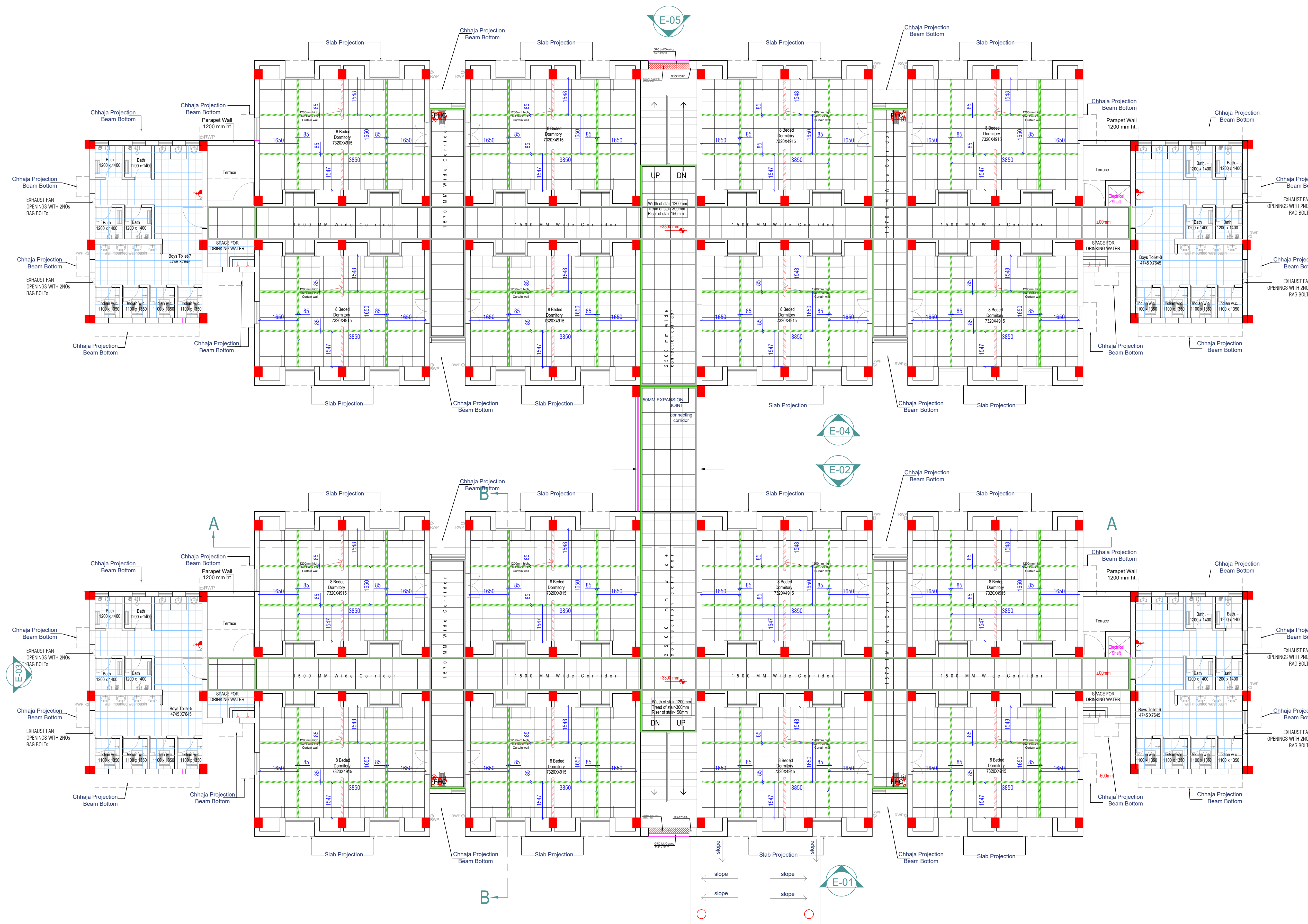
CATEGORY : BOYS HOSTEL

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.-
EMRS NAME/BH/AR_01

DATE - 09 MARCH 2023

85 GROUND FLOOR PLAN ±00mm



LEGEND FLOORING	
(V)	FULL BODY (HOMOGENEOUS) VITRIFIED TILE FLOORING
(K)	KOTA STONE FLOORING WITH WHITE MARBLE STRIPS AS PER DESIGN (APPROXIMATE @ 5% AREA)
(C)	ANTISKID RECTIFIED CERAMIC TILE FLOORING
(G)	GRANITE AS PER SPEC
(MV)	MATT FINISHED ANTISKID VITRIFIED TILES

N.K.
 (NARENDRA KUMAR)
 p.k. Agrawal 10.3.23
 (Chand Agrawal)
 (CAUT) 13/3/23
 (R.K. Gang)
 8th 95 13/3/2023
 (SANDEEP SOOD)

A.P.K.
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 Chief Technical Consultant

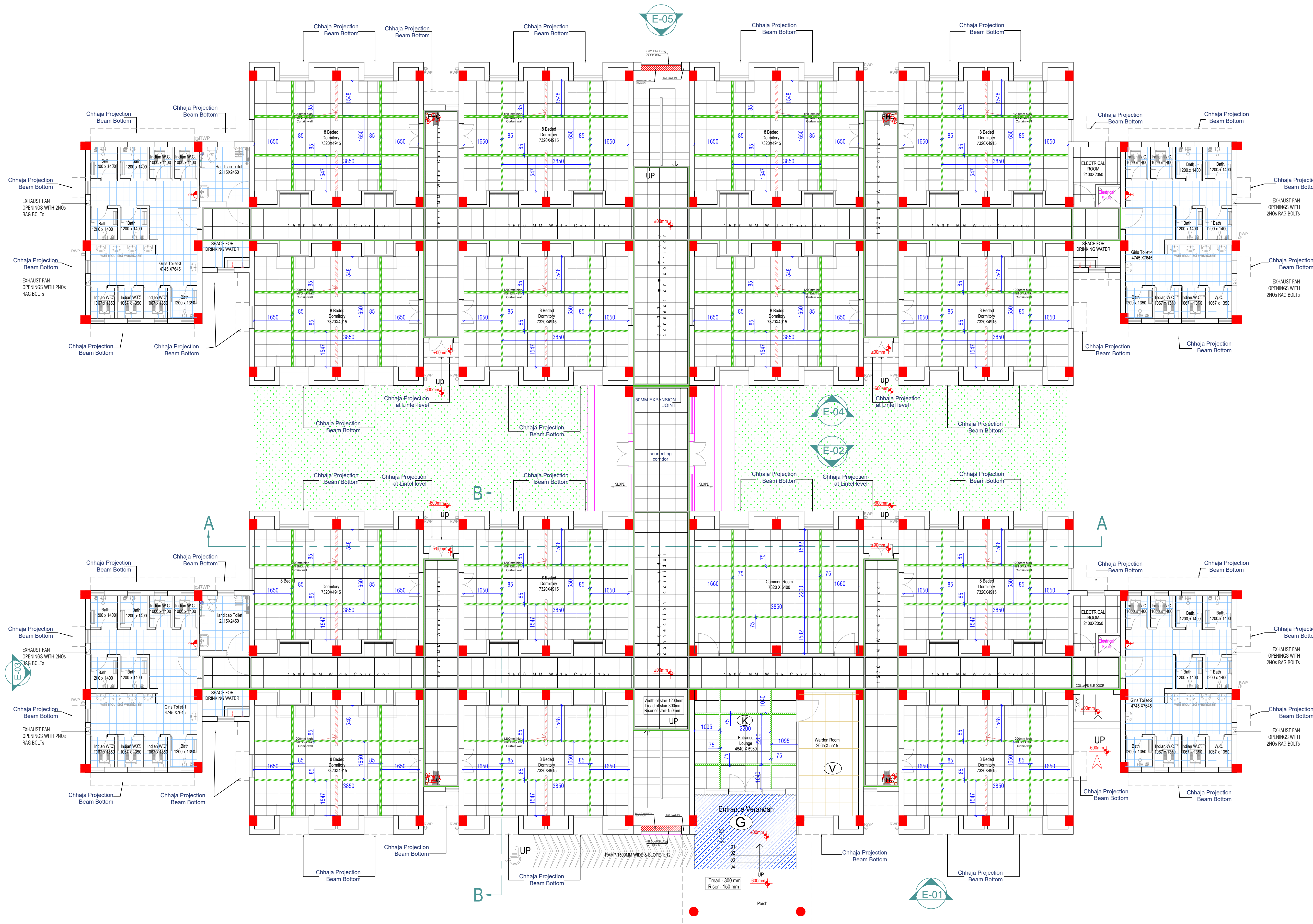
CATEGORY : BOYS HOSTEL

DRAWING TITLE : FIRST FLOOR PLAN

DWG. NO.-
EMRS NAME/BH/AR_02

DATE - 09 MARCH 2023

FIRST FLOOR PLAN +3300mm



LEGEND FLOORING	
(V)	FULL BODY (HOMOGENEOUS) VITRIFIED TILE FLOORING
(K)	KOTA STONE FLOORING WITH WHITE MARBLE STRIPS AS PER DESIGN (APPROXIMATE @ 5% AREA)
(C)	ANTISKID RECTIFIED CERAMIC TILE FLOORING
(G)	GRANITE AS PER SPEC
(MV)	MATT FINISHED ANTISKID VITRIFIED TILES

N.K.
 (NARENDRA KUMAR)
 P.K. Agrawal 10.3.23
 (Charan d Agrawal)
 13/3/23
 (R.K. Gang)
 13/3/2023
 (SANDEEP SOOD)

A.P.K.
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 Chief Technical Consultant

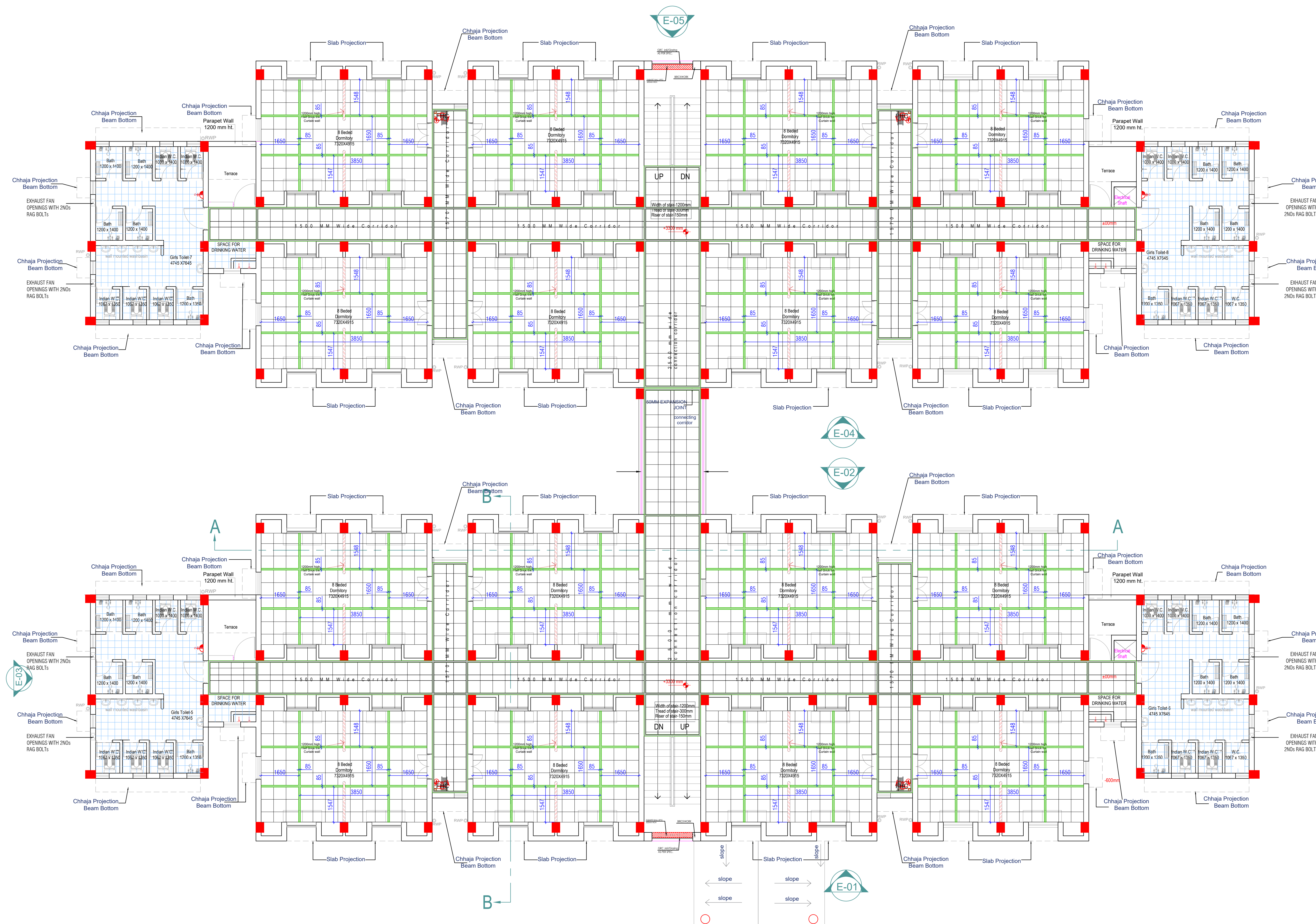
CATEGORY : GIRLS HOSTEL

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO. - EMRS NAME/GH/AR_01

DATE - 09 MARCH 2023

87 GROUND FLOOR PLAN ±00mm



LEGEND FLOORING	
(V)	FULL BODY (HOMOGENEOUS) VITRIFIED TILE FLOORING
(K)	KOTA STONE FLOORING WITH WHITE MARBLE STRIPS AS PER DESIGN (APPROXIMATE @ 5% AREA)
(C)	ANTISKID RECTIFIED CERAMIC TILE FLOORING
(G)	GRANITE AS PER SPEC
(MV)	MATT FINISHED ANTISKID VITRIFIED TILES

N.K.
 (NARENDRA KUMAR)
 p.k. Agrawal 10.3.23
 (Charan Agrawal)
 13/3/23
 (R.K. Gang)
 8.3.23
 13/3/2023
 (SANDEEP SOOD)

A.P.K.
A D P Keshri
 Chief Technical Consultant

CATEGORY: GIRLS HOSTEL

DRAWING TITLE: FIRST FLOOR PLAN

DWG. NO.- EMRS NAME/GH/AR_02

DATE - 09 MARCH 2023

FIRST FLOOR PLAN +3300mm



NOTES -

FRONT ENTRANCE RAMP SHALL BE AS PER SITE

⊠ EXHAUST FAN OPENINGS WITH 2NOs RAG BOLTS

N.K.
(NARENDRA KUMAR)
p.k. Approval 10.3.23
(Approved Approval)
13/3/23
(R.K. Gang)

8.11.23
13/3/2023
(SANDEEP SOOD)

A.P.K.

A D P Keshri
Chief Technical Consultant

LEGEND FLOORING

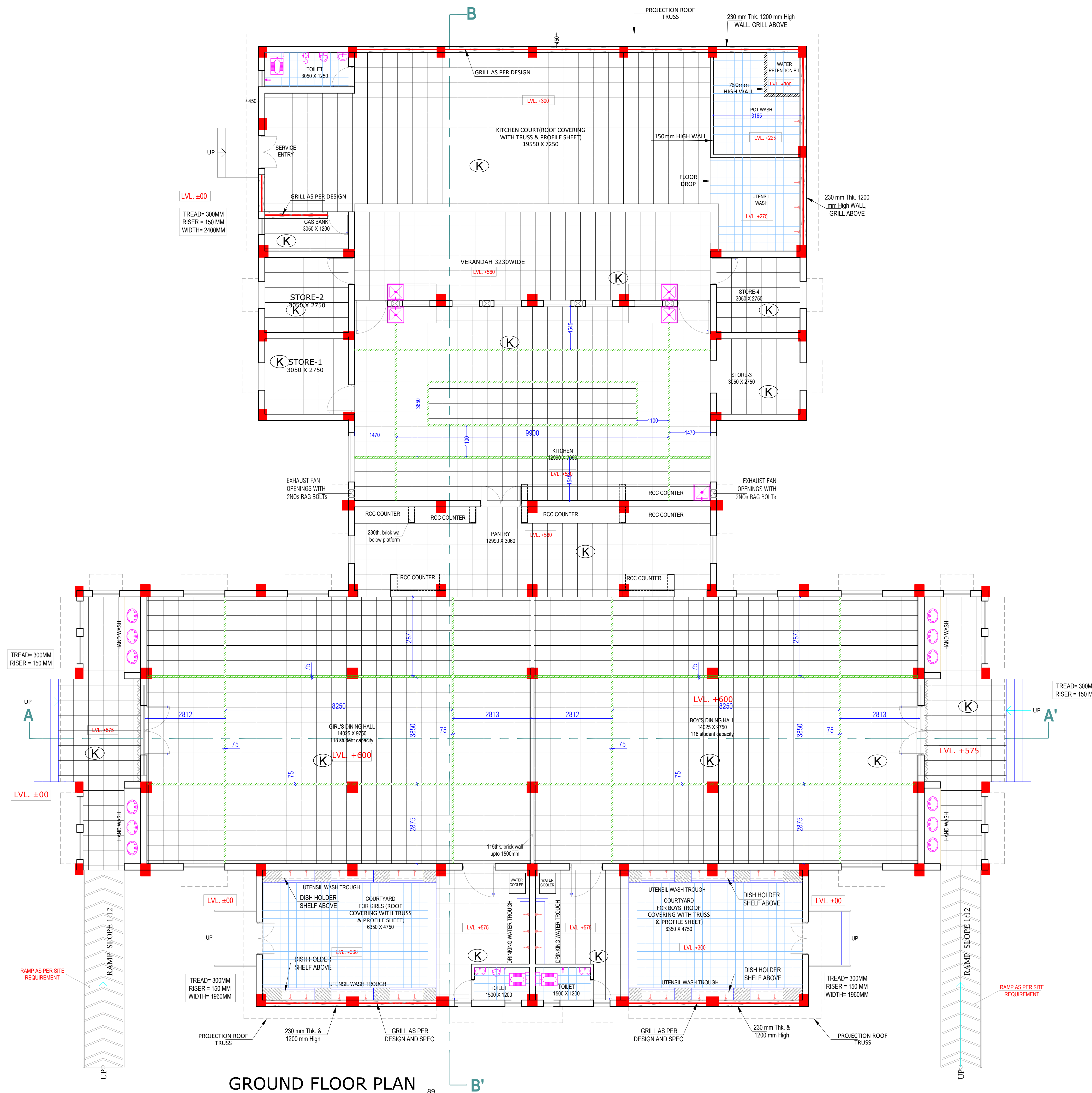
MS	MARBLE STRIPS AS PER DESIGN (APPROXIMATE@5% AREA)
(K)	KOTA STONE FLOORING WITH WHITE MARBLE STRIPS AS PER DESIGN (APPROXIMATE @ 5% AREA)
(C)	ANTISKID RECTIFIED CERAMIC TILE FLOORING
(MV)	MATT FINISHED ANTISKID VITRIFIED TILES
(G)	18mm THICK GRANITE COUNTER SLAB

CATEGORY : KITCHEN & DINING BLOCK

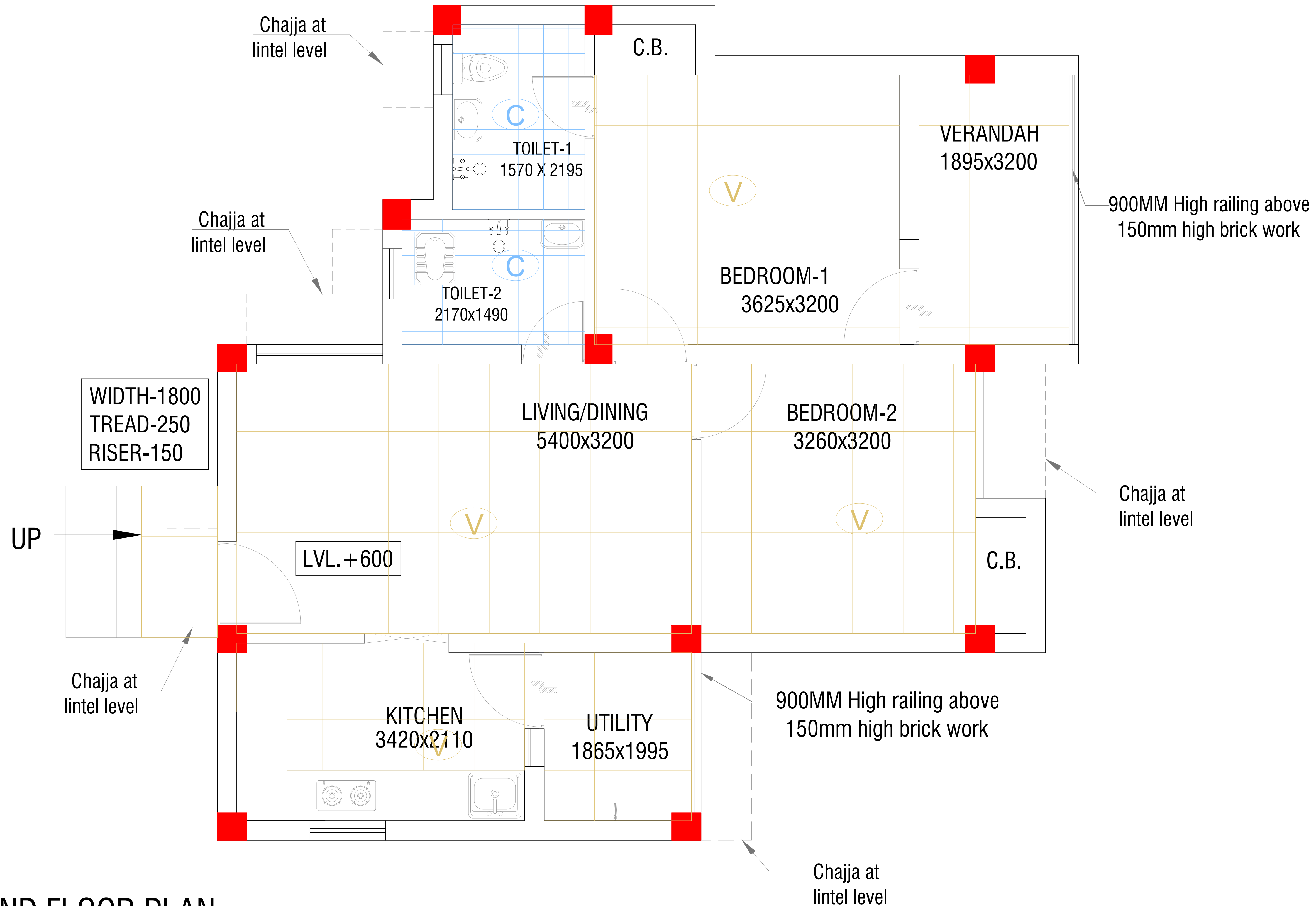
DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.-
EMRS NAME/K&D/AR_01

DATE - 09 MARCH 2023



GROUND FLOOR PLAN



GROUND FLOOR PLAN

N.K.
(NARENDRA KUMAR)
pk Approved 10/3/23
(Prasad Approved)
13/3/23
(R.K. Gang)
20/3/23
(SANDEEP SOOD)
A.P.K.
A D P Keshri
Chief Technical Consultant









LEGEND FLOORING	
(V)	RECTIFIED CERAMIC / VITRIFIED TILES
(G)	18mm THICK GRANITE COUNTER SLAB
(K)	KOTA STONE IN TREAD & RISERS OF STEPS, SKIRTING, DADO AND PILLARS LAID
(C)	ANTISKID RECTIFIED CERAMIC TILE

CATEGORY : WARDEN RESIDENCE

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.-
EMRS NAME/WR/AR_01

DATE - 09 MARCH 2023

JOHNSON TILES					
S NO.	TILES CATEGORY	CONCEPT		TILES DESCRIPTION	REFERENCE IMAGE
Tiles (Toilets, Kitchen & Dinning)					
1	TOILET TILES	CONCEPT 1		Emperia LT & DK (300x450)	
		CONCEPT 2		Kayla LT & DK (300x450)	
		CONCEPT 3		Axim Pink LT & DK (300x450)	
		CONCEPT 4		Montana LT & DK (300x450)	
1		CONCEPT 5		Zambia LT & DK (300x450)	
Tiles (Principal, Vice Principal & Staff)					
2	PVT FLOOR TILES (Homogempus Body)	CONCEPT 1	FLOOR TILE	S&P Crema Matt and Glossy (600X600)	
		CONCEPT 2	FLOOR TILE	S&P White Marbonite (600X600)	
		CONCEPT 3	FLOOR TILE	S&P Ivory Morbonite (600X600)	

pk Agrawal
10.3.23
(Pranod Agrawal)

NO. (Signature) 13/3/23

8-11 13/3/2023 .91

(Signature)

A D P Keshri

Chief Technical Consultant

Tiles (RAMP)					
3	Ramp	CONCEPT 1	FLOOR TILE	Tac Tiles Button (Endura) (300 x 300)	
		CONCEPT 2	FLOOR TILE	Linner (Endura) (300 x 300)	
		CONCEPT 3	FLOOR TILE	RAMP (300 x 300)	

N.K.
 (NARENDRA KUMAR)













P.K. Agrawal
 10.3.23
 (Pranod Agrawal)

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 (Pk Gang)

San SS
 13/3/2023.
 (SANDEEP SOOD)

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92
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Chief Technical Consultant

KAJARIA TILES					
S NO.	TILES CATEGORY	CONCEPT		TILES DESCRIPTION	REFERENCE IMAGE
Tiles (Toilets, Kitchen & Dinning)					
1	TOILET TILES	CONCEPT 1	WALL TILE	30X45 GREY EMPRESS LIGHT	
			WALL TILE	30X45 GREY EMPRESS DARK	
			FLOOR TILE	30X30 SPRING LEAVES GRIS	
		CONCEPT 2	WALL TILE	30X45 ISTANBUL CREMA	
			WALL TILE	30X45 BOLIVIA MARFIL	
			FLOOR TILE	30X30 CHICAGO BLANCO	
		CONCEPT 3	WALL TILE	30X45 LUX CREMA	
			WALL TILE	30X45 LUX BEIGE	
			FLOOR TILE	30X30 DURBAN MARFIL	
		CONCEPT 4	WALL TILE	30X45 ITALIAN MARBLE LIGHT	
			WALL TILE	30X45 ITALIAN MARBLE DARK	
			FLOOR TILE	30X30 BOLIVIA MARFIL	



pk Agrawal
10.3.23
(Pranod Agrawal)

APK

ADK (NARENDRA KUMAR) (AK Gang) 13/3/23

8-11-93 13/3/2023.93

A D P Keshri

Tiles (Principal, Vice Principal & Staff)					
2	PVT (Polished Vitrified Tiles) FLOOR TILES (Homogempus Body)	CONCEPT 1	FLOOR TILE	60X60 K6602 (POLISHED)	
		CONCEPT 2	FLOOR TILE	60X60 K6603 (POLISHED)	

NK
 (NARENDRA KUMAR)

pk Agrawal
 10.3.23
 (Pranod Agrawal)

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 (Pk Gang)

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 13/3/2023.
 (SANDEEP SOOD)

APK

94 **A D P Keshri**
Chief Technical Consultant

NITCO TILES					
S.NO.	TILES CATEGORY	CONCEPT		TILES DESCRIPTION	REFERENCE IMAGE
Tiles (Toilets, Kitchen & Dinning)					
1	TOILET TILES	CONCEPT 1	WALL TILE	Wall : Liam Grey LT(300 x 450)	
			WALL TILE	Wall : Liam Grey Dark(300 x 450)	
			FLOOR TILE	Floor : Crust Liam Grey (300 x 300)	
		CONCEPT 2	WALL TILE	Wall : Grigio Venzo LT (300 x 450)	
			WALL TILE	Wall : Grigio Venzo (300 x 450)	
			FLOOR TILE	Floor : Crust Grigio Venzo (300 x 450)	
		CONCEPT 3	WALL TILE	Wall : Grey Cloud LT (300 x 450)	
			WALL TILE	Wall : Grey Cloud (300 x 450)	
			FLOOR TILE	Floor : Crust Grey Cloud	
		CONCEPT 4	WALL TILE	Wall : Bianco Marfil LT(300 x 300)	
			WALL TILE	Wall : Bianco Marfil(300 x 300)	
			FLOOR TILE	Floor : Rio Cremadune(300 x 300)	

NK
(NARENDRA KUMAR)

P K Agrawal
10.3.23






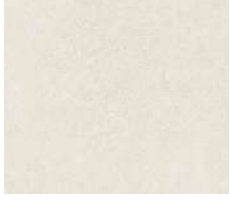



Leant 13/3/23
(Rk Gang)

8m 95
13/3/2023.

A P Keshri

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A D P Keshri

			WALL TILE	Wall : Coaster White LT(300 x 300)	
			WALL TILE	Floor : Crust Coaster White(300 x 300)	
		CONCEPT 5	FLOOR TILE	Jaipur Moti (300 x 300)	
			FLOOR TILE	Maharaja Offwhite (300 x 300)	
Tiles (Principal, Vice Principal & Staff)					
2	PVT (Polished Vitrefied Tiles) FLOOR TILES (Homogempus Body)	CONCEPT 1	FLOOR TILE	Ontario Gris (600 x 600)	
		CONCEPT 2	FLOOR TILE	Sandstone Khaki (600 x 600)	
		CONCEPT 3	FLOOR TILE	Sandstone Dune (600 x 600)	
		CONCEPT 4	FLOOR TILE	Sandstone Lt Grey (600 x 600)	
2		CONCEPT 5	FLOOR TILE	Nuria Mist (600 x 600)	

p k Agrawal
 10.3.23
 (Pranod Agrawal)




APK

NK

13/3/23

8-11-23
 13/3/2023 .96

A D P Keshri

Tiles (Portico)					
2	Porch Lobby	CONCEPT 1	FLOOR TILE	Asterix Décor(300x300)	
		CONCEPT 2	FLOOR TILE	Landscape Iris (300x300)	
		CONCEPT 3	FLOOR TILE	Bloom Dust (300x300)	

NK
 (NARENDRA KUMAR)






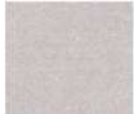
p k Agrawal
 10.3.23
 (Pranod Agrawal)

leant 13/3/23
 (Pk Gang)

San SS
 13/3/2023
 (SANDEEP SOOD)

APKeshri

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 Chief Technical Consultant

SOMANY TILES					
S NO.	TILES CATEGORY	CONCEPT		TILES DESCRIPTION	REFERENCE IMAGE
Tiles (Toilets, Kitchen & Dinning)					
1	TOILET TILES	CONCEPT 1	WALL TILE	Morbido Light 300x450	
			WALL TILE	Morbido Dark 300x450	
			FLOOR TILE	EC F Morbido Dark 300x300	
		CONCEPT 2	WALL TILE	Ampir Light 300x450	
			WALL TILE	Ampir Dark 300x450	
			FLOOR TILE	EC Neo Bianco 300x300	
		CONCEPT 3	WALL TILE	Grezzo Light 300x450	
			WALL TILE	Grezzo Dark 300x450	
			FLOOR TILE	EC Sprinkle Grey 300x300	

N.K.
 (NARENDRA KUMAR)

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 10.3.23
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San 98
 13/3/2023.
 (SANDEEP SOOD)

A.P. Keshri

1		CONCEPT 4	WALL TILE	Lozano Light 300x450	
			WALL TILE	Lozano Dark 300x450	
			FLOOR TILE	EC F Lozano Dark 300x300	
		CONCEPT 5	WALL TILE	30X45 -ROGERO LIGHT	
			WALL TILE	30X45 -ROGERO DARK	
			FLOOR TILE	30X30 -LIETO LIGHT	

Tiles (Principal, Vice Principal & Staff)

2	PVT FLOOR TILES (Homogempus Body)	CONCEPT 1	FLOOR TILE	Rocken Crema 600x600	
		CONCEPT 2	FLOOR TILE	Rocken Grey Light 600x600	
		CONCEPT 3	FLOOR TILE	Rocken Copper 600x600	

N.K.

(NARENDRA KUMAR)

P. K. Agrawal
10.3.23

Leant 13/3/23

(Rk Gang)





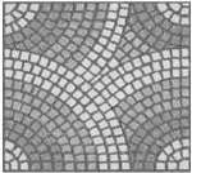
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13/3/2023.


APKeshri


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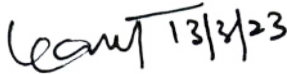
A D P Keshri

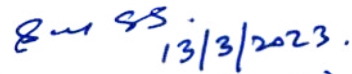
Chief Technical Consultant


Tiles (Portico)					
3	Portico	CONCEPT 1	FLOOR TILE	Novel Nasca Gris 300x300	
		CONCEPT 2	FLOOR TILE	Ciaz Brown 400x400	
		CONCEPT 3	FLOOR TILE	Casino Blue 400x400	
		CONCEPT 4	FLOOR TILE	Deccan Natural 300x300	
		CONCEPT 5	FLOOR TILE	Flaix Grey 300x300	


 (NARENDRA KUMAR)


 10.3.23
 (Premod Agrawal)


 13/3/23
 (R.K. Gang)


 13/3/2023.
 (SANDEEP SOOD)



100
A D P Keshri
Chief Technical Consultant

Tiles (Ramp)					
4	Ramp	CONCEPT 1	FLOOR TILE	Nastro Terracotta 300x300	
		CONCEPT 2	FLOOR TILE	Plaza Terracotta 300x300	
		CONCEPT 3	FLOOR TILE	Plaza Star Beige 300x300	

N.K.
 (NARENDRA KUMAR)

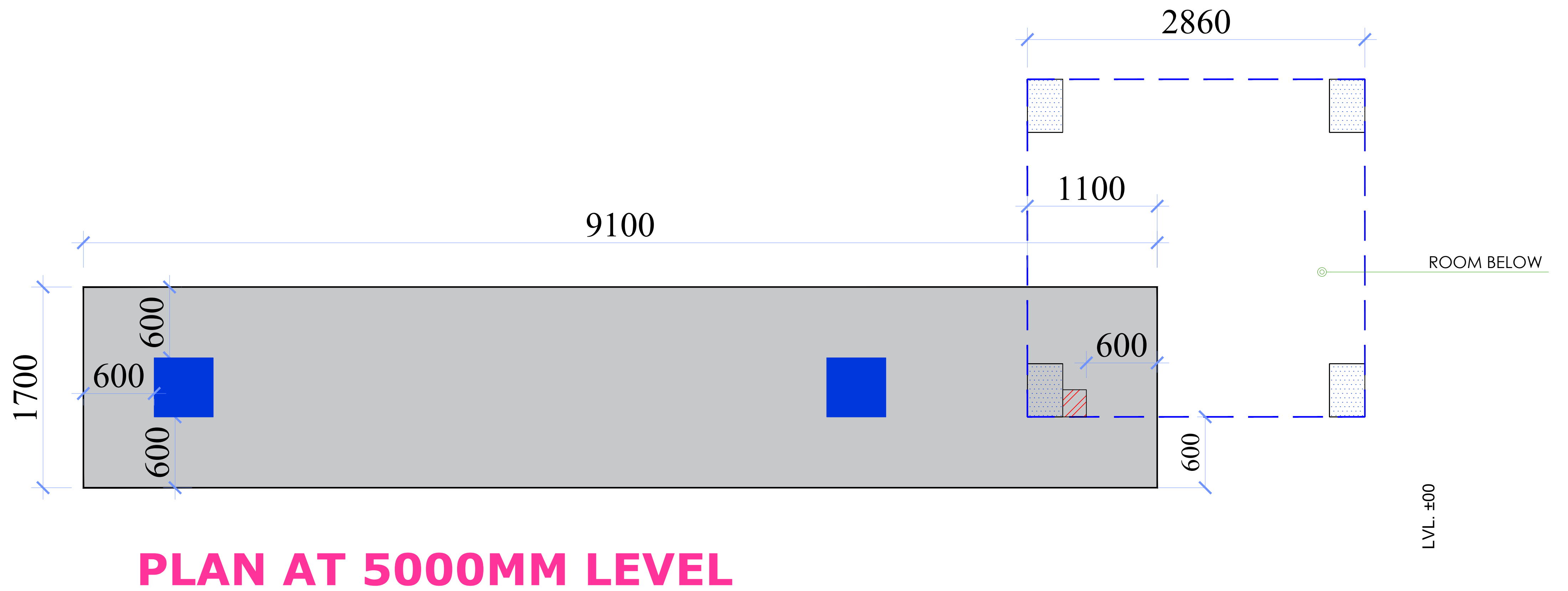
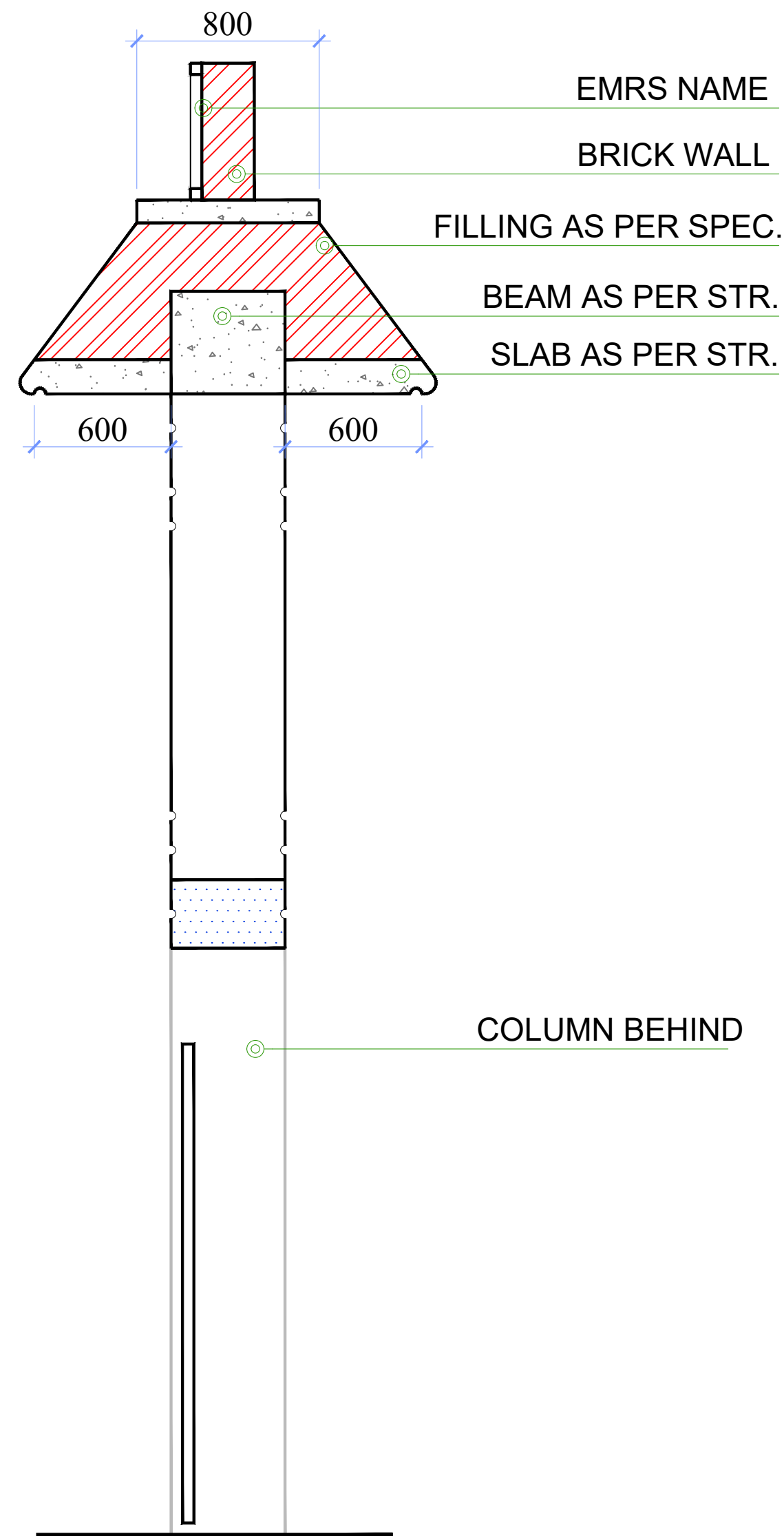
P.K. Agrawal
 10.3.23
 (Pranod Agrawal)

Leant 13/3/23
 (R.K. Gang)

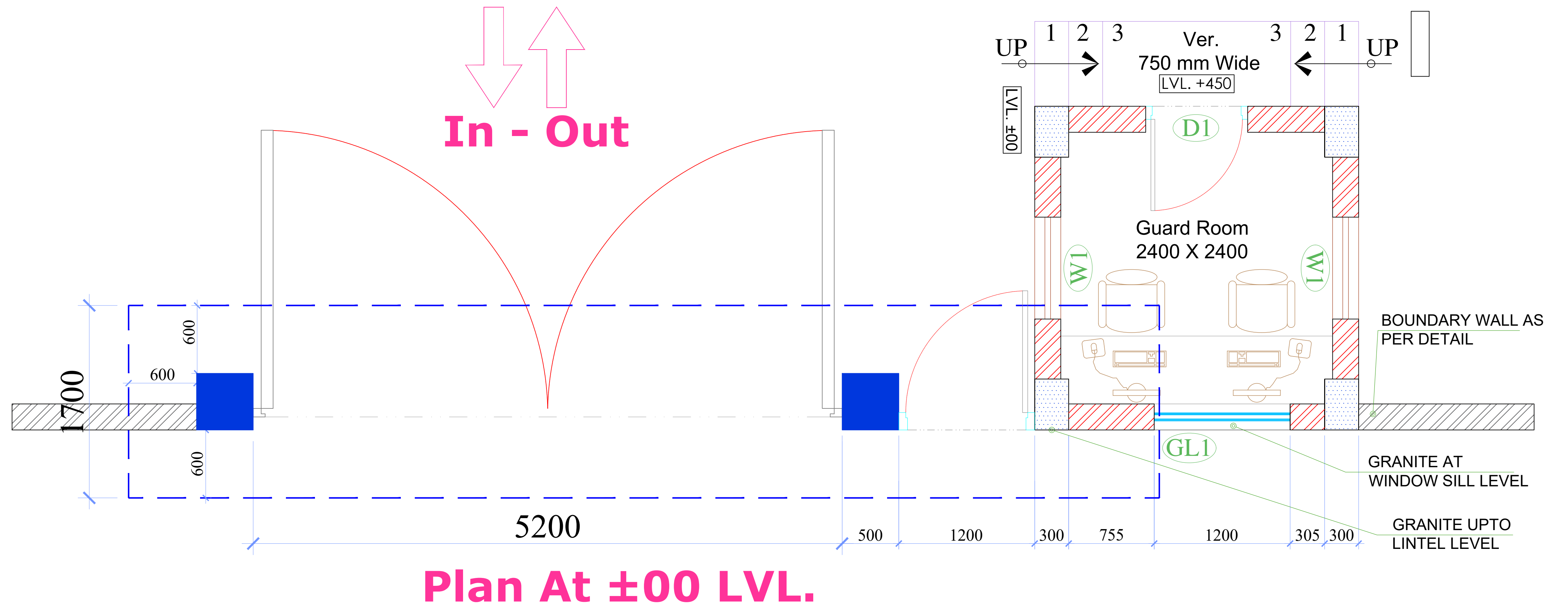
S.S.
 13/3/2023.
 (SANDEEP SOOD)

A.P. Keshri

A D P Keshri
Chief Technical Consultant
 101



PLAN AT 5000MM LEVEL



Plan At ±00 LVL.

N.K.
 (NARENDRA KUMAR) 10/3/23
pk Agrawal
 (Pranod Agrawal) 13/3/2023
Sanjiv
 (R.K. Gang) 13/3/2023
Sandeep Sood
 (SANDEEP SOOD)
A.P.K.
 A D P Keshri
 Chief Technical Consultant

DATE - 09 MARCH 2023

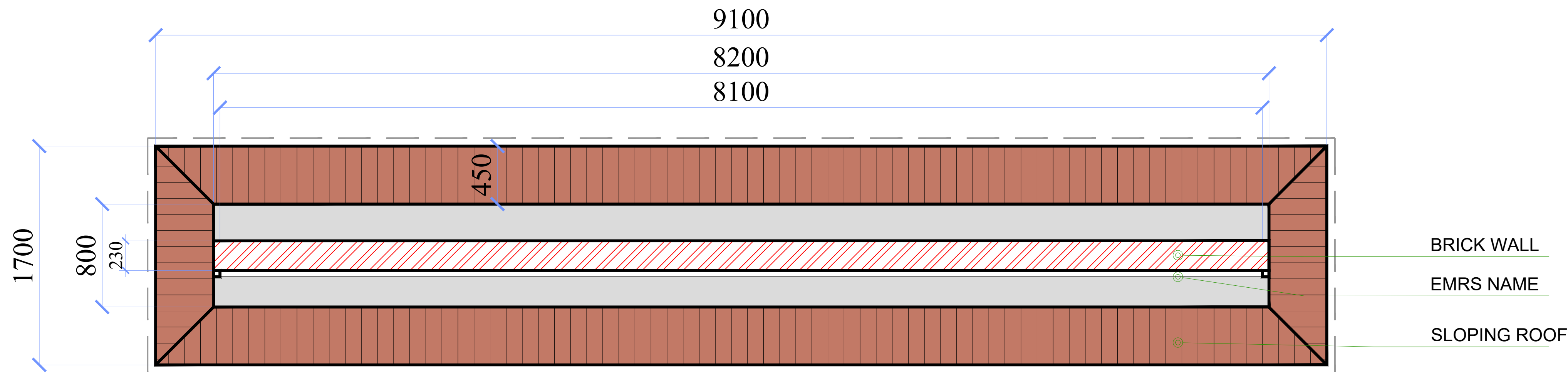
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 UNDER INTIMATION TO NESTS PSU MAY ADOPT
 DESIGN BASED ON LOCAL ETHICS & CULTURE

DWG. NO.-
 EMRS NAME/MISC/EG/AR_01

ENTRANCE GATE
 FLOOR PLAN, SECTION

SCALE:

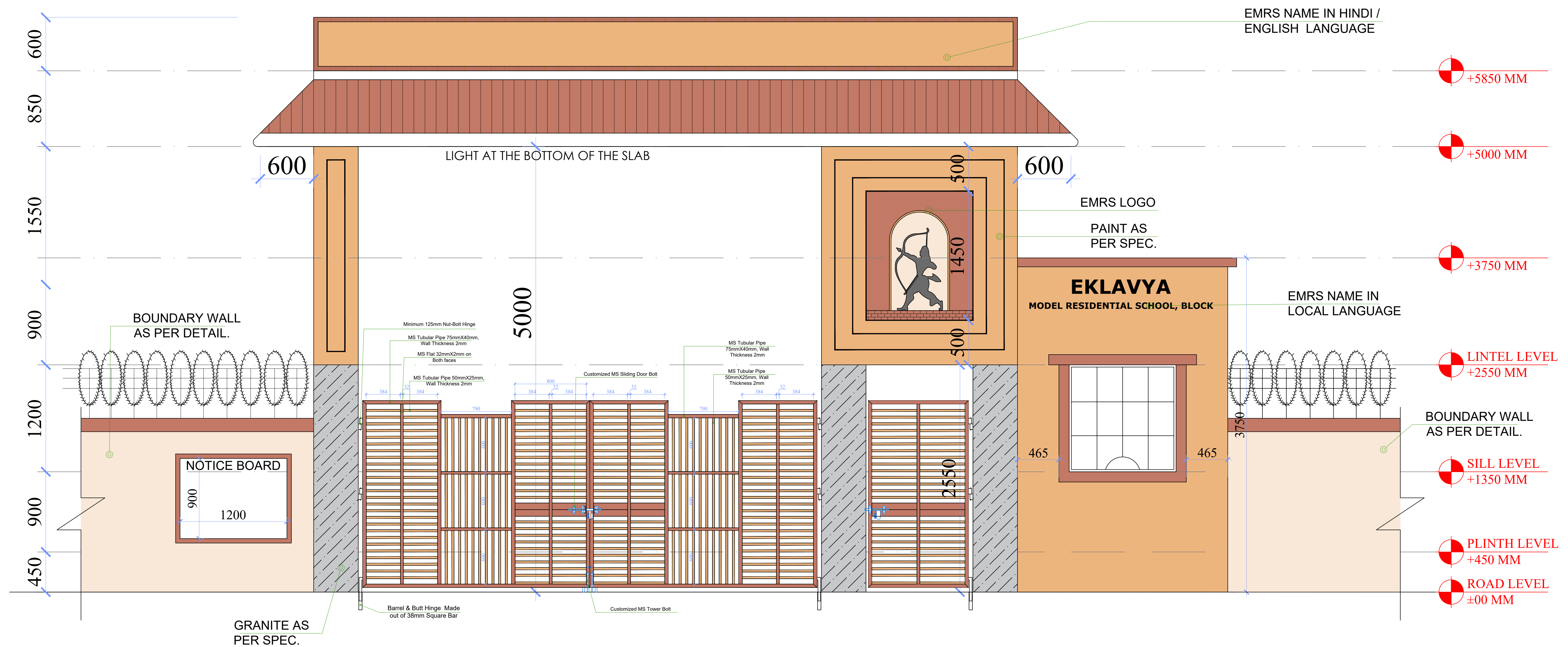
MINISTRY OF TRIBAL AFFAIRS
 NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)



PLAN AT 6400MM LEVEL

N.K.
 (NARENDRA KUMAR)
 p.k. Agrawal 10.3.23
 (Planned Approval)
 leant 13/4/23
 (Pk Gang)
 sur ss 13/3/2023.
 (SANDEEP SOOD)

A.P.K.
A D P Keshri
 Chief Technical Consultant



DATE - 09 MARCH 2023

NOTES:
 UNDER INTIMATION TO NESTS PSU MAY ADOPT
 DESIGN BASED ON LOCAL ETHICS & CULTURE

DWG. NO.-
 EMRS NAME/MISC/EG/AR_02

SCALE:

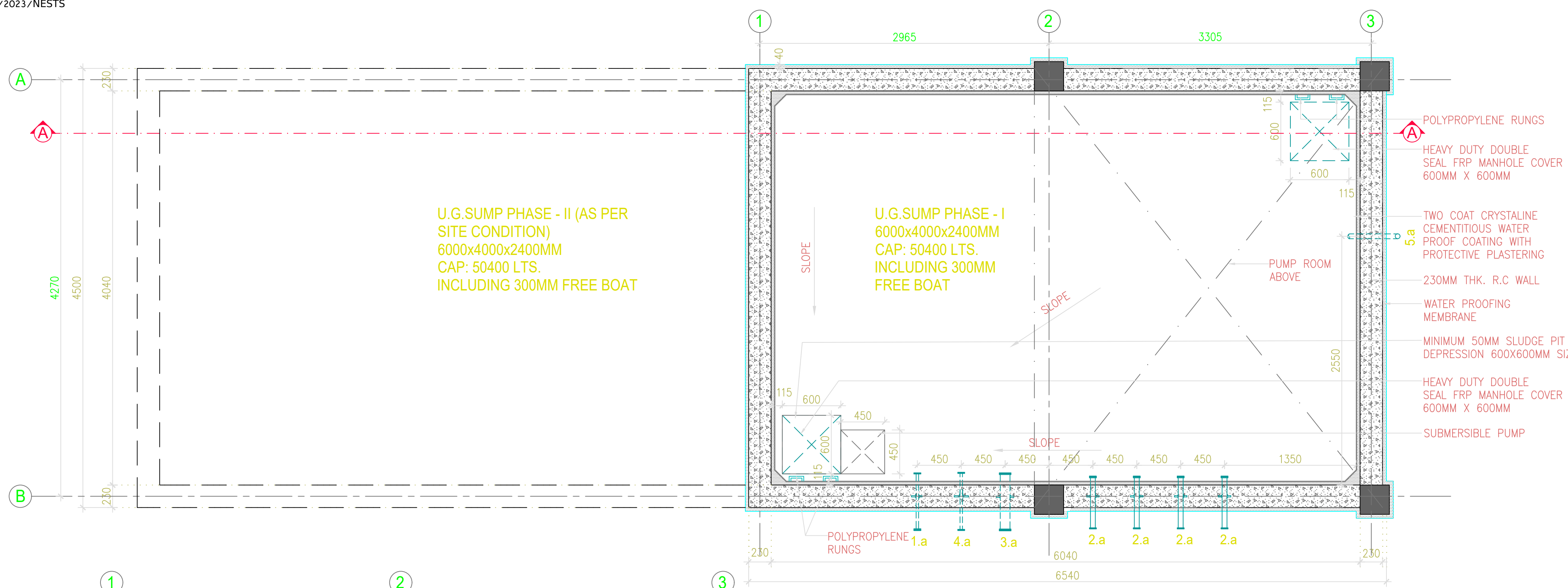
MINISTRY OF TRIBAL AFFAIRS
 NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

ENTRANCE GATE
 ELEVATION, TERRACE PLAN

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

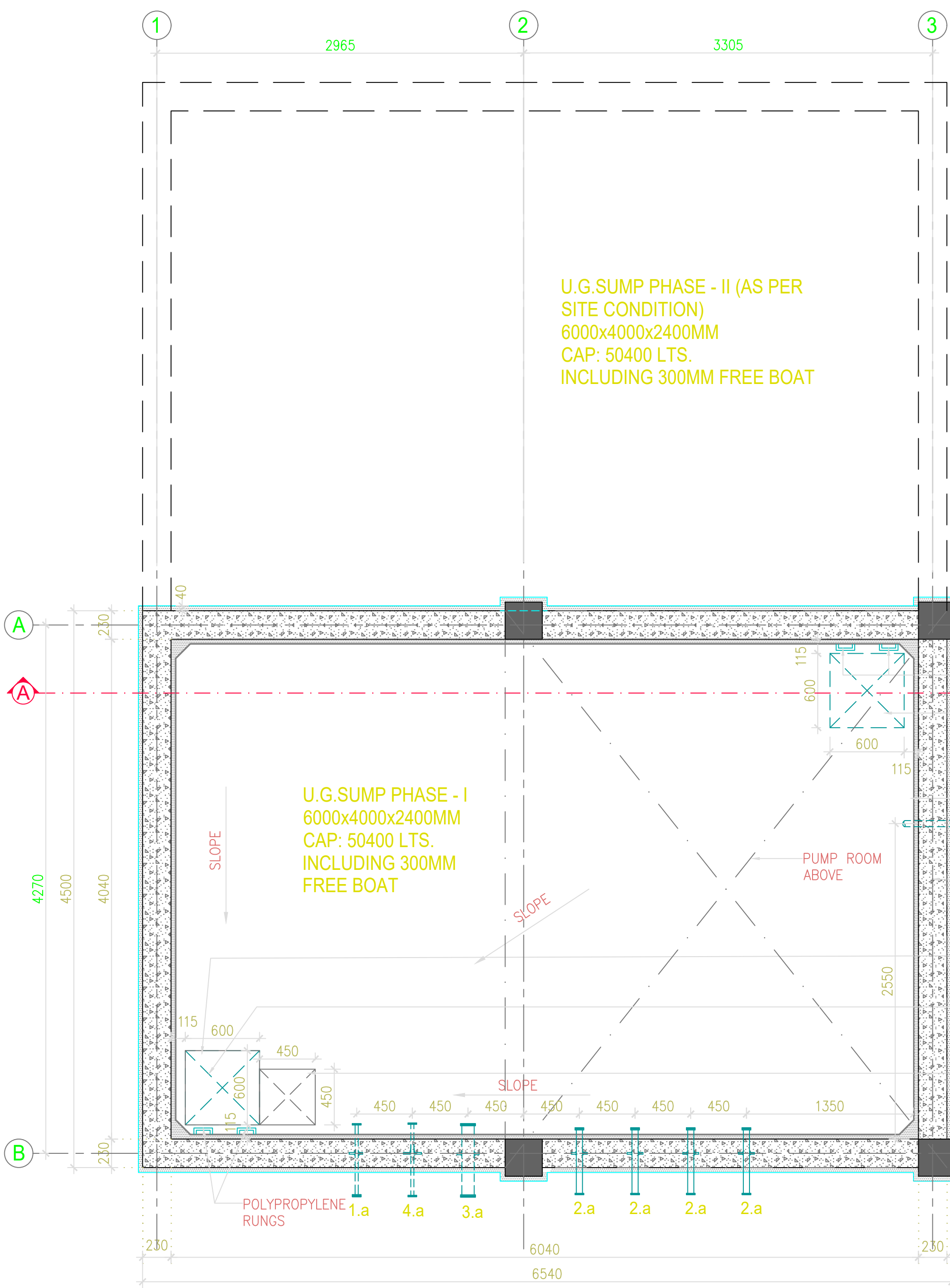
CLIENT -

**GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS**

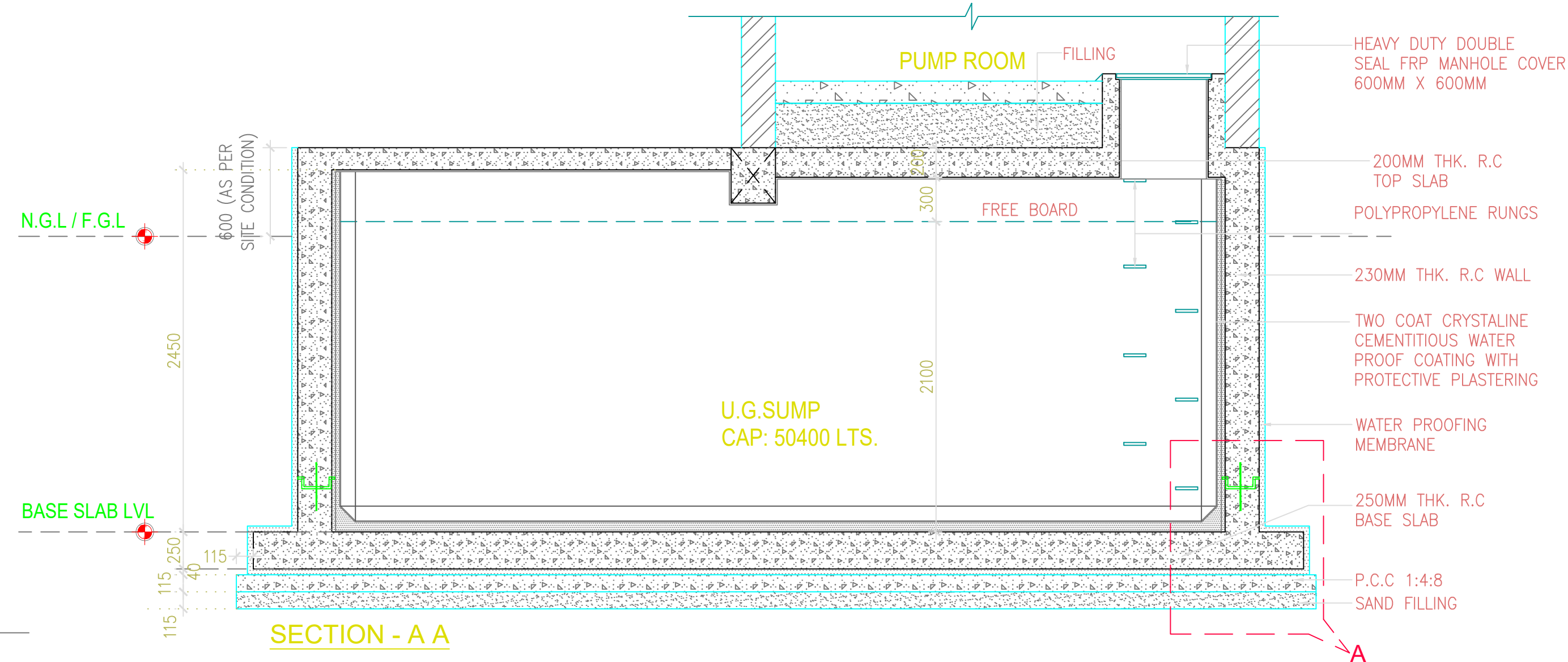


**U.G. SUMP PLAN
OPTION - 2**

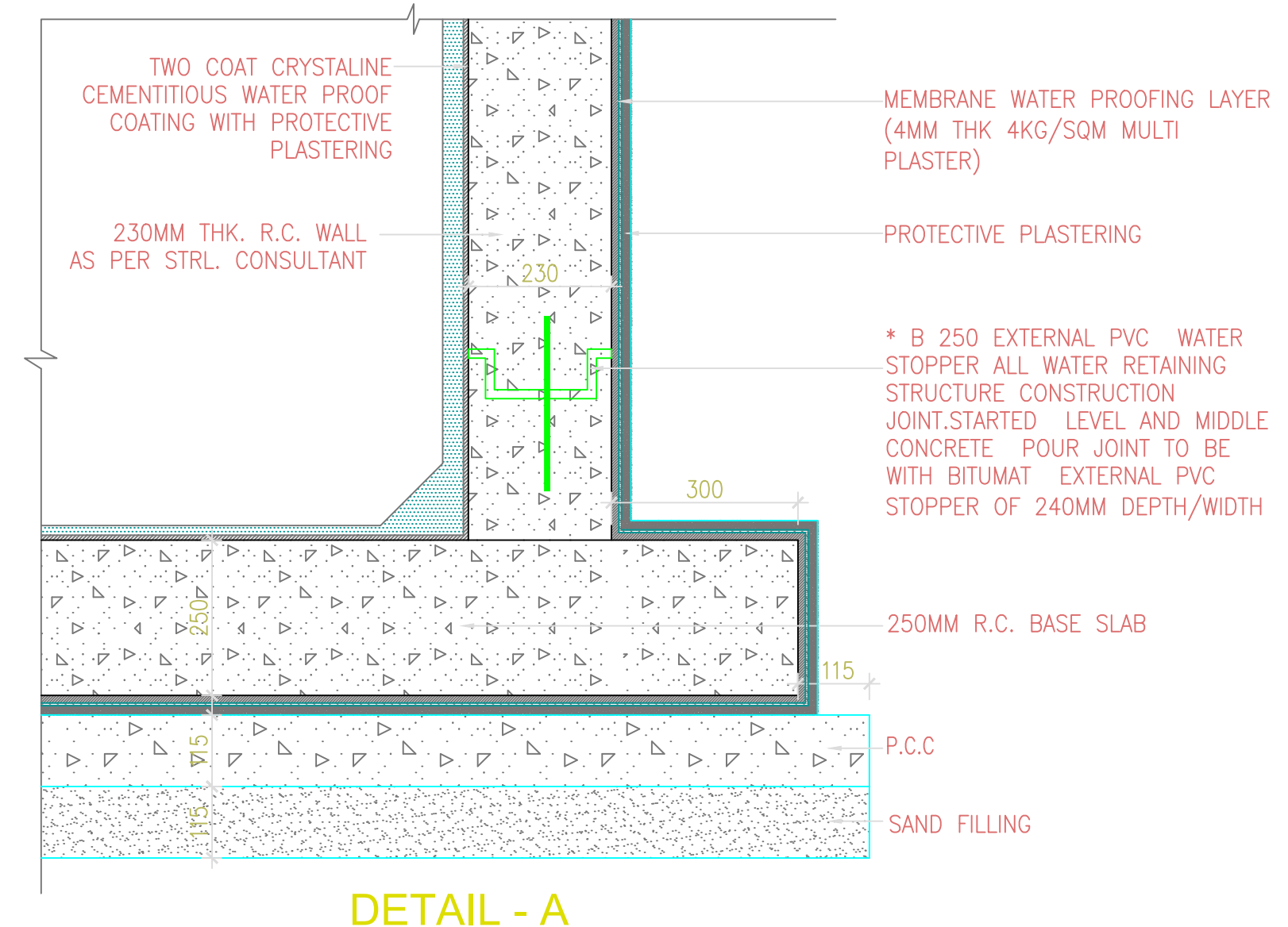
DETAIL OF PUDDLE FLANGE(P.F.) (REFERENCE FROM RCC COVER SLAB BOTTOM)					
S. NO	SYMBOL	DESCRIPTION	PF DIA.	CENTER OF PF LEVEL	MAKE
1	1.a	ELECTRICAL POWER SUPPLY (TO BE FIXED HORIZONTALLY)	25MM	-150MM	G.I. PIPE TATA-B CLASS
2	2.a	OUTLET PIPE FOR BORE WATER TO OVER HEAD TANK (TO BE FIXED HORIZONTALLY) (4NOS)	50MM	-150MM	G.I. PIPE TATA-B CLASS
3	3.a	INLET PIPE FOR TRUCK WATER TO SUMP (TO BE FIXED HORIZONTALLY)	100MM	-150MM	G.I. PIPE TATA-B CLASS
4	4.a	INLET PIPE FOR BORE WATER (TO BE FIXED HORIZONTALLY)	50MM	AS @ SITE	G.I. PIPE TATA-B CLASS
5	5.a	VENT PIPE (TO BE FIXED VERTICALLY)	50MM	TOP SLAB	G.I. PIPE TATA-B CLASS



**U.G. SUMP PLAN
OPTION - 1**



SECTION - A A



DETAIL - A

N.K.
(NARENDRA KUMAR)
pk approved 10.12.23
(Anand Approved)
10/13/23
(R.K. Gang)
2nd SS 15/3/2023.
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : **SUMP**

DRAWING TITLE : **FLOOR PLAN, SECTION**

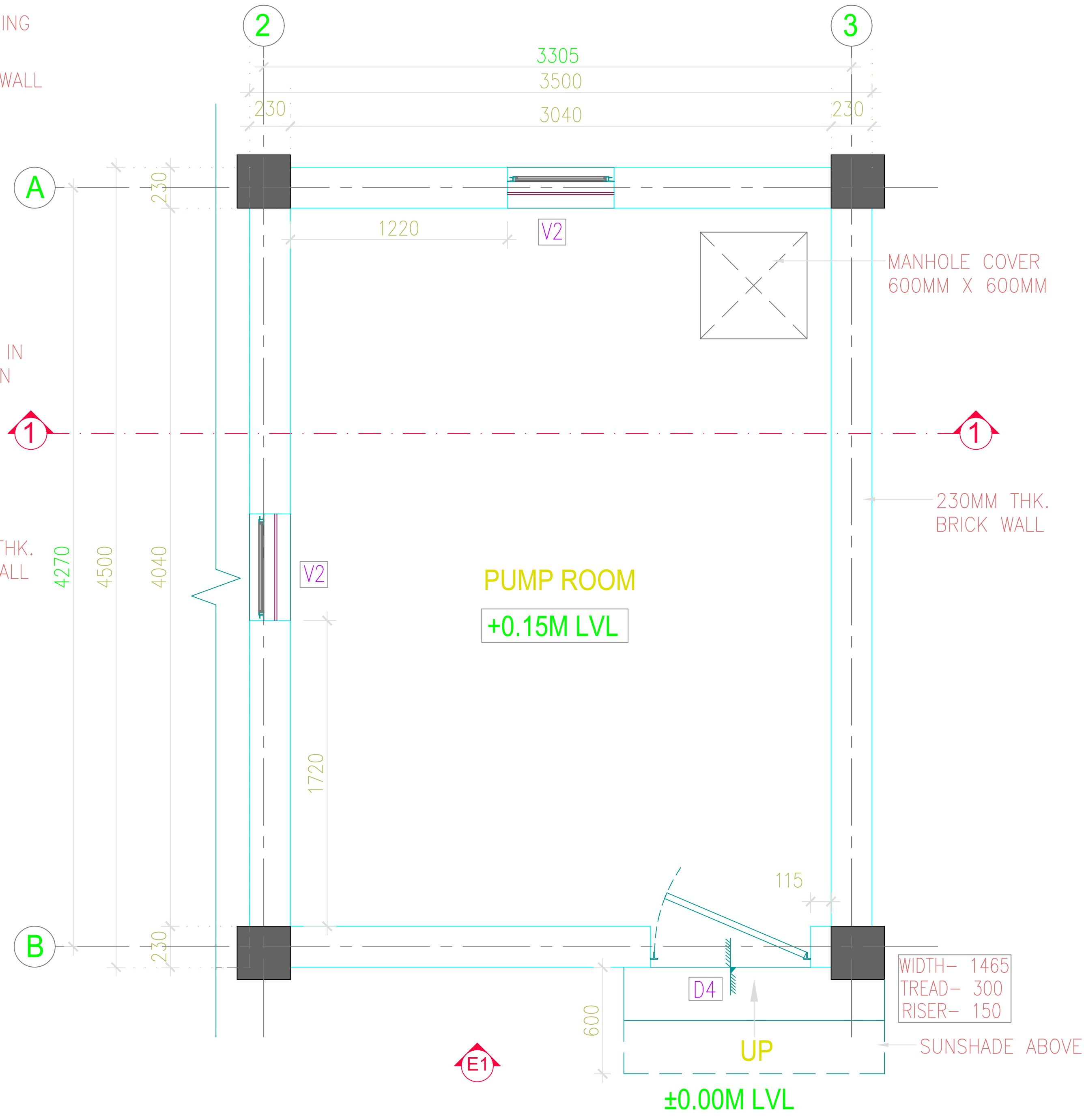
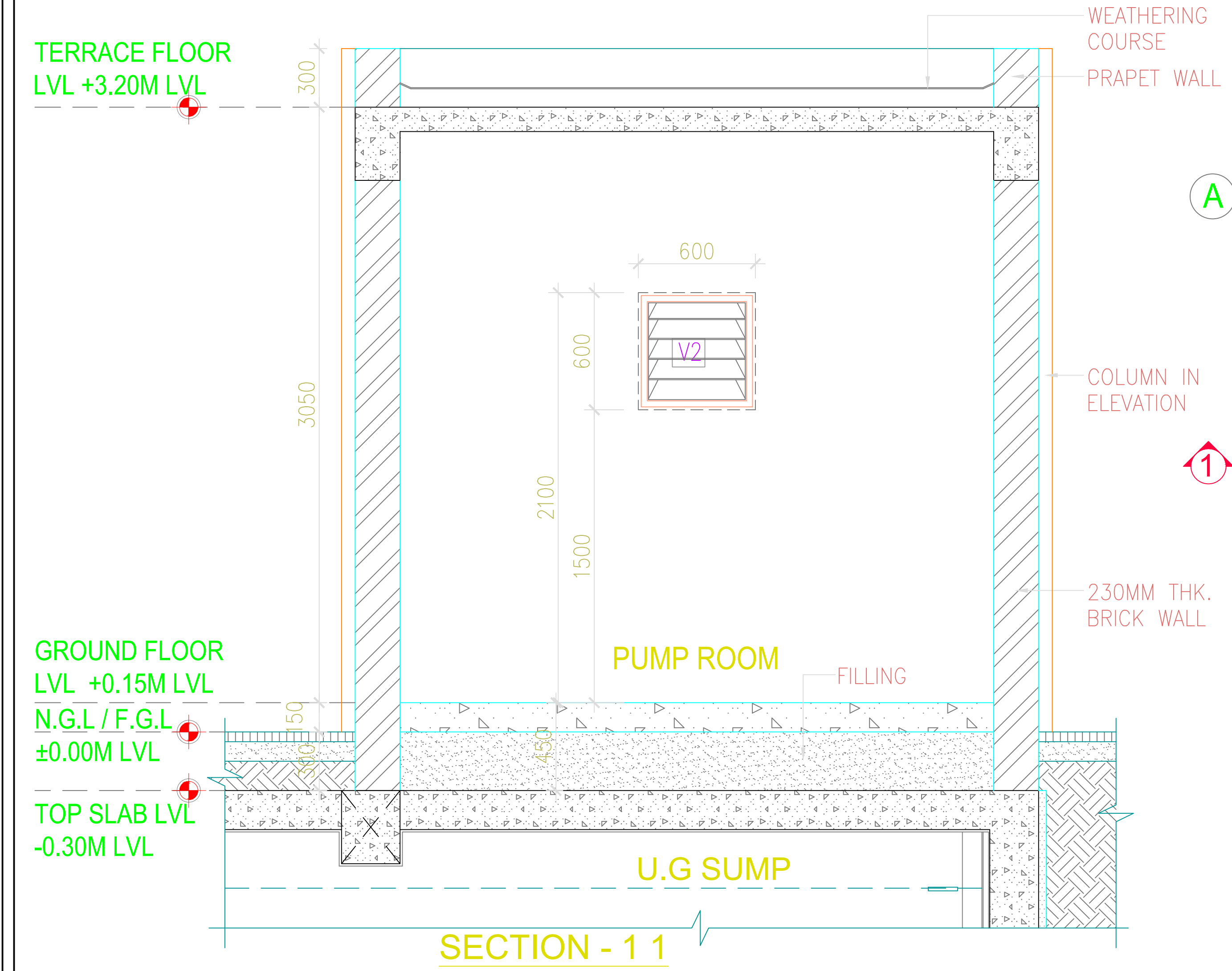
DWG. NO.-
EMRS NAME/MISC/SUMP/AR_01

DATE - 09 MARCH 2023

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

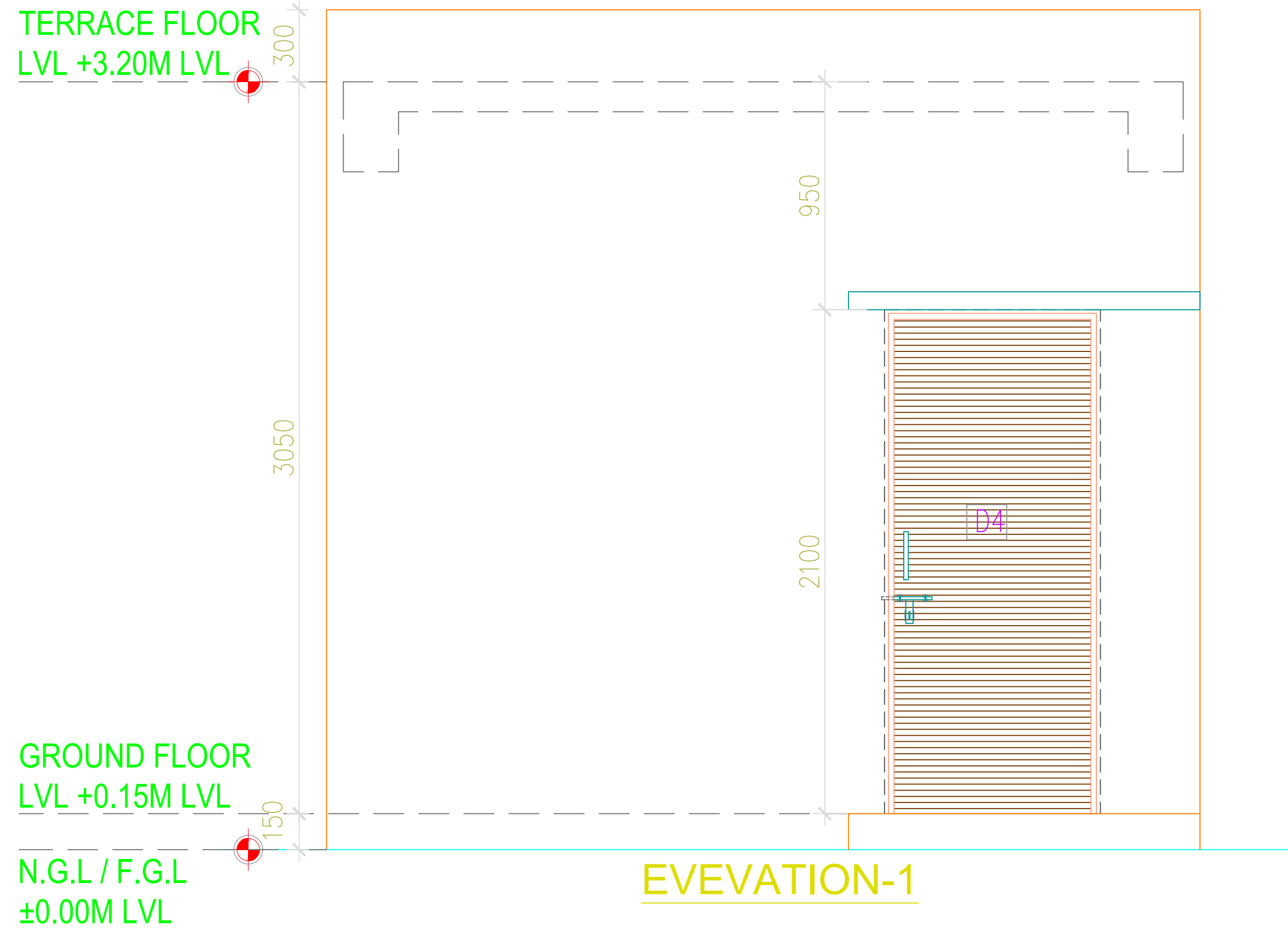
CLIENT -

**GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS**



PUMP ROOM PLAN

PUMP ROOM						
S.NO	TYPE	DESCRIPTION	SIZE	SILL LEVEL	GROUND FLOOR	FRAME SIZE
01	D4	DOOR 4	900X2100	-	01	T-IRON FRAME 40X40X6MM
02	V2	VENTILATOR 2	600X600	1500	02	STEEL GLAZED WINDOW Z - SECTION
GRAND TOTAL					03	



EVEVATION-1

N.K.
(NARENDRA KUMAR)
pk Approved 10.3.23
(Prasad Approved)
Count 13/3/23
(R.K. Gang)
2nd SS 13/3/23.
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : PUMP ROOM

DRAWING TITLE : FLOOR PLAN, SECTION

DWG. NO.-
EMRS NAME/MISC/PUMP ROOM/AR_01

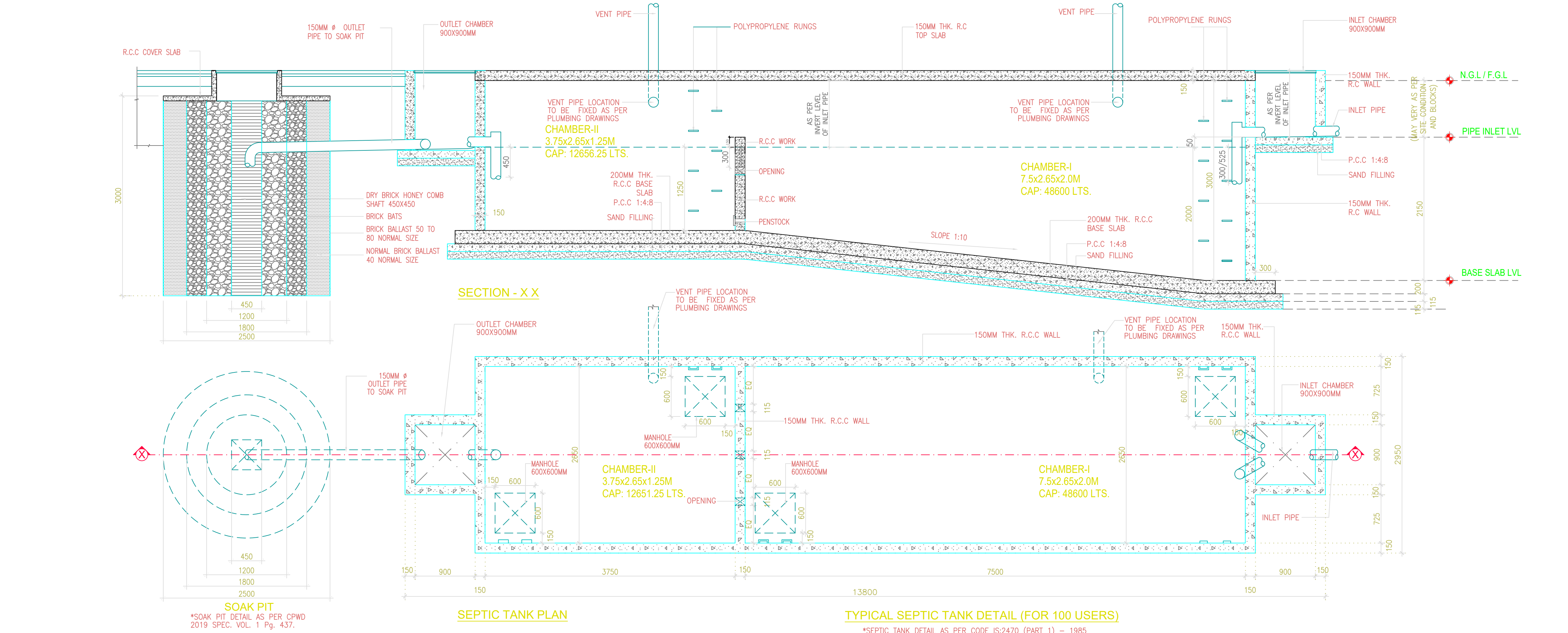
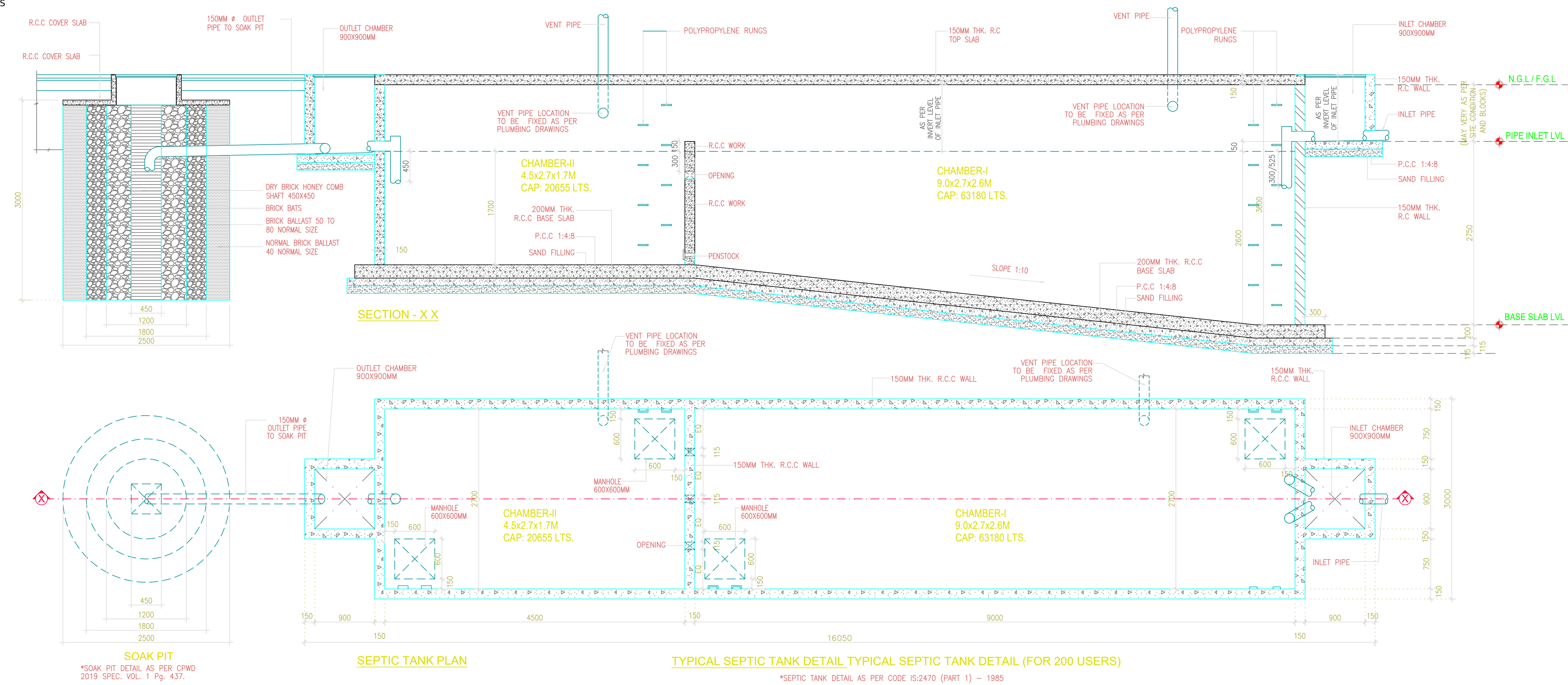
DATE - 09 MARCH 2023

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

**GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION
SOCIETY FOR TRIBAL STUDENTS**

- NOTE-
1. TOP SLAB OF SEPTIC TANK SHOULD BE 150 / 300 MM ABOVE THE FORMATION LEVEL.
 2. INLET LEVEL IS AS PER THE SLOPE OF THE INLET PIPE.



N.K.
 (NARENDRA KUMAR)
 p.k. approval 10.3.23
 (Approved Approval)
 (CAUT 13/3/23
 (K Gang)
 8th 95 15/3/2023.
 (SANDEEP SOOD)

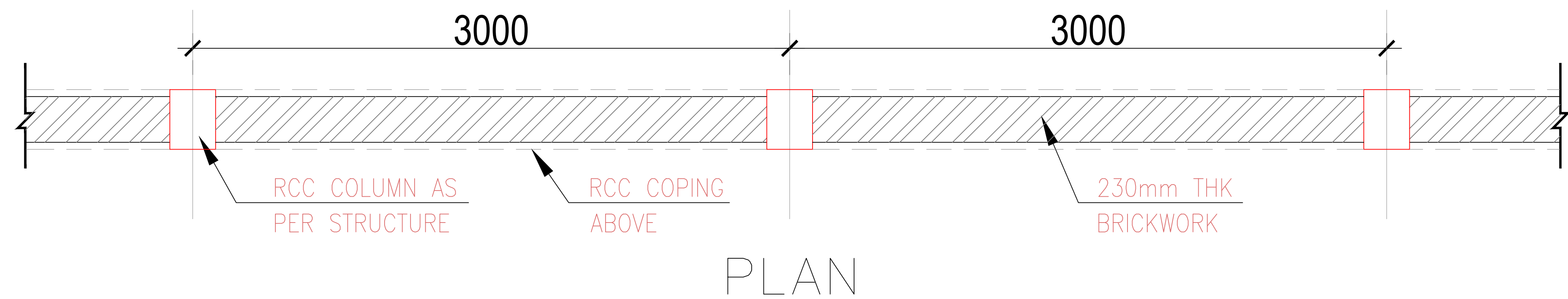
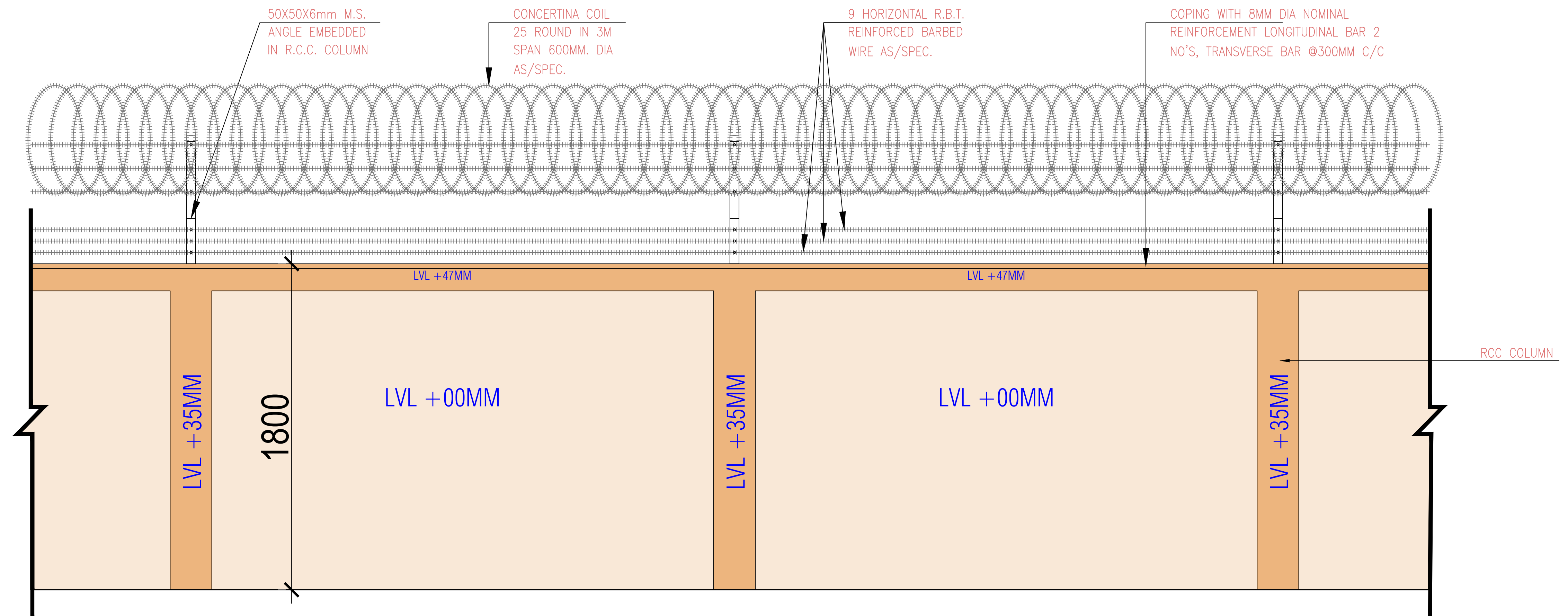
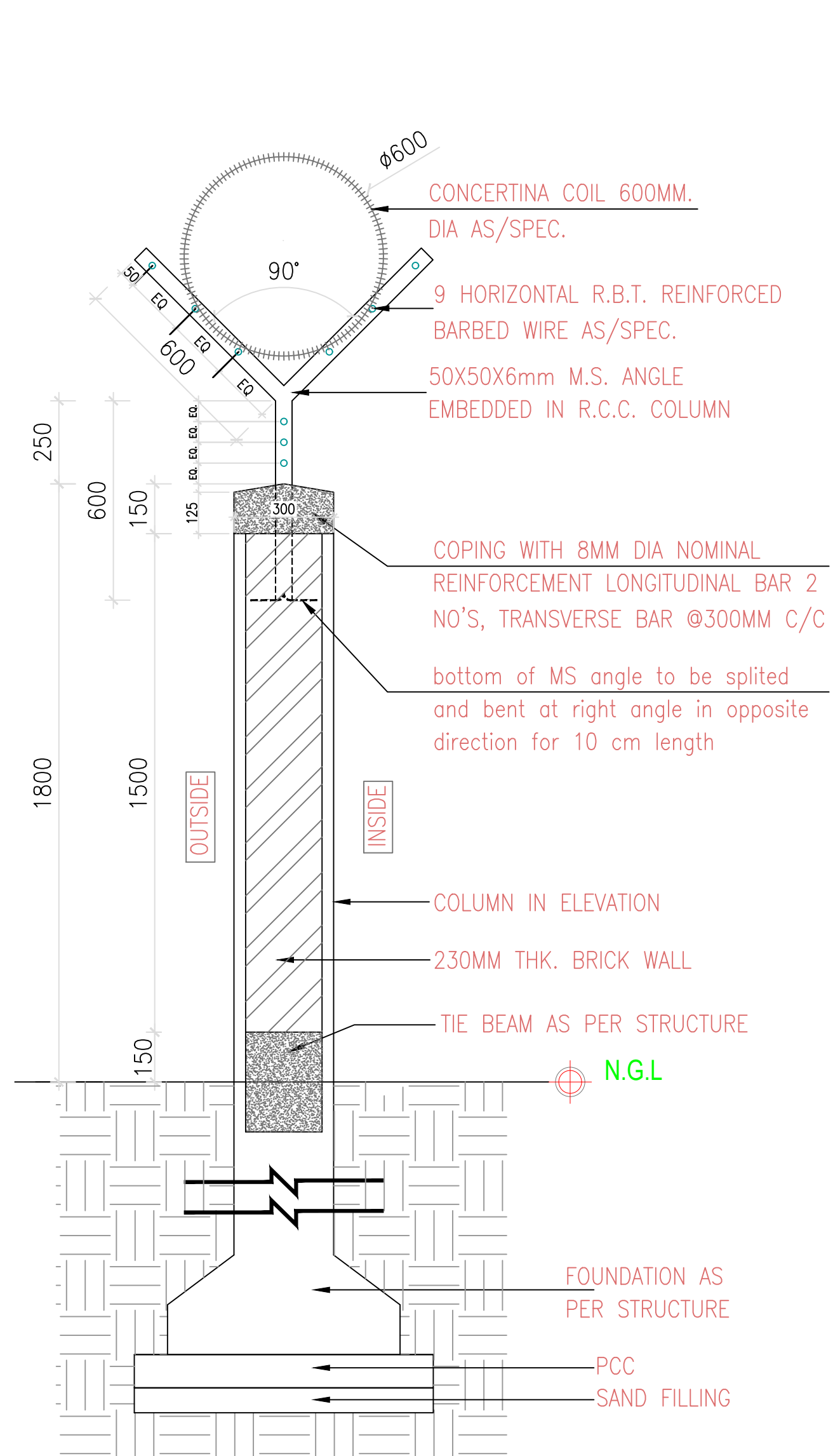
A.P.K.
A D P Keshri
 Chief Technical Consultant

CATEGORY : SEPTIC TANK 200 USER AND 100 USER

DRAWING TITLE : FLOOR PLAN, SECTION

DWG. NO.- EMRS NAME/MISC/SEPTIC TANK/AR_01

DATE - 09 MARCH 2023



N.K.
 (NARENDRA KUMAR)
 pk Agrawal 10.3.23
 (Prasad Agrawal)
 13/3/23
 (Rk Gang)
 13/3/2023.
 (SANDEEP SOOD)

A.P.K.
 A D P Keshri
 Chief Technical Consultant

DATE - 09 MARCH 2023

NOTES-
 25MM THK EXPANSION JOINT
 AT EVERY 15M INTERVAL

DWG. NO.-
 EMRS NAME/MISC/BW/AR_01

BOUNDARY WALL
 TYPICAL PLAN, ELEVATION, SECTION

MINISTRY OF TRIBAL AFFAIRS
 NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

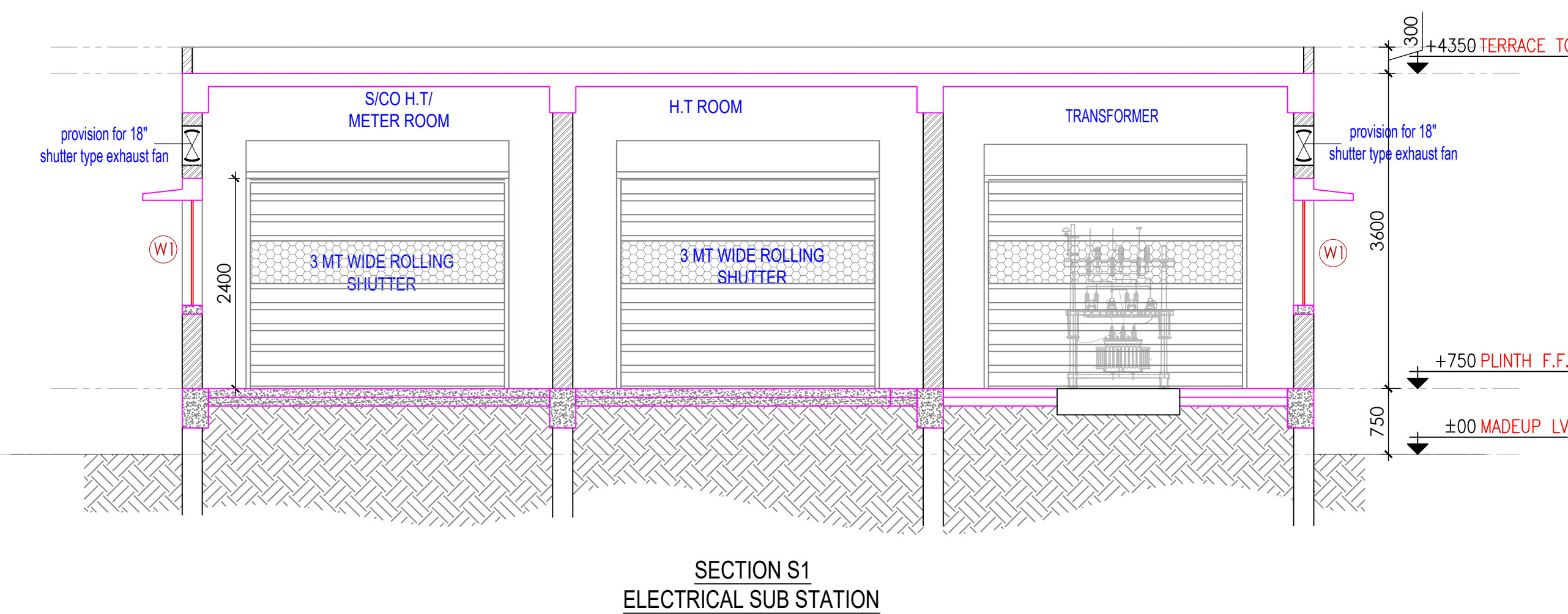
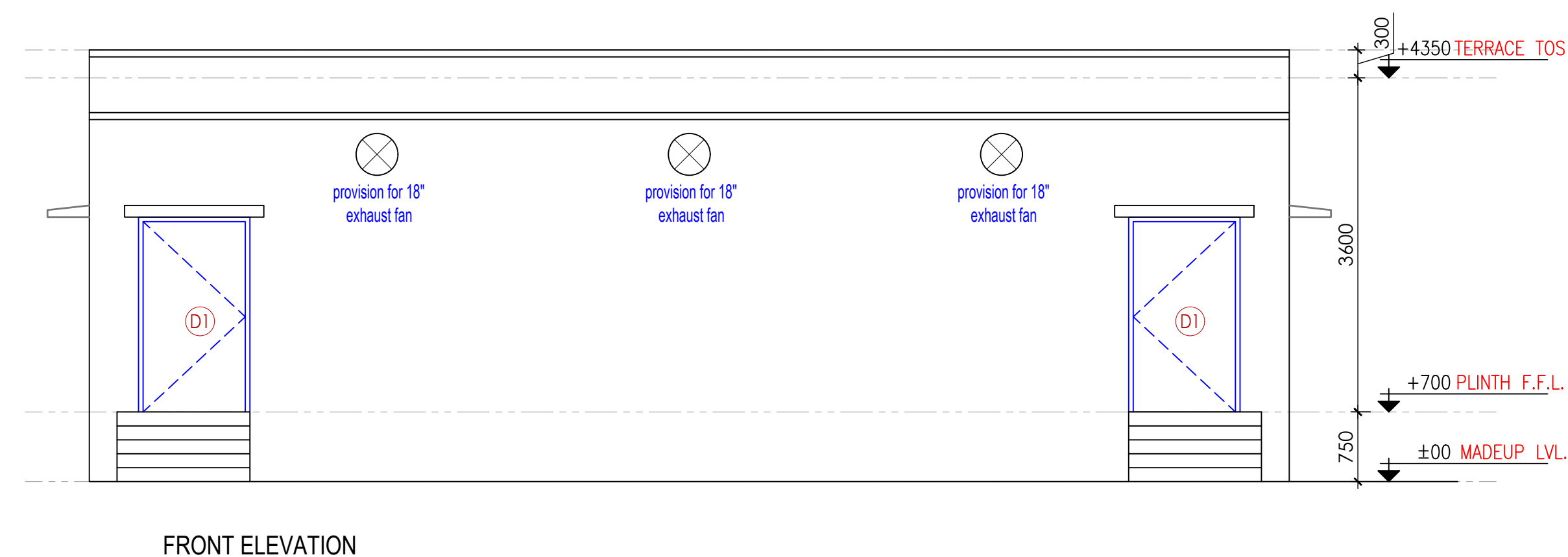
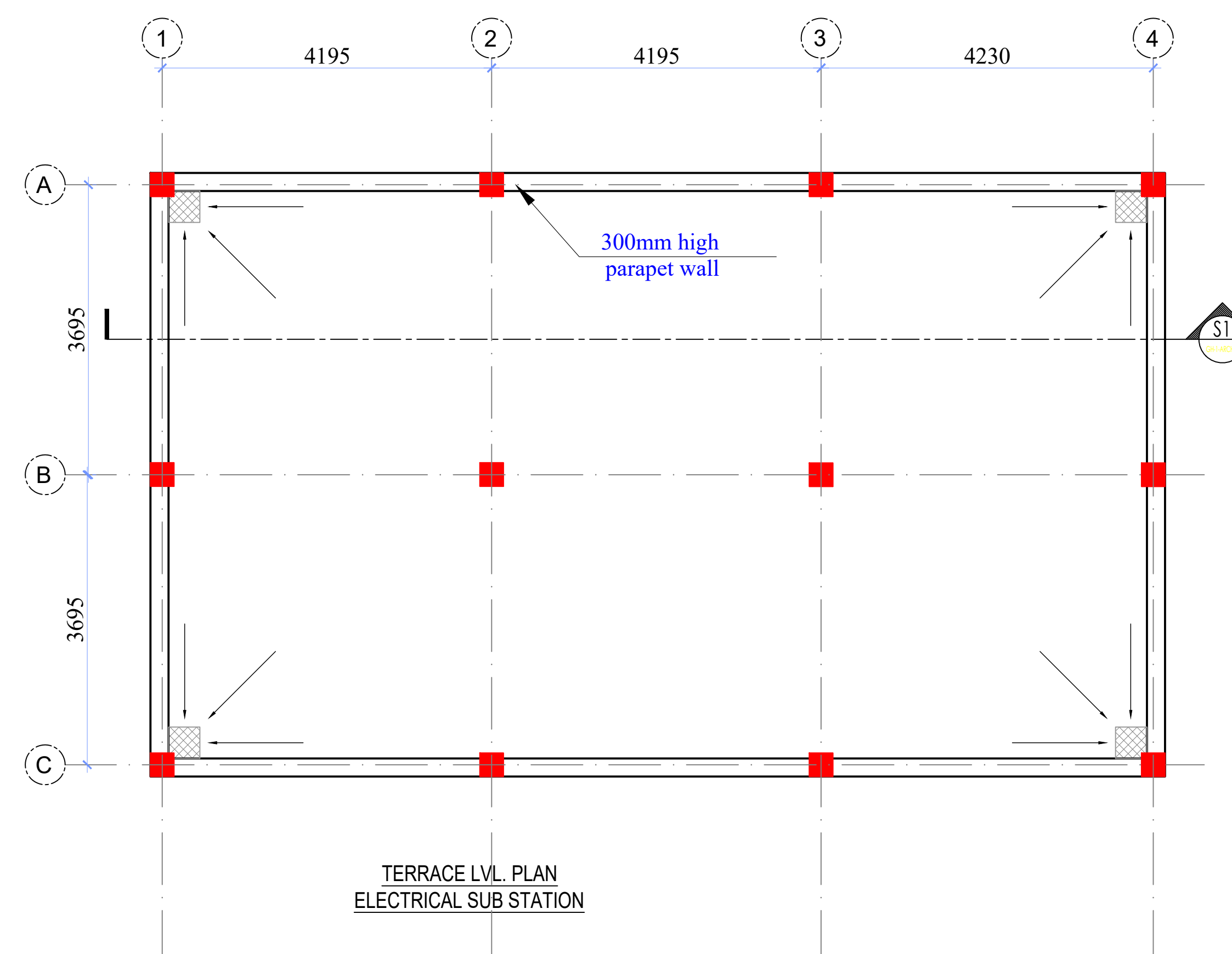
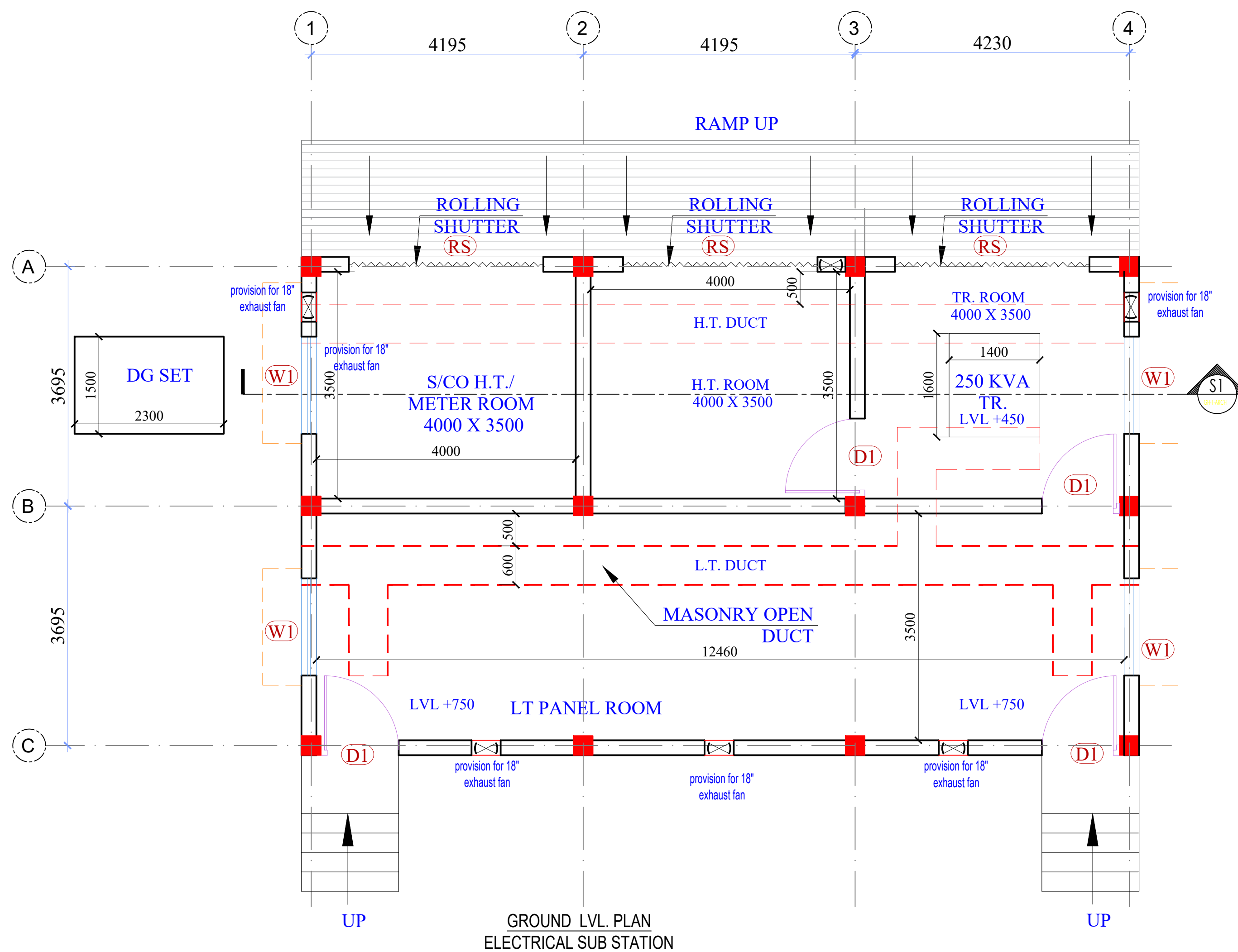
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

**GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS**



DOOR, WINDOW SCHEDULE				
TAG	CLEAR OPENING SIZE	SILL	LINTEL	GF
D1	1200 X 2100	0	2100	4
RS	3000 X 2100	0	2100	3
W1	1500 X 1200	900	2100	4



N.K.
(NARENDRA KUMAR)
P.K. Agrawal 10.02.23
(Pranod Agrawal)
ecmt 13/4/23
(R.K. Gang)
em ss 13/3/2023.
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

GROUND FLOOR BUILT-UP AREA- 99.35 SQMT

CATEGORY : SUB STATION

DRAWING TITLE : PLAN, ELEVATION, SECTION

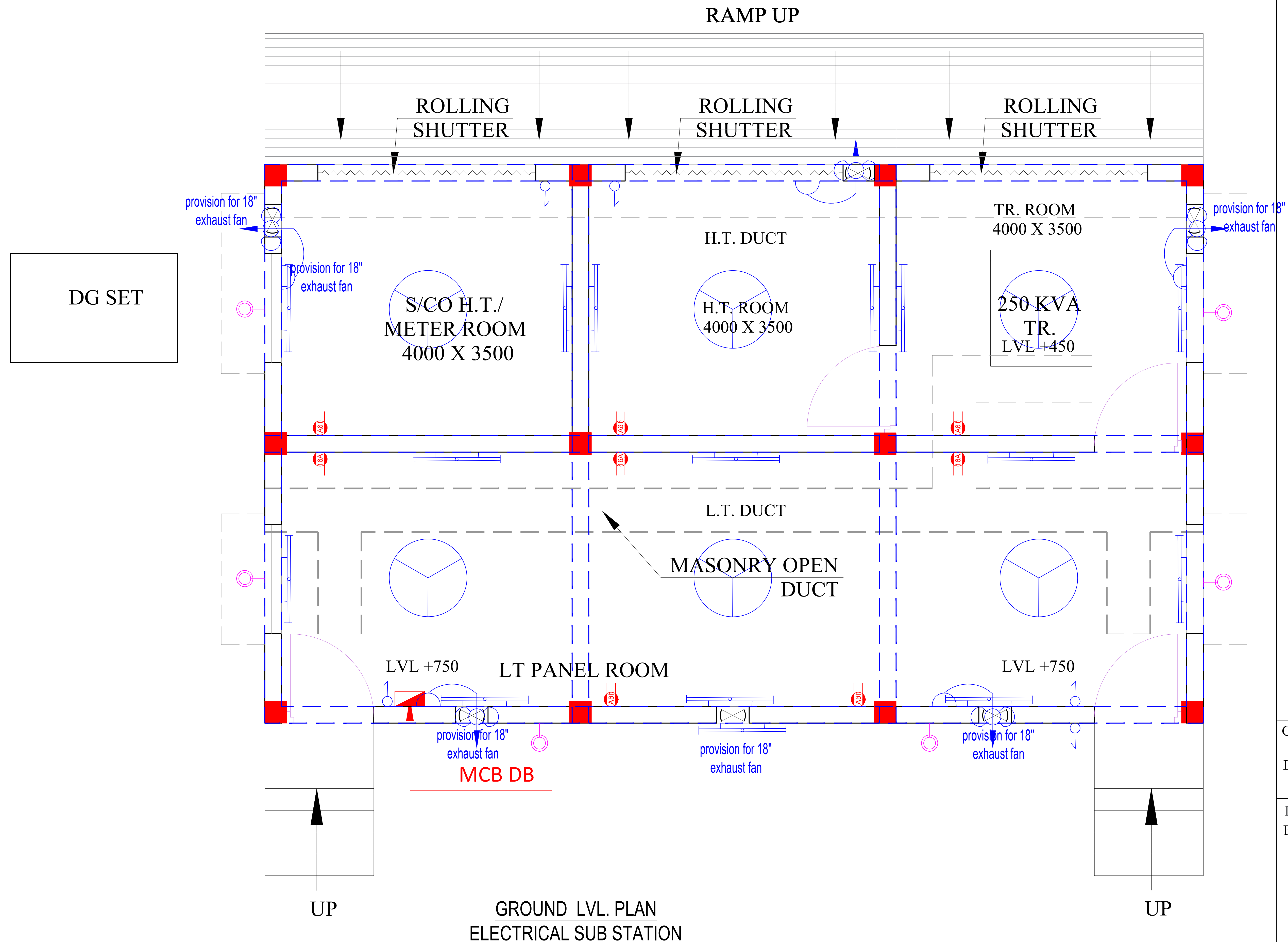
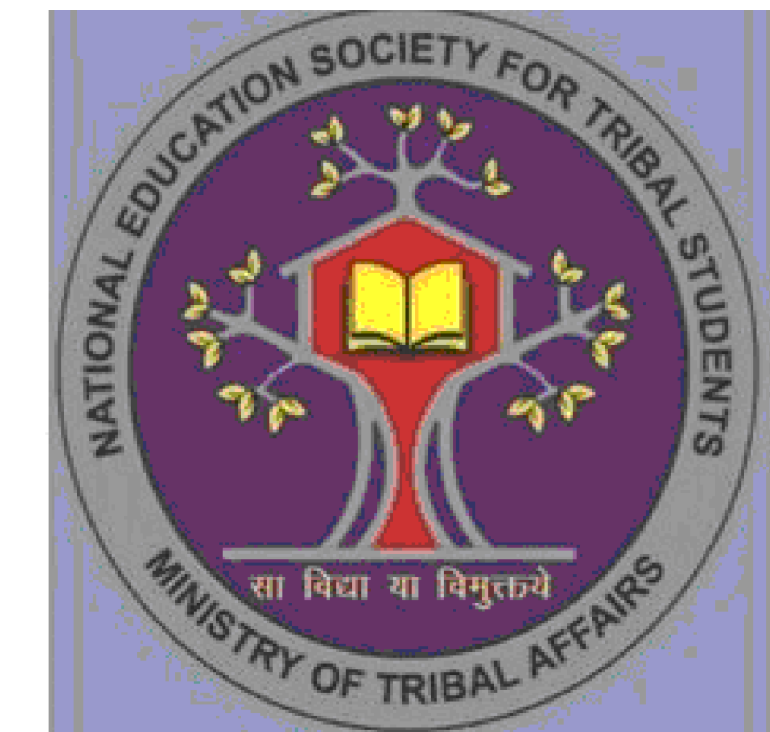
DWG. NO.- EMRS NAME/SUB/AR_01

DATE - 09 MARCH 2023

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAHYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

**GOVT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATIONAL SOCIETY FOR TRIBAL STUDENTS**



LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	20W LED TUBE LIGHT FITTING
	CEILING FAN 1200MM
	EXHAUST FAN 450mm METAIL BODY
	DISTRIBUTION BOARD
	15/16A POWER PLUG POINT
	20W LED BULKHEAD FITTING

(Signature)
VIRENDER KUMAR

(Signature)
R.K. SIMOLASANI

(Signature)
A D P Keshri

**A D P Keshri
Chief Technical Consultant**

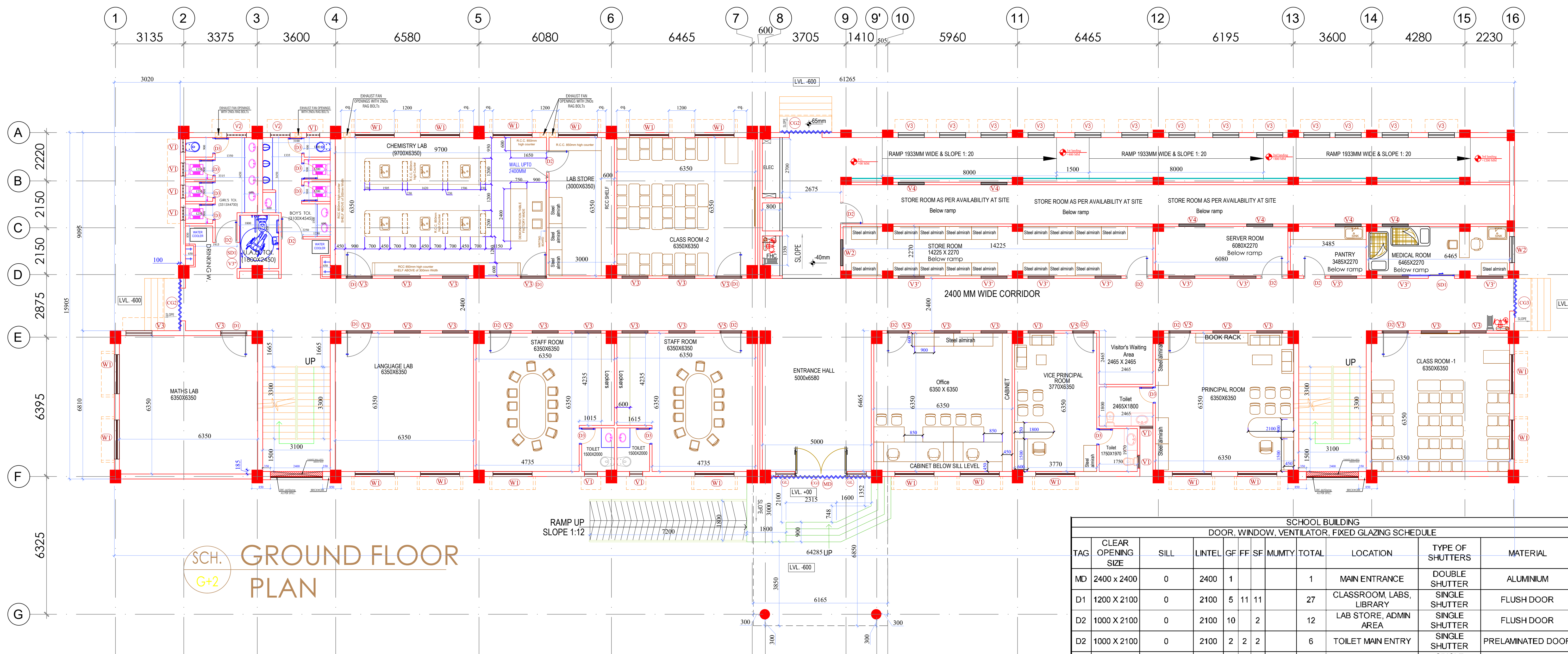
CATEGORY : SUB STATION

DRAWING TITLE : PLAN, ELEVATION, SECTION

DWG. NO.-
EMRS NAME/SUB/AR_01

DATE - 09 MARCH 2023

**GROUND LVL. PLAN
ELECTRICAL SUB STATION**



SCH. GROUND FLOOR PLAN

SCHOOL BUILDING DOOR, WINDOW, VENTILATOR, FIXED GLAZING SCHEDULE											
TAG	CLEAR OPENING SIZE	SILL	LINTEL	GF	FF	SF	MUMTY	TOTAL	LOCATION	TYPE OF SHUTTERS	MATERIAL
MD	2400 x 2400	0	2400	1				1	MAIN ENTRANCE	DOUBLE SHUTTER	ALUMINIUM
D1	1200 X 2100	0	2100	5	11	11		27	CLASSROOM, LABS, LIBRARY	SINGLE SHUTTER	FLUSH DOOR
D2	1000 X 2100	0	2100	10		2		12	LAB STORE, ADMIN AREA	SINGLE SHUTTER	FLUSH DOOR
D2	1000 X 2100	0	2100	2	2	2		6	TOILET MAIN ENTRY	SINGLE SHUTTER	PRELAMINATED DOOR
D3	750 X 2100	0	2100	11	7	8		26	WC DOOR	SINGLE SHUTTER	PRELAMINATED DOOR
D3	750 X 2100	0	2100				1	1	TERRACE	SINGLE SHUTTER	MS SHEET DOOR
SD1	1200 X 2100	0	2100	1	1	1		3	H.TOILET	SLIDING DOOR	PRELAMINATED DOOR
SD1	1200 X 2100	0	2100	1				1	MEDICAL ROOM	SLIDING DOOR	FLUSH DOOR
CG1	4800 X 2400	0	2400	1				1	MAIN ENTRANCE		COLLAPSIBLE GATE
CG2	2400 X 2100	0	2100	2				2	CORRIDOR END		COLLAPSIBLE GATE
CG3	1800 X 2100	0	2100	1				1	CORRIDOR END		COLLAPSIBLE GATE
W1	1800 X 1200	900	2100	19	28	27		74	CLASSROOM, ADMIN AREA, LABS, CORRIDOR END		STEEL GLAZED WINDOW
W2	1200 X 1200	900	2100	2				2	STORE, PANTRY		STEEL GLAZED WINDOW
GL	878 X 2100	300	2400	2				2	MAIN ENTRANCE		ALUMINIUM FIXED GLAZING
V1	600 X 600	1500	2100	9	5	5		19	TOILET		STEEL SECTION
V2	900 X 1200	900	2100	2	2	2		6	TOILET		STEEL SECTION
V3	1200 X 600	AS PER SITE	B.O.B	37	48	46		131	CLASSROOM, ADMIN AREA, LABS, RAMP		STEEL SECTION
V3'	1200 X 600	AS PER SITE	2100	9				9	STORE, SERVER, PANTRY, MEDICAL		STEEL SECTION
V3"	1200 X 600	AS PER SITE	B.O.B	1	1	1		3	H.TOILET		STEEL SECTION
V4	1200 X 450	AS PER SITE	B.O.B	6				6	STORE, MEDICAL ROOM, SERVER		STEEL SECTION
V5	1000 X 600	AS PER SITE	B.O.B	5				5	STAFFROOM, OFFICE, V.PRINCIPAL, PRINCIPAL		STEEL SECTION

AREA STATEMENT SCHOOL BUILDING	
DETAILS	AREA (in Sqm)
MAIN BUILDING	
GROUND FLOOR PLINTH AREA	852.96
FIRST FLOOR PLINTH AREA	782.53
SECOND FLOOR PLINTH AREA	782.53
TOTAL AREA	2418.02
ENTRANCE PORCH AREA	
AREA OF PORCH	42.23
Ramp AREA	
AREA AT GROUND FLOOR	133.94
AREA AT FIRST FLOOR (AREA/2)	104.05
TOTAL COVERED AREA	2698.00

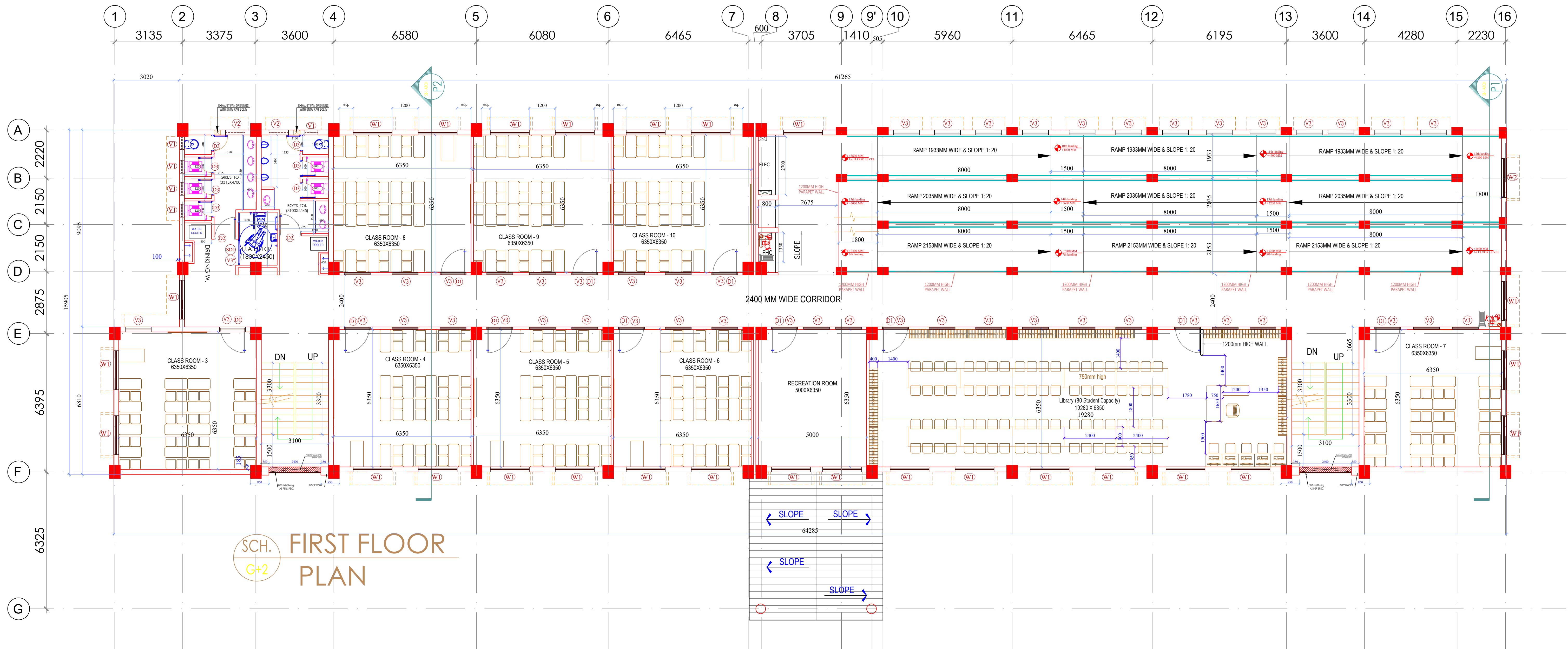
N.K.
 (NARENDRA KUMAR)
 p.k. Agrawal 10.3.23
 (Pranod Agrawal)
 Count 13/4/23
 (R.K. Ganguly)
 2nd ss 13/3/2023.
 (SANDEEP SOOD)
 A.D.P. Keshri
 Chief Technical Consultant

DATE - 09 MARCH 2023

DWG. NO. - EMRS NAME/SCH/AR_01
 SCHOOL GROUND FLOOR PLAN

SCALE:

MINISTRY OF TRIBAL AFFAIRS
 NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)



SCH. FIRST FLOOR
G+2
PLAN

NDK.
(NARENDRA KUMAR)

Count 13/1/23
(Rk Gang)

plk Approved 10/3/23
(Pranav Approved)

2nd SS 13/3/2023.
(SANDEEP SOOD)

A P Keshri
Chief Technical Consultant

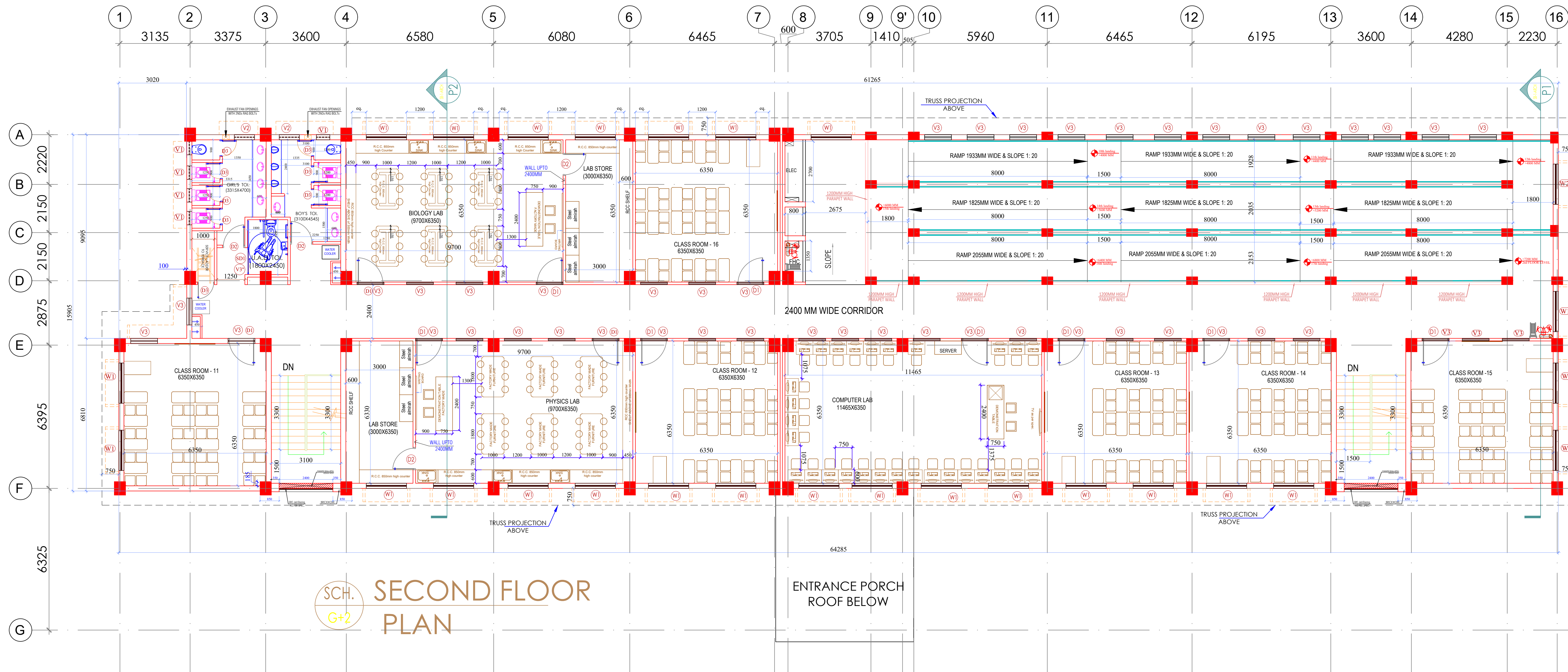
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_02

SCHOOL
FIRST FLOOR PLAN

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)



SCH. SECOND FLOOR PLAN
G+2

ENTRANCE PORCH
ROOF BELOW

NDI.
(NARENDRA KUMAR)

Count 13/1/23
(Rk Gang)

plk Approved 10/3/23
(Approved Approval)

2nd SS 13/3/2023.
(SANDEEP SOOD)

A.P. Keshri
A D P Keshri
Chief Technical Consultant

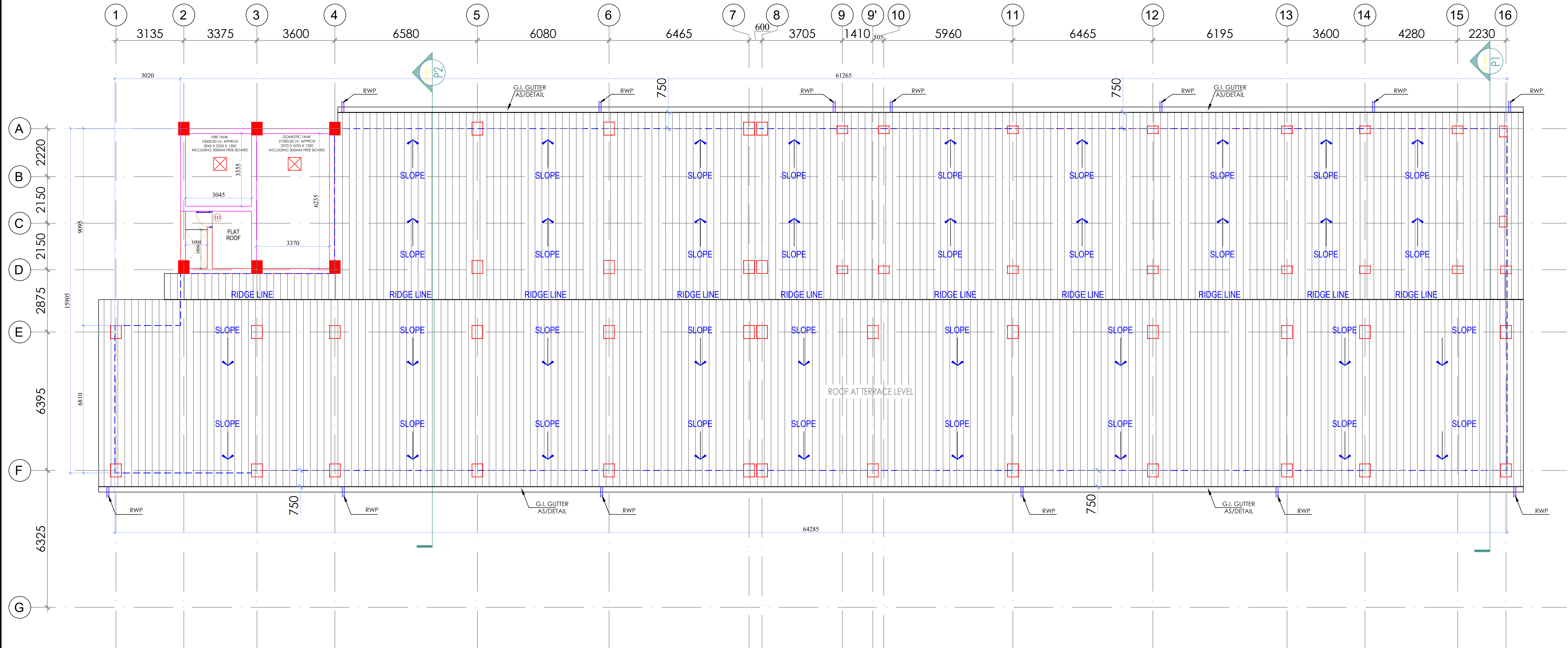
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_03

SCHOOL
SECOND FLOOR PLAN

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)



SCH. **TERRACE FLOOR**
G+2 **PLAN**

N.K.
(NARENDRA KUMAR)

(Count 13/1/23)
(Rk Gang)

plk Approved 10/3/23
(Approved Approval)

8-11 SS 13/3/2023.
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

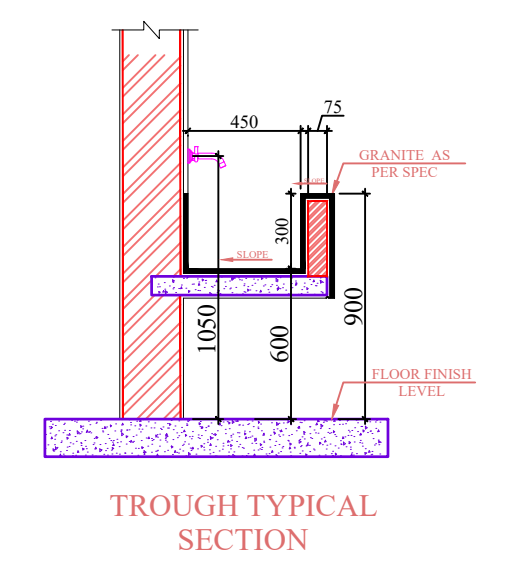
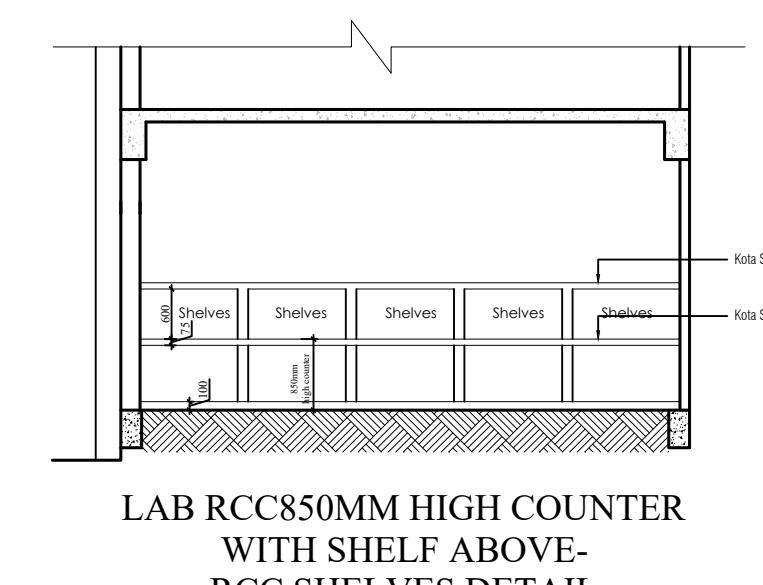
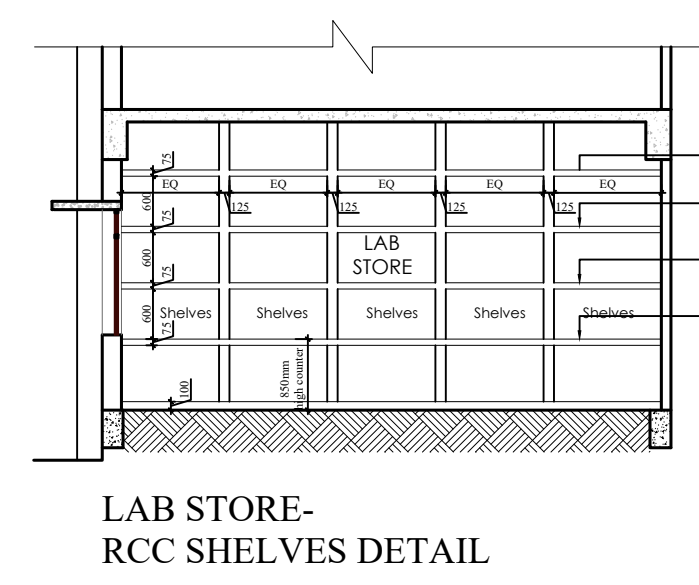
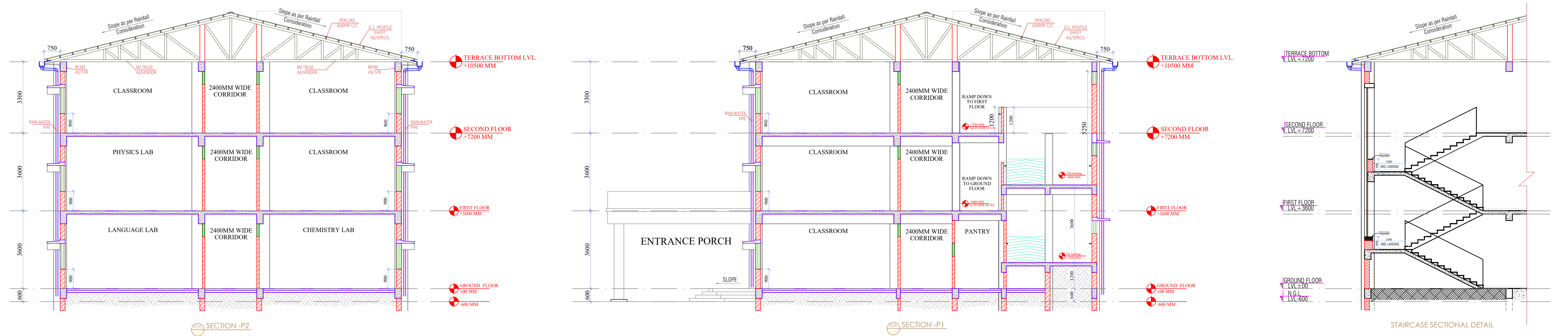
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_04

SCHOOL
ROOF FLOOR PLAN

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)



N.K.
(NARENDRA KUMAR)

Count 13/1/23
(Rk Gang)

pl approved 10/3/23
(Phanendra Anjwal)

Rev SS 13/3/2023
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

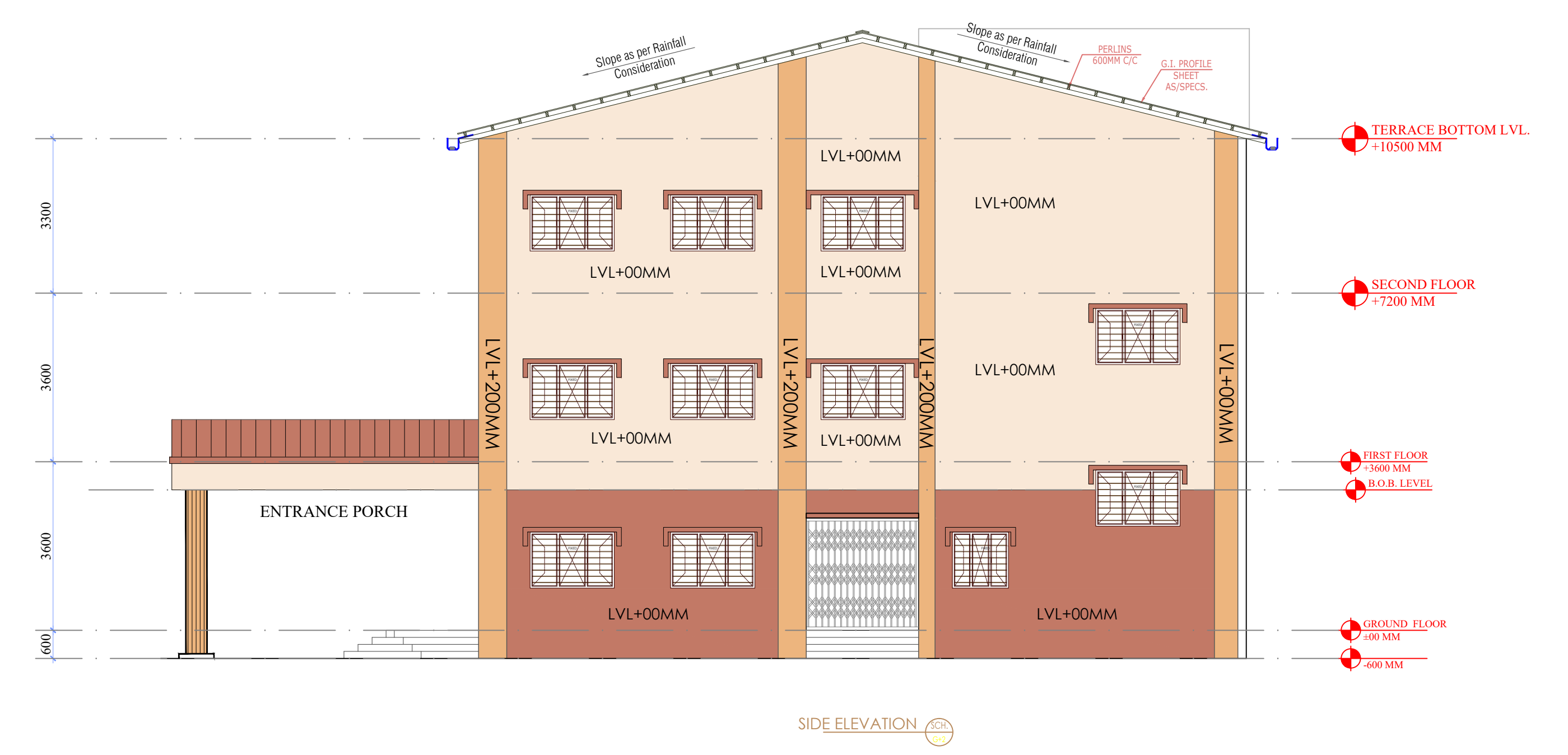
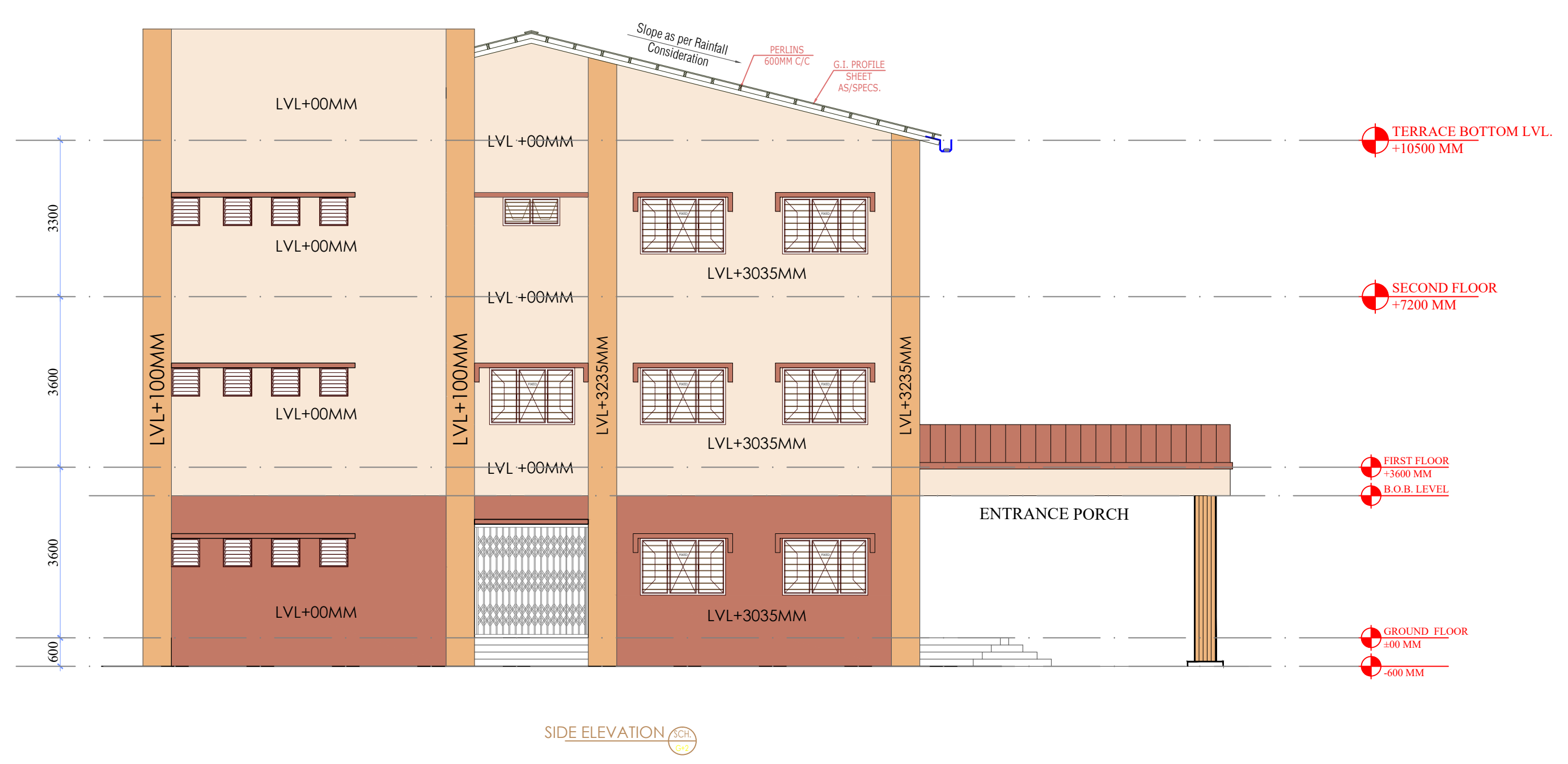
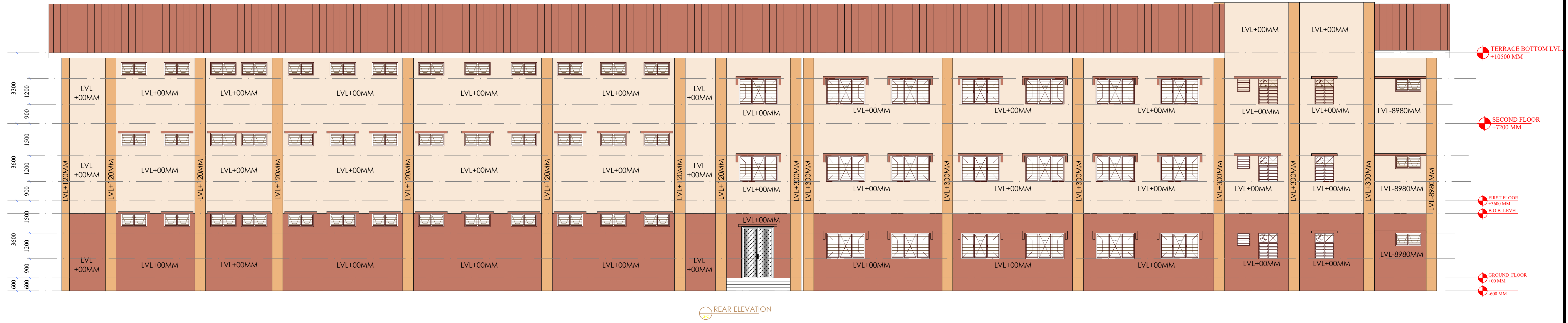
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_05

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

SCHOOL
ELEVATION, SECTION



N.K.
 (NARENDRA KUMAR)
 10/3/23
 (Approved)

13/3/23
 (R.K. Gang)

13/3/2023.
 (SANDEEP SOOD)

A.P.K.
 A D P Keshri
 Chief Technical Consultant

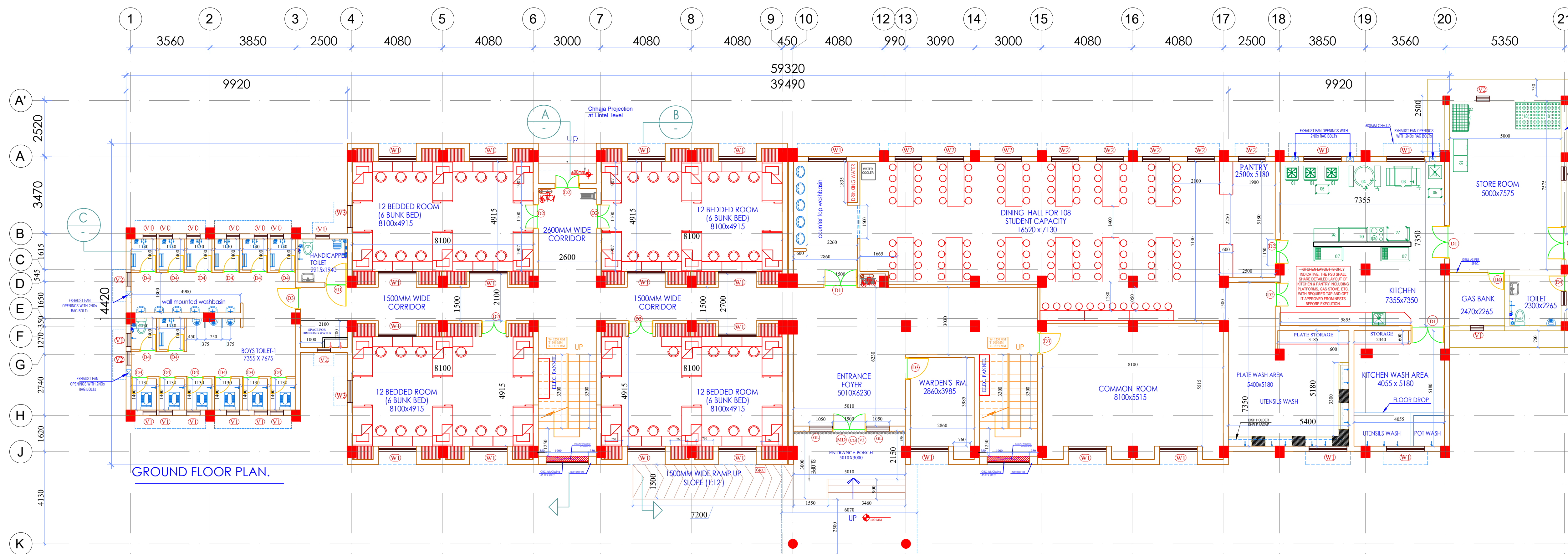
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_06

SCHOOL
ELEVATION, SECTION

SCALE:

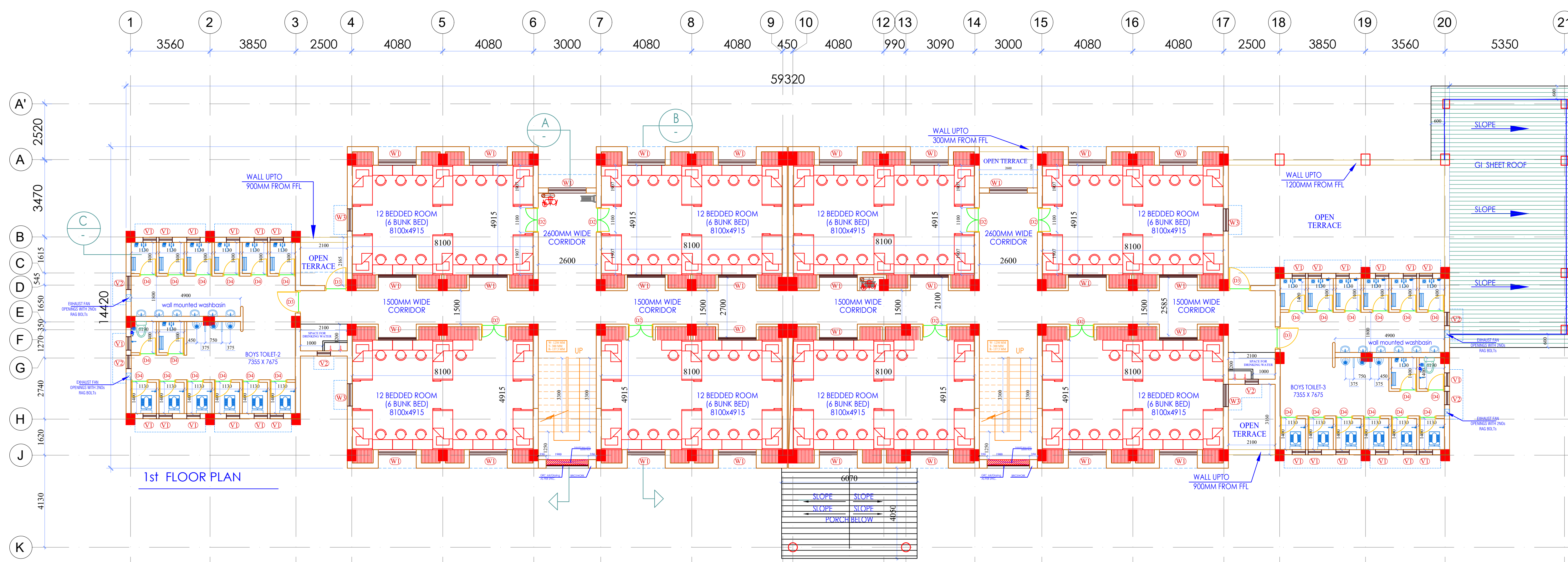
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)



GROUND FLOOR PLAN.

AREA STATEMENT HOSTEL BUILDING			
DETAILS	Right side Area (Kitchen side)(in Sqm)	Left side Area (in Sqm)	TOTAL FLOOR AREA
MAIN BUILDING			
GROUND FLOOR PLINTH AREA	391.77	332.33	724.10
FIRST FLOOR PLINTH AREA	330.32	327.65	657.97
SECOND FLOOR PLINTH AREA	330.32	327.65	657.97
TOTAL AREA	1052.41	987.63	2040.04
ENTRANCE PORCH AREA			
AREA OF PORCH			27.86
RIGHT SIDE KITCHEN STORE AREA			
			55.69
Total			2124.00

BOYS HOSTEL BUILDING									
CLEAR TAGL OPENING SIZE	DOOR, WINDOW, VENTILATOR, FIXED GLAZING SCHEDULE					TOTAL	LOCATION	TYPE OF SHUTTER	MATERIAL
	BILL	UNTEL	UP	FF	MM				
MD 1500 x 2400	0	2400	1			1	MAIN ENTRANCE DOOR	DOUBLE SHUTTER	ALUMINIUM DOOR
ED 1500 x 2100	0	2100	2			2	DINING HALL ENTRY & KITCHEN BACK SIDE ENTRY	DOUBLE SHUTTER	FLUSH DOOR
ED 1500 x 2100	0	2100	2			2	KITCHEN WARDEN STORE BACK SIDE ENTRY	DOUBLE SHUTTER	FACTORY PRESSED LAMINATED DOOR
ED 1100 x 2100	0	2100	7	8	8	23	DORMITORY CORRIDOR, KITCHEN & WARDEN STORE	DOUBLE SHUTTER	FLUSH DOOR
ED 1000 x 2100	0	2100	2			2	WARDEN ROOM & COMMON ROOM	SINGLE SHUTTER	FLUSH DOOR
ED 1000 x 2100	0	2100			2	2	TERRACE	SINGLE SHUTTER	MS SHEET DOOR
ED 1000 x 2100	0	2100	1	4	2	7	TOILET MAIN ENTRY, 1ST FLOOR TERRACE	SINGLE SHUTTER	FACTORY PRESSED LAMINATED DOOR
ED 750 x 2100	0	2100	15	28	28	71	TOILET INTERNAL DOOR	SINGLE SHUTTER	FACTORY PRESSED LAMINATED DOOR
ED 750 x 2100	0	2100	1			1	GAS BANK DOOR	SINGLE SHUTTER	GRELL DOOR
ED 1000 x 2100	0	2100	1			1	HANDICAP TOILET	DOUBLE SWING	FACTORY PRESSED LAMINATED DOOR
GD 5070 x 2400	0	2400	1			1	MAIN ENTRANCE		COLLAPSIBLE GATE
WV 1700 x 1800	AS PER SITE	6.0	22	30	32	84	DORMITORY, WARDEN ROOM, COMMON ROOM, WASH AREA, DINING, HARD WASH AREA, KITCHEN, CORRIDOR	FOUR & OPENABLE	STEEL GLAZED WINDOW
WV 1200 x 1800	AS PER SITE	6.0	8			8	DINING AREA	FOUR & OPENABLE	STEEL GLAZED WINDOW
WV 1000 x 1800	AS PER SITE	6.0	2	4	4	10	DORMITORY	FOUR & OPENABLE	STEEL GLAZED WINDOW
VT 600 x 400	AS PER SITE	6.0	16	26	26	88	TOILET & GAS BANK		STEEL SECTION
WV 600x1200	AS PER SITE	6.0	5	8	8	17	TOILET & STORE		STEEL SECTION
WV 1500 x 2400	AS PER SITE	6.0	1			1	MAIN ENTRANCE		ALUMINIUM FIXED GLAZING
GL 1200 x 2000	300	6.0	2			2	MAIN ENTRANCE		ALUMINIUM FIXED GLAZING



1st FLOOR PLAN

NDK
(NARENDRA KUMAR)
PK Approved 10.3.23
(Pranav Approved)
LCMUT 13/3/23
(Rk Gang)
Smt SS 13/3/23
(SANDEEP SOOD)
APK
A D P Keshri
Chief Technical Consultant

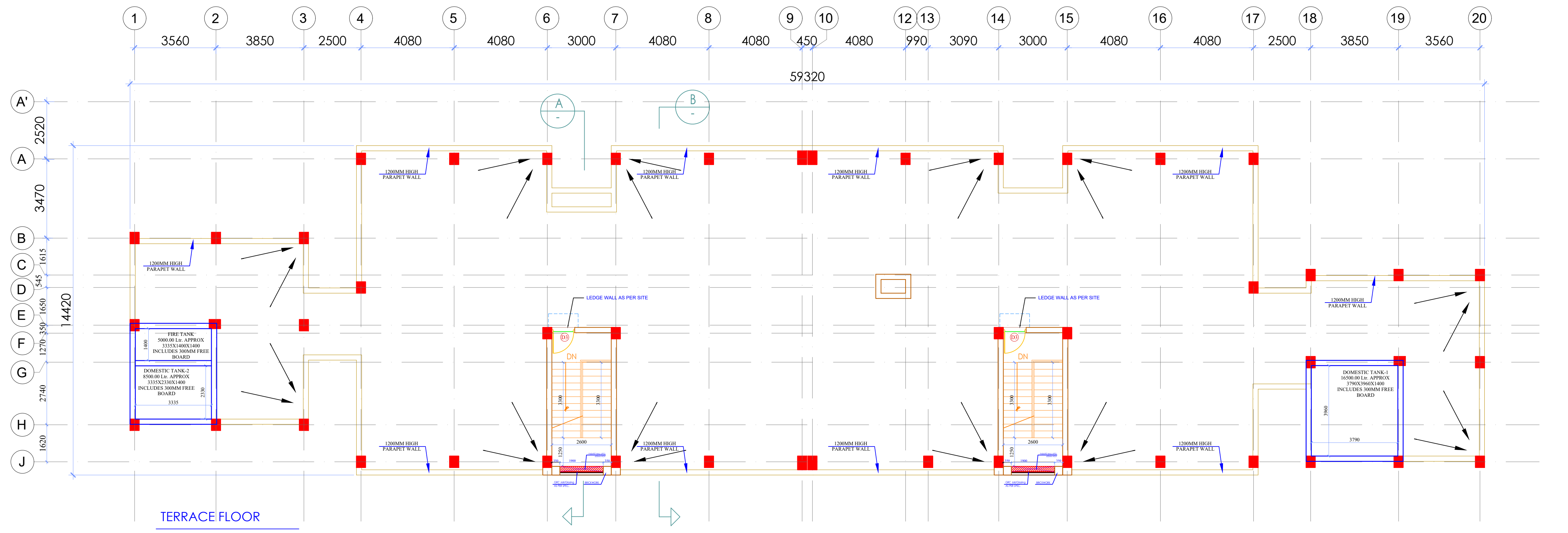
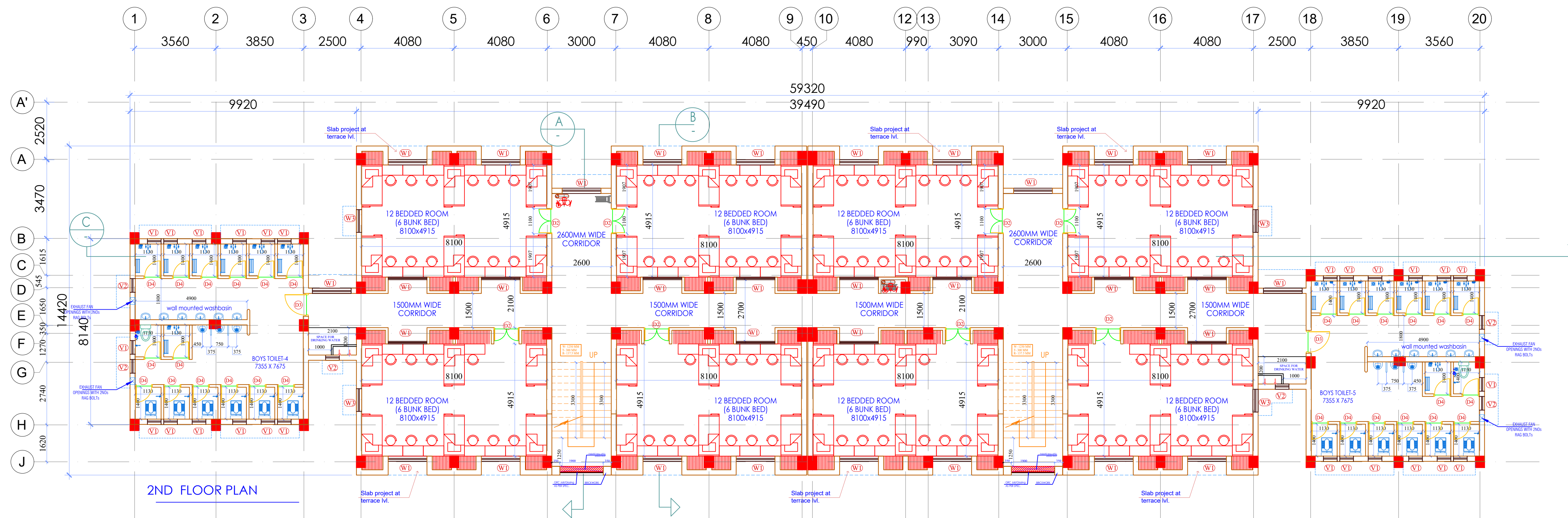
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/BH/AR_01

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

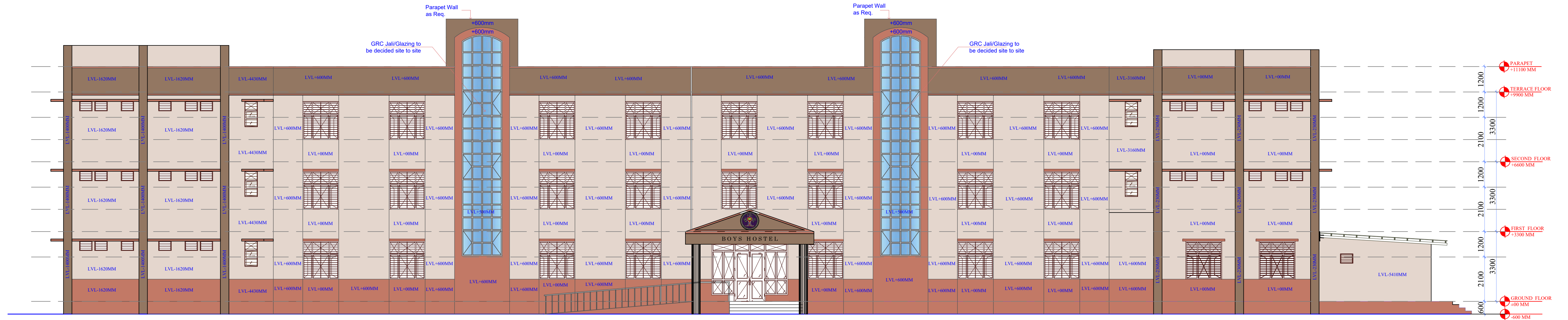
TITLE
HOSTEL-BOYS



N.K.
 (NARENDRA KUMAR)
 p.k. Approved 10.3.23
 (Pranod Agrawal)
 Locant 13/3/23
 (R.K. Gang)
 Smt SS. 13/3/2023.
 (SANDEEP SOOD)

A.P.K.
 A D P Keshri
 Chief Technical Consultant

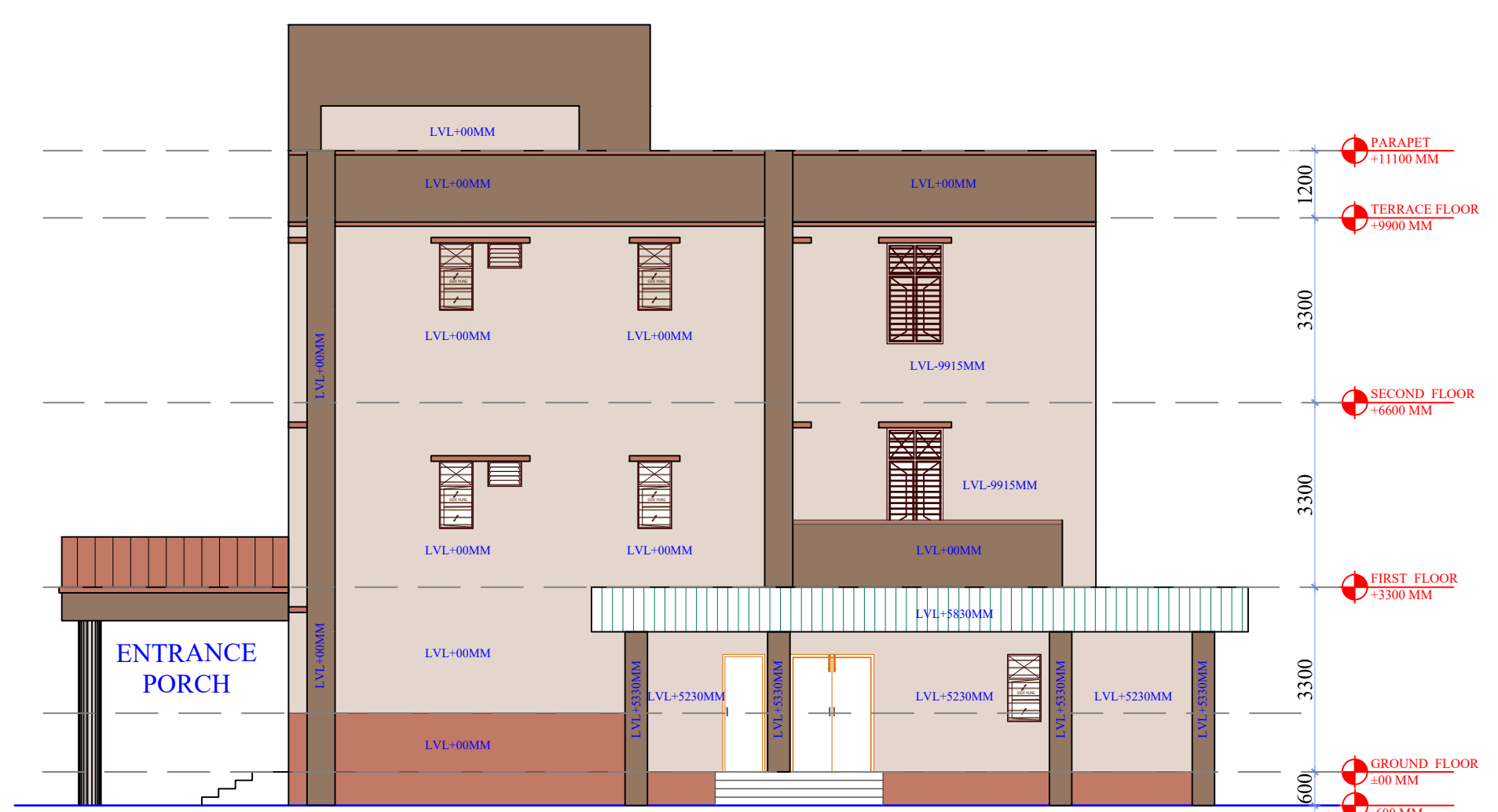
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	TITLE HOSTEL-BOYS		



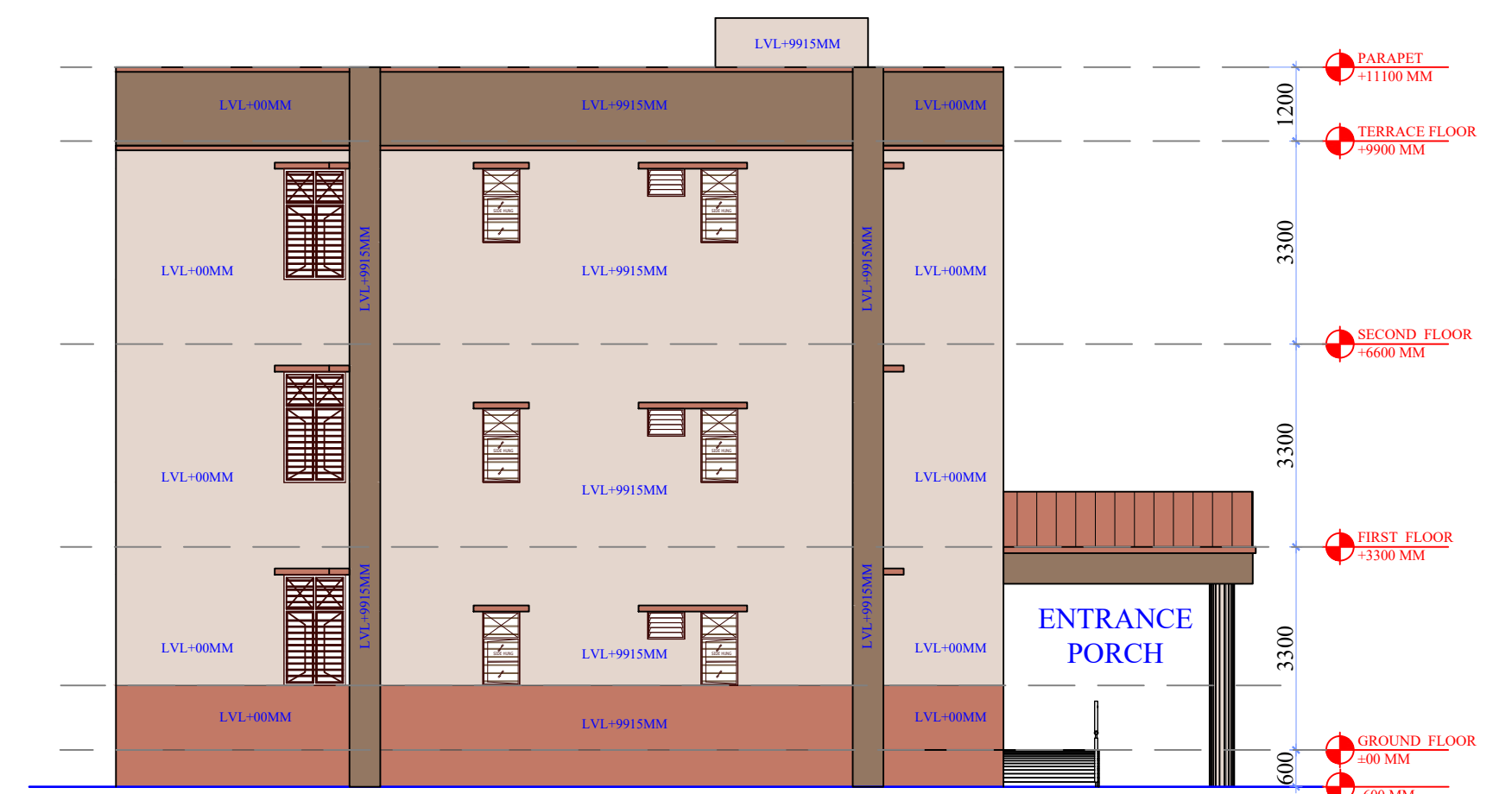
FRONT ELEVATION



REAR ELEVATION



RIGHT ELEVATION



LEFT ELEVATION

NDK
 (NARENDRA KUMAR)
 p.k. Agrawal 10.3.23
 (Approved Approval)
 Locant 13/3/23
 (Rk Gang)
 San SS 13/3/23
 (SANDEEP SOOD)

APK
 A D P Keshri
 Chief Technical Consultant

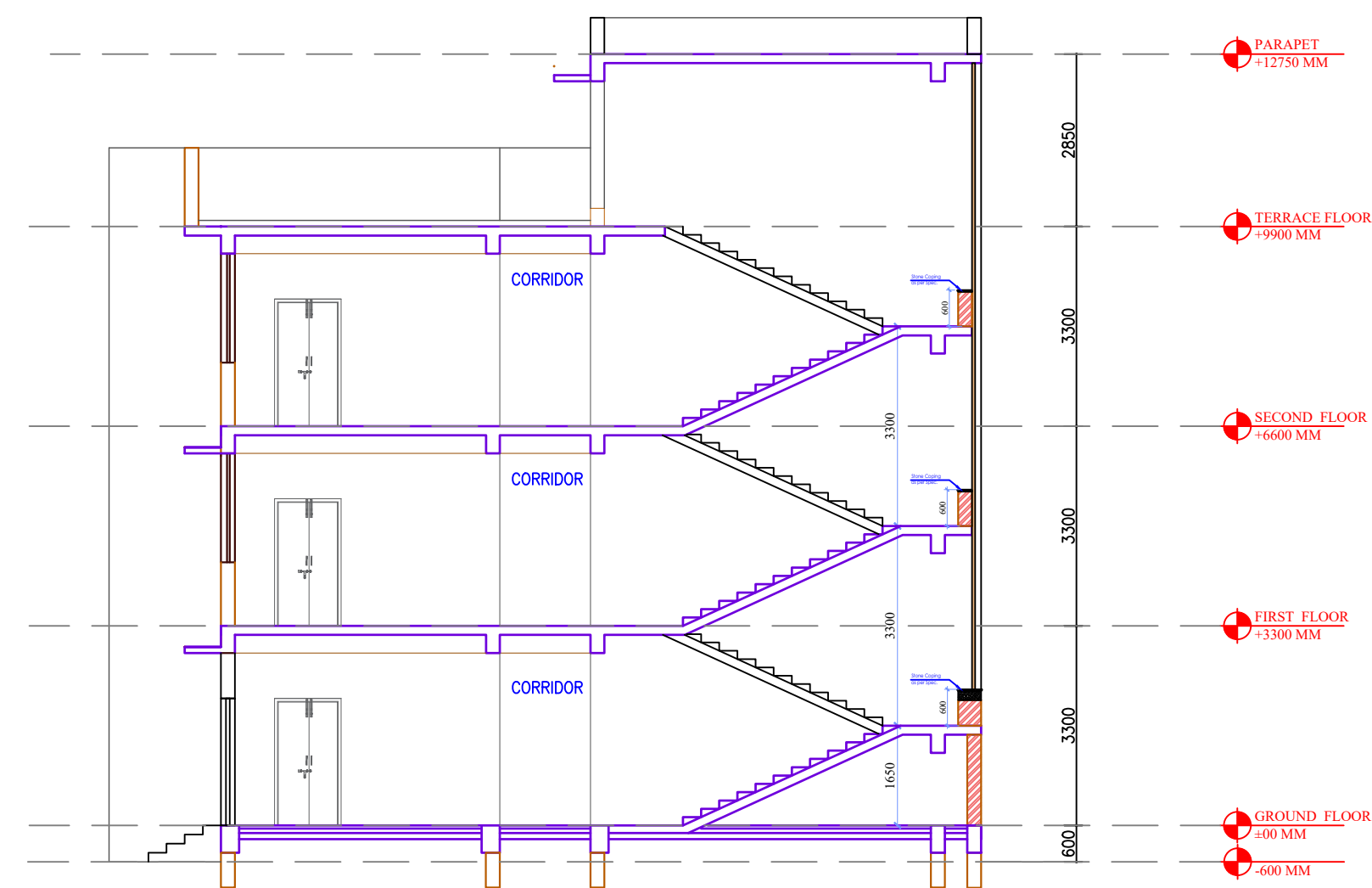
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/BH/AR_03

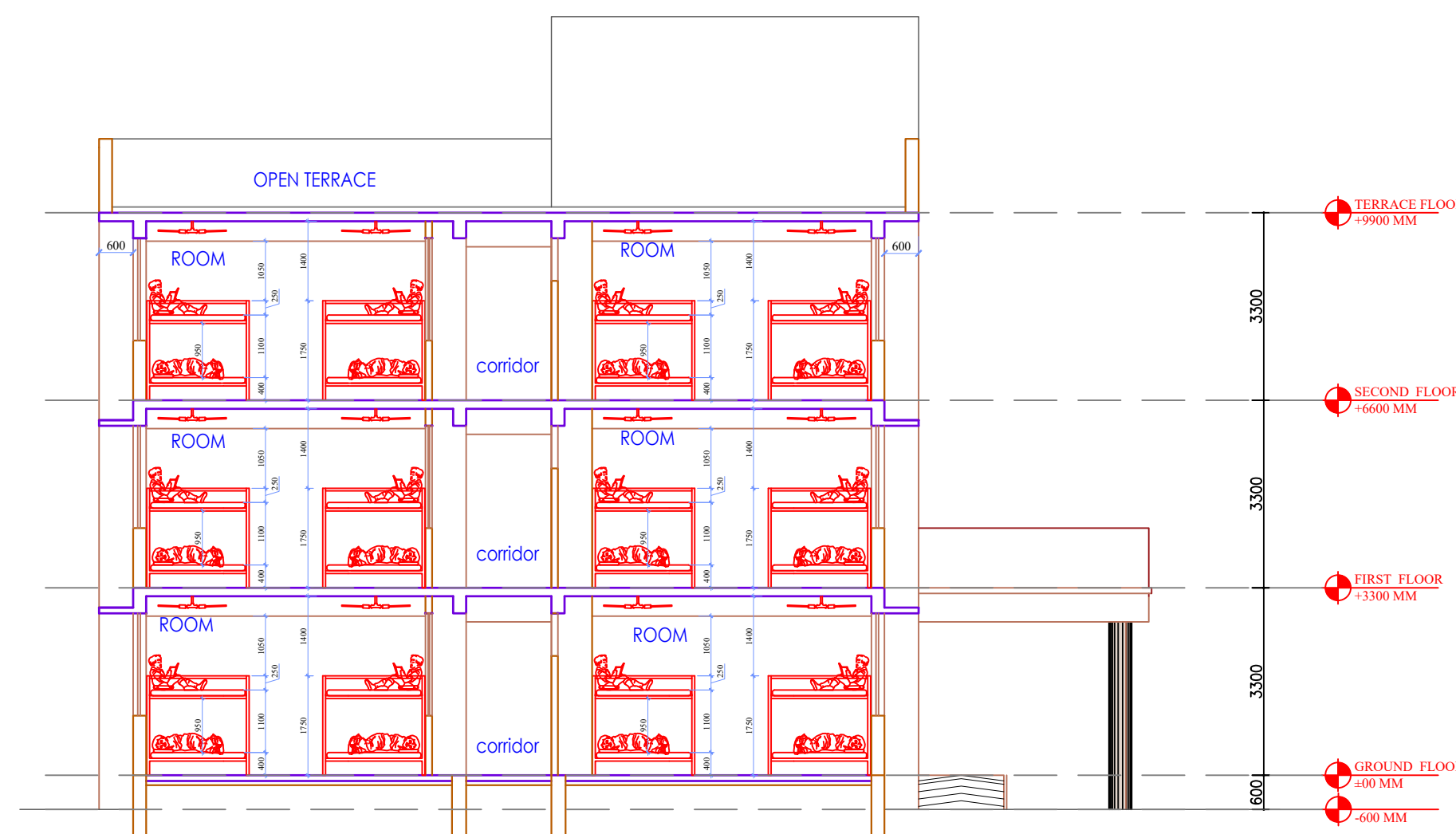
SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

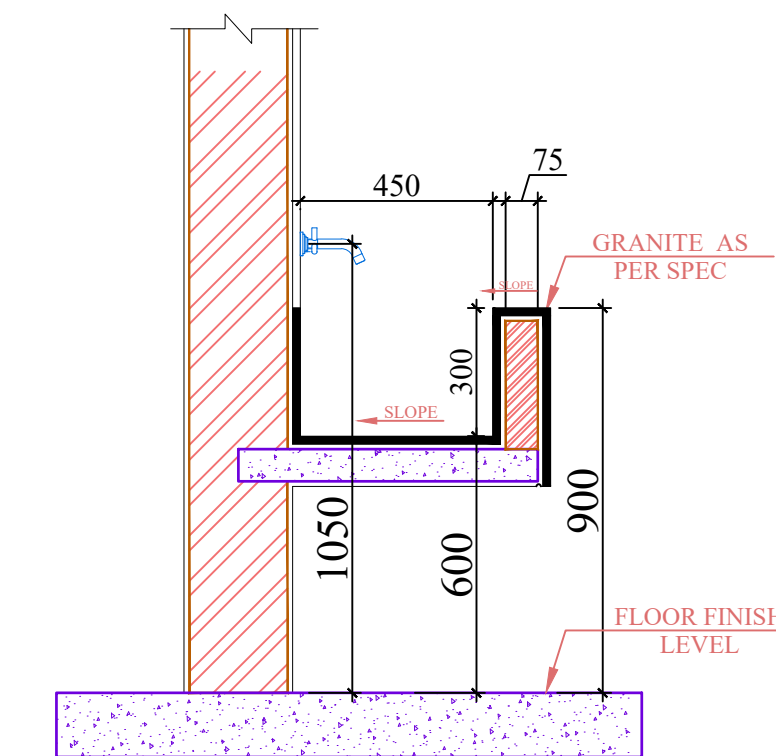
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HOSTEL-BOYS
ELEVATION



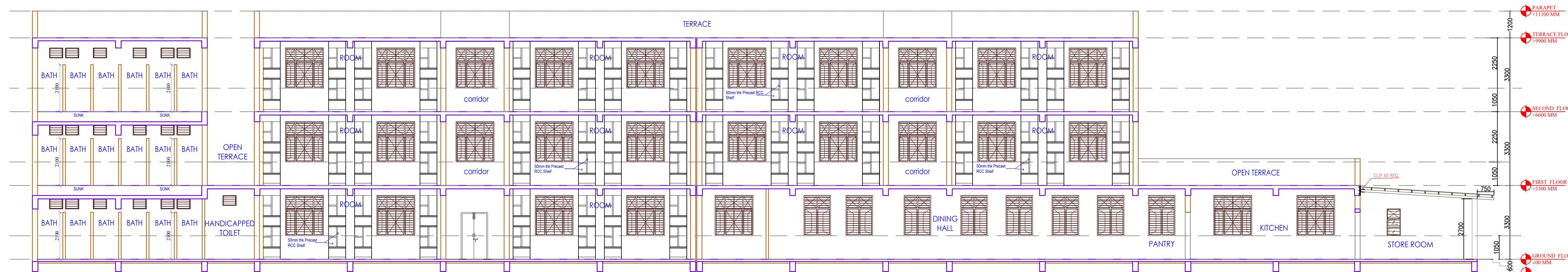
SECTION - A.



SECTION - B.



TROUGH TYPICAL SECTION



SECTION - C.

N.K.
 (NARENDRA KUMAR)
 p.k. approved 10.3.23
 (Pranav approved)
 10/3/23
 (R.K. Gang)
 8/11/23
 13/3/2023
 (SANDEEP SOOD)

A.P.K.
 A D P Keshri
 Chief Technical Consultant

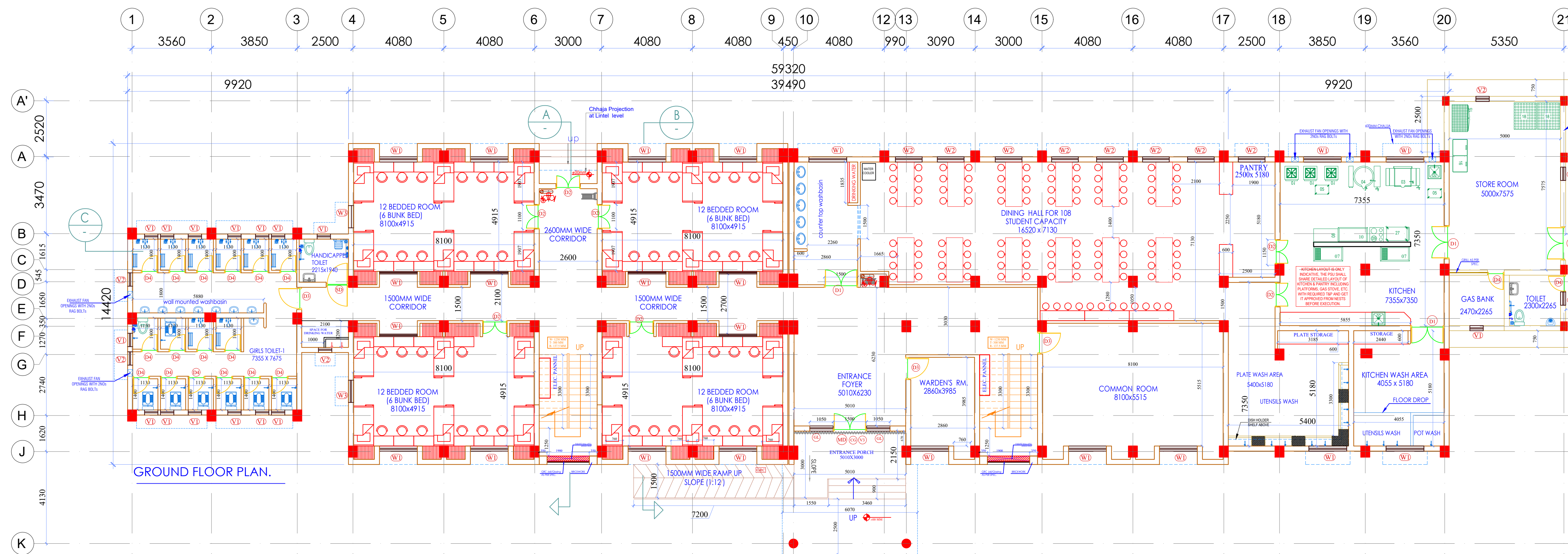
DATE - 09 MARCH 2023

DWG. NO.-
 EMRS NAME/BH/AR_04

SCALE:

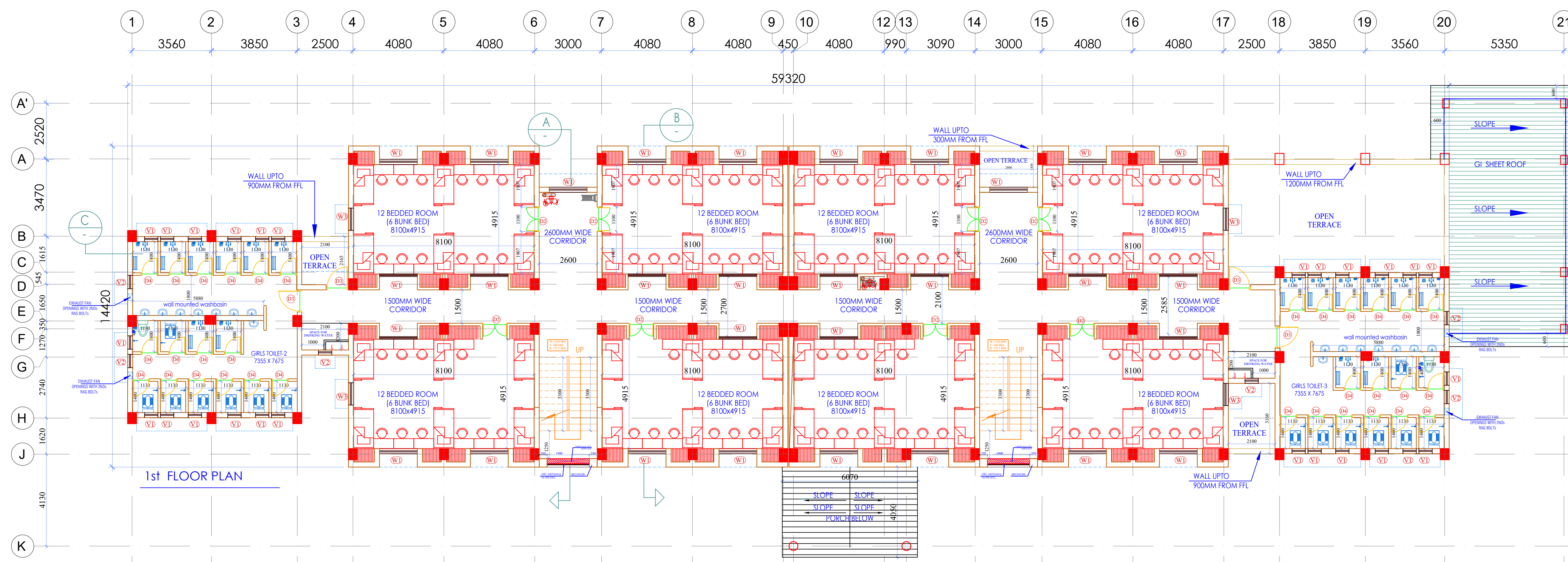
MINISTRY OF TRIBAL AFFAIRS
 NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

TITLE
 HOSTEL-BOYS
 SECTION



AREA STATEMENT HOSTEL BUILDING			
DETAILS	Right side Area (Kitchen side) (in Sqm)	Left side AREA (in Sqm)	TOTAL FLOOR AREA
MAIN BUILDING			
GROUND FLOOR PLINTH AREA	391.77	332.33	724.10
FIRST FLOOR PLINTH AREA	330.32	327.05	657.37
SECOND FLOOR PLINTH AREA	330.32	327.05	657.37
TOTAL AREA	1052.41	987.63	2040.04
ENTRANCE PORCH AREA			
AREA OF PORCH			27.86
RIGHT SIDE KITCHEN STORE AREA			
AREA			55.69
Total			2124.00

GIRLS HOSTEL BUILDING											
TAQ	CLEAR OPENING	BILL	UNTEL	OP	PP	MUNT	TOTAL	LOCATION	TYPE OF SHUTTER	MATERIAL	
M0	1500 x 2400	0	2400	1			1	MAIN ENTRANCE DOOR	DOUBLE SHUTTER	ALUMINIUM DOOR	
D1	1500 x 2100	0	2100	2			2	DINING HALL ENTRY & KITCHEN BACK SIDE ENTRY	DOUBLE SHUTTER	FLUSH DOOR	
D2	1500 x 2100	0	2100	2			2	KITCHEN WASH STORE BACK SIDE ENTRY	DOUBLE SHUTTER	FACTORY PRESSED LAMINATED DOOR	
D3	1800 x 2100	0	2100	7	8	8	23	DORMITORY CORRIDOR EXIT & KITCHEN	DOUBLE SHUTTER	FLUSH DOOR	
D3	1000 x 2100	0	2100	2			2	WARDEN ROOM & COMMON ROOM	SINGLE SHUTTER	FLUSH DOOR	
D3	1000 x 2100	0	2100			2	2	TERRACE	SINGLE SHUTTER	MS SHEET DOOR	
D3	1000 x 2100	0	2100	1	4	2	7	TOILET MAIN ENTRY, 1ST FLOOR TERRACE	SINGLE SHUTTER	FACTORY PRESSED LAMINATED DOOR	
D4	700 x 2100	0	2100	17	32	30	81	TOILET INTERNAL DOOR	SINGLE SHUTTER	FACTORY PRESSED LAMINATED DOOR	
D4	2100 x 2100	0	2100	1			1	GAS BANK DOOR	SINGLE SHUTTER	GI-DOOR	
D4	1000 x 2100	0	2100	1			1	HANDICAP TOILET	DOUBLE SHUTTER	FACTORY PRESSED LAMINATED DOOR	
D5	1800 x 2400	0	2400	1			1	MAIN ENTRANCE		COLLAPSIBLE GATE	
W1	1700 x AS PER SITE	1800	0	22	30	32	84	DORMITORY, WARDEN ROOM, COMMON ROOM, WASH AREA, DINING HALL, WASH AREA, KITCHEN, CORRIDOR	FIXED & OPENABLE	STEEL GLAZED WINDOW	
W2	1200 x AS PER SITE	1800	0	8	8	8	8	DINING AREA	FIXED & OPENABLE	STEEL GLAZED WINDOW	
W3	1000 x AS PER SITE	1800	0	2	4	4	10	DORMITORY	FIXED & OPENABLE	STEEL GLAZED WINDOW	
V1	800 x AS PER SITE	450	0	16	20	20	60	TOILET & GAS BANK		STEEL SECTION	
V2	600x100 AS PER SITE	9	0	5	5	5	17	TOILET & STORE		STEEL SECTION	
V3	1500 x 2400	450	0	1			1	MAIN ENTRANCE		ALUMINIUM FIXED GLAZING	
GL	1000 x 2550	300	0	0	2	2	2	MAIN ENTRANCE		ALUMINIUM FIXED GLAZING	



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PK Approved 10.3.23
(Pranav Approved)
LCM 13/3/23
(Rk Gang)
Smt SS 13/3/23
(SANDEEP SOOD)
APK
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Chief Technical Consultant

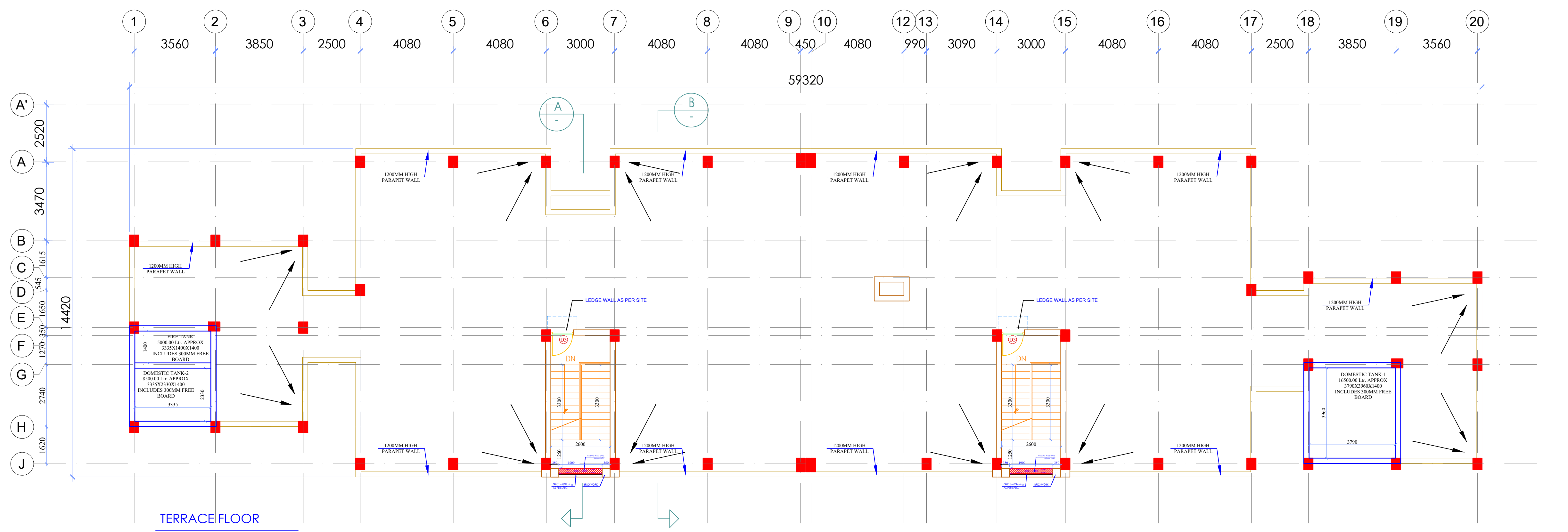
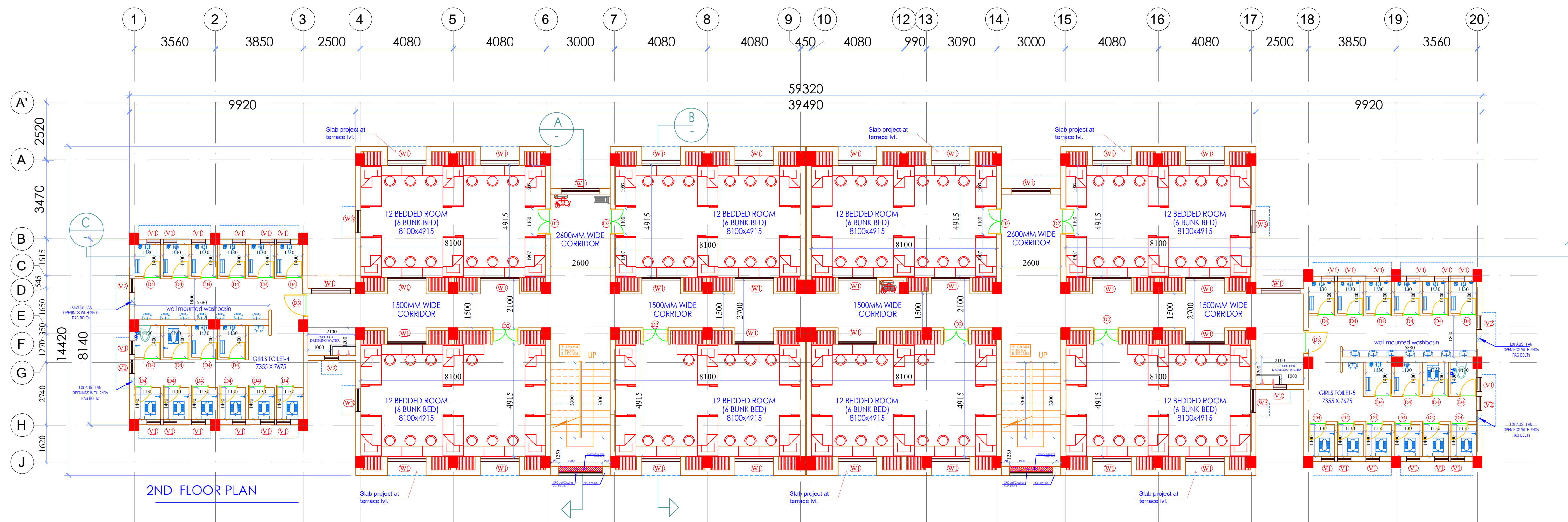
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/GH/AR_01

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

TITLE
HOSTEL-GIRLS



N.K.
 (NARENDRA KUMAR)
 p.k. Approved 10.3.23
 (Pranod Appraisal)
 Locant 13/3/23
 (R.K. Gang)
 Gen SS. 13/3/23.
 (SANDEEP SOOD)

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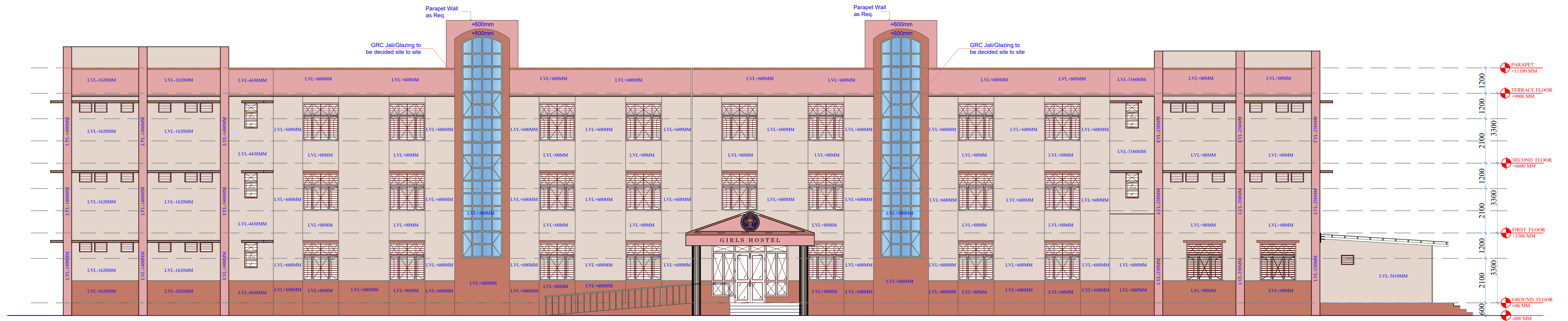
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 EMRS NAME/GH/AR_02

SCALE:

MINISTRY OF TRIBAL AFFAIRS
 NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

TITLE
 HOSTEL-GIRLS



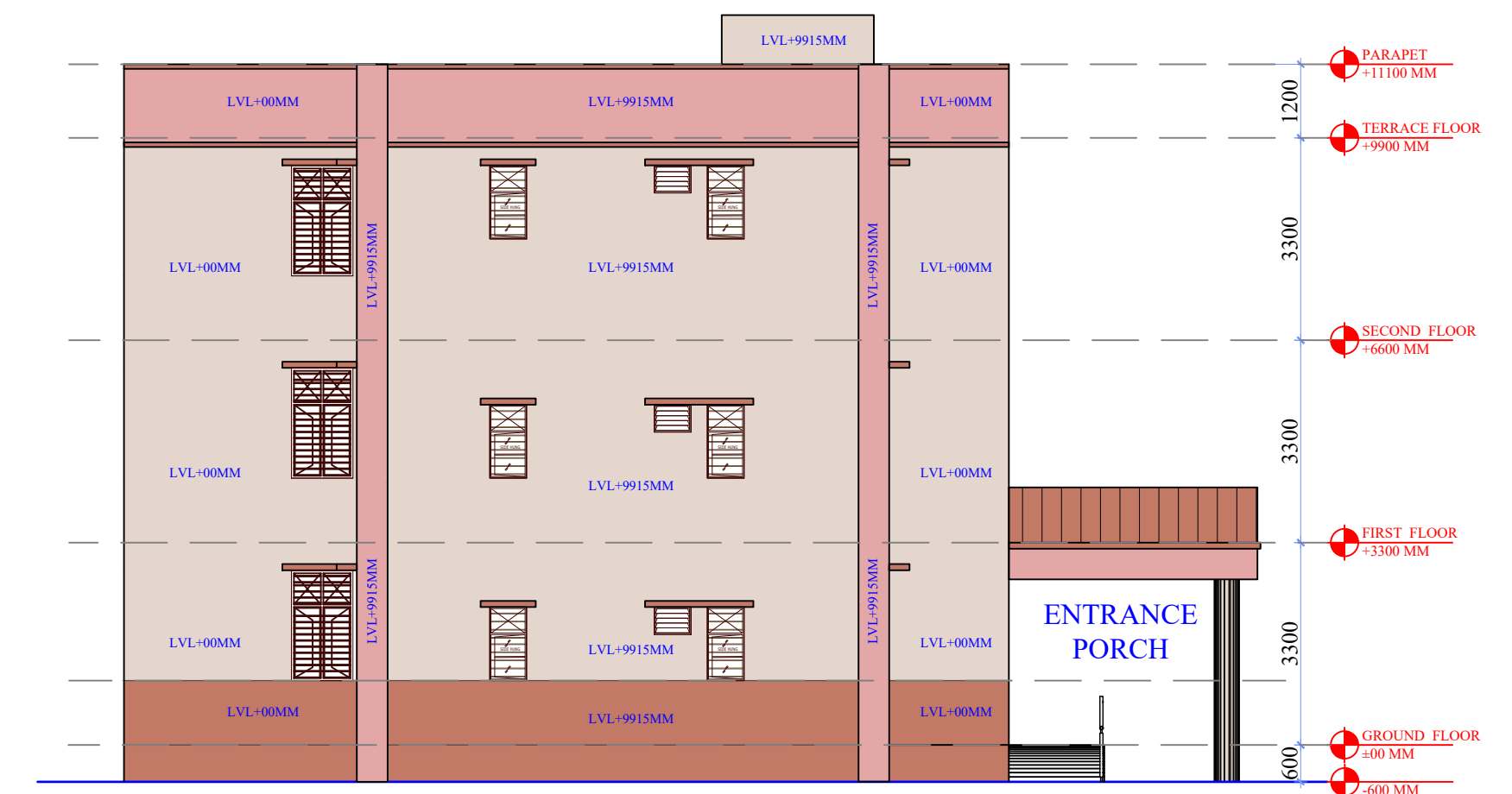
FRONT ELEVATION



REAR ELEVATION



RIGHT ELEVATION



LEFT ELEVATION

N.K.
 (NARENDRA KUMAR)
 p.k. Approved 10.3.23
 (Approved Approval)
 Locant 13/4/23
 (R.K. Gang)
 San SS. 13/3/2023.
 (SANDEEP SOOD)

A.P.K.
 A D P Keshri
 Chief Technical Consultant

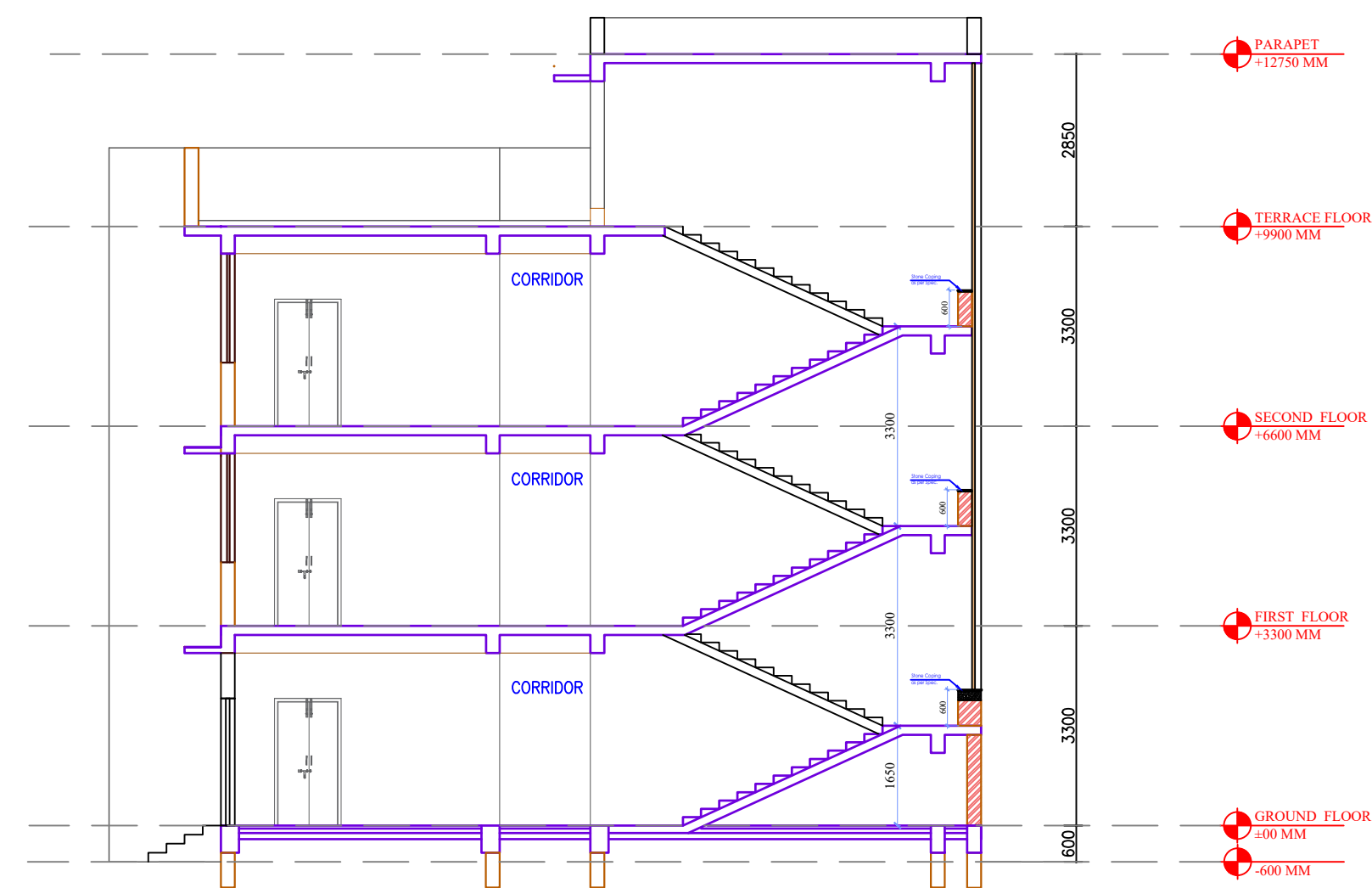
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/GH/AR_03

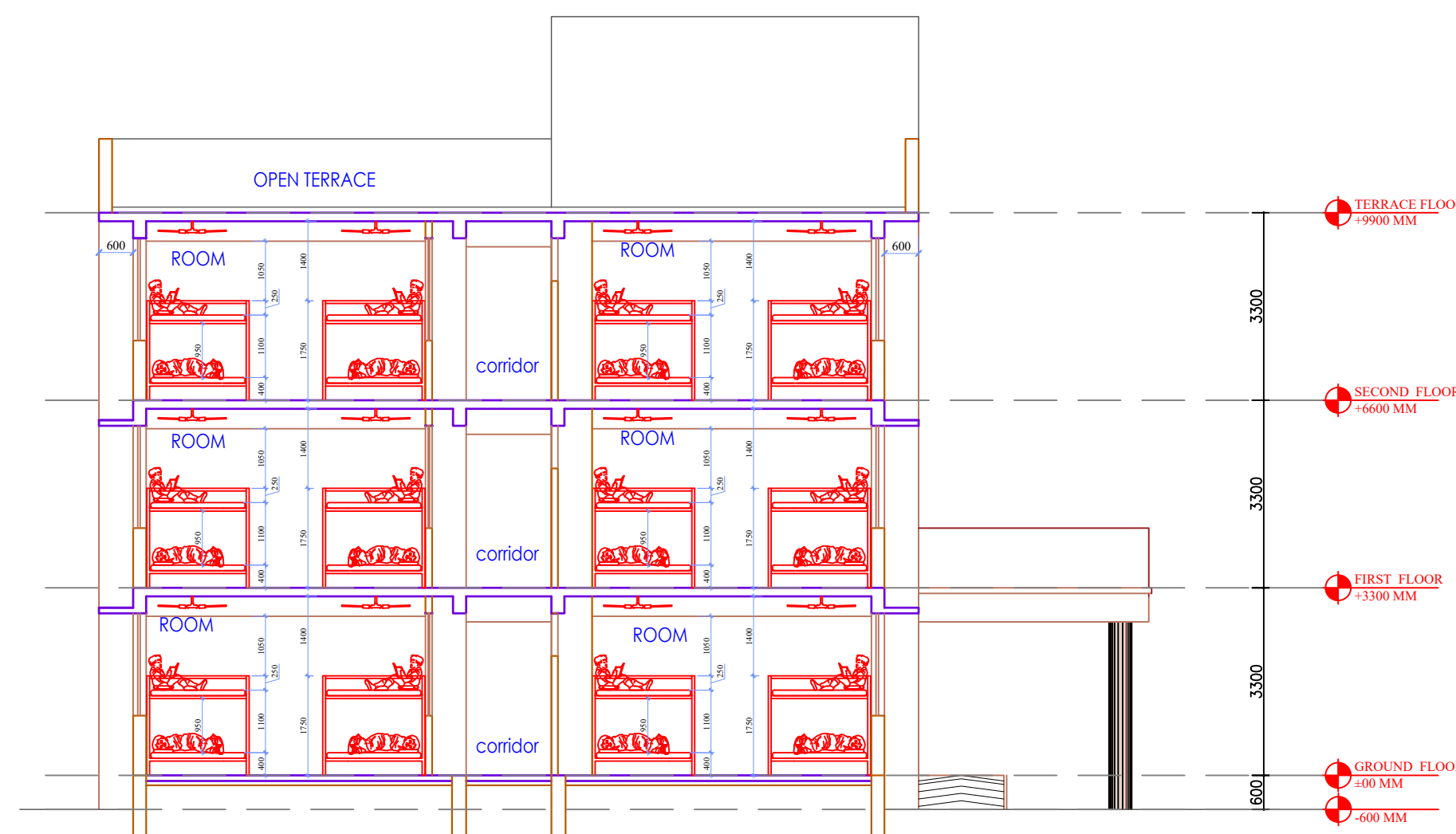
SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

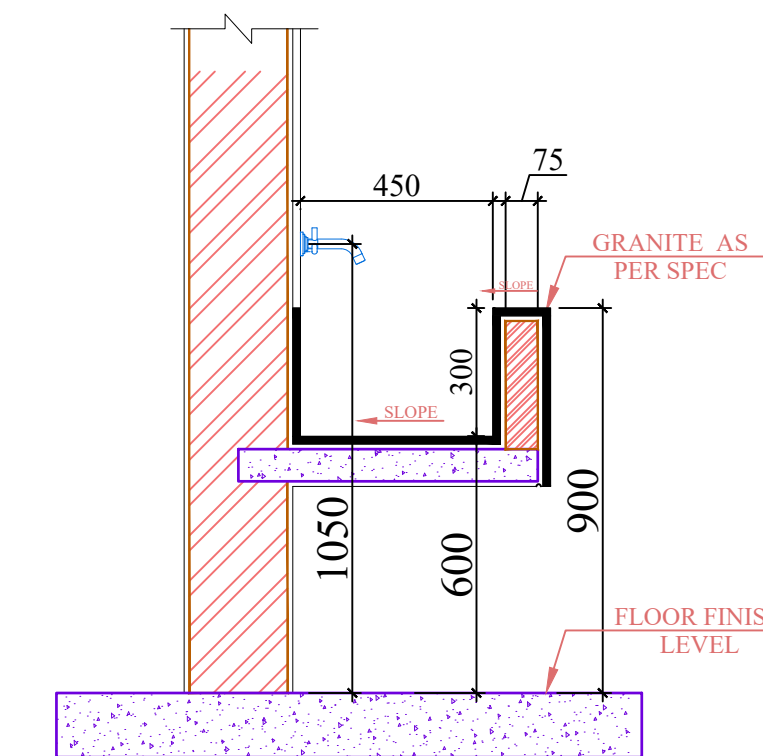
TITLE
HOSTEL-GIRLS
ELEVATION



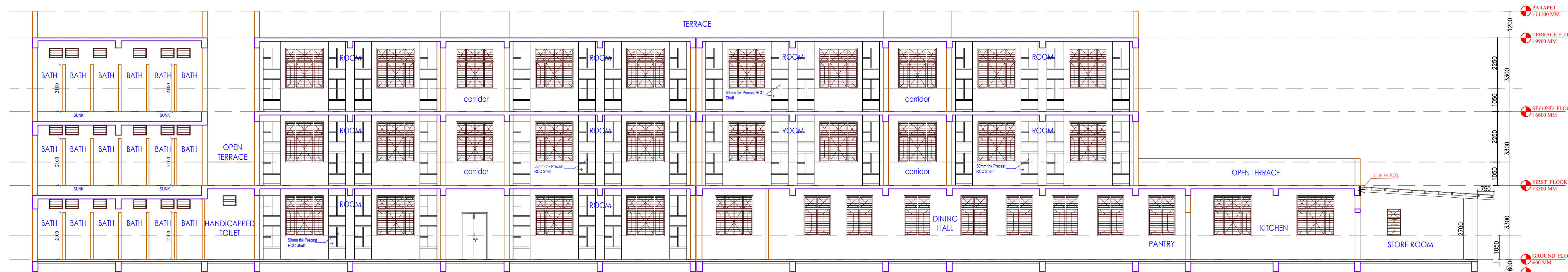
SECTION - A.



SECTION - B.



TROUGH TYPICAL SECTION



SECTION - C.

NDK
 (NARENDRA KUMAR)
 p.k. Approved 10.3.23
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 Count 13/3/23
 (Rk Gang)
 Rev SS 13/3/2023
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ADP Keshri
 A D P Keshri
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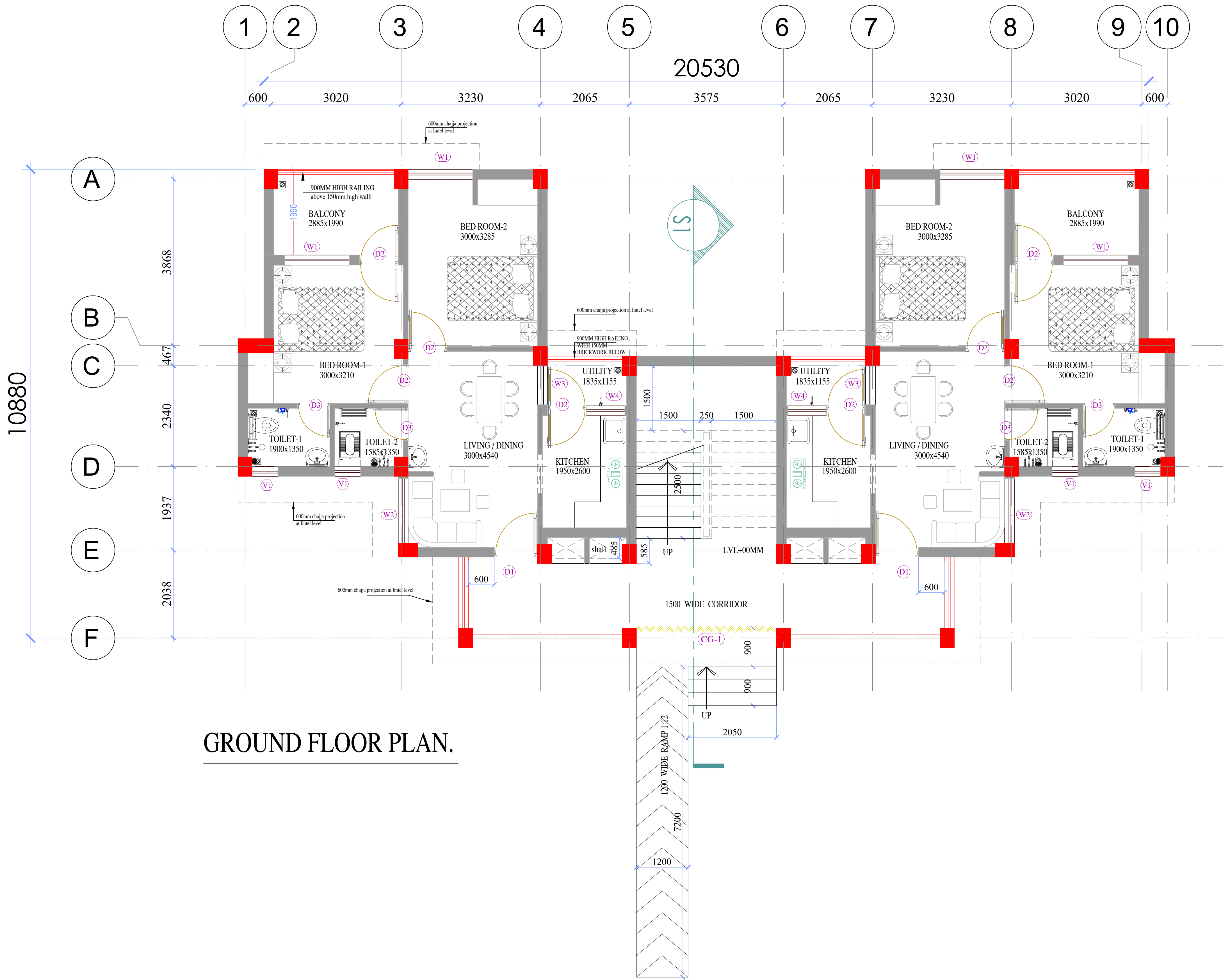
DATE - 09 MARCH 2023

DWG. NO.-
 EMRS NAME/GH/AR_04

SCALE:

MINISTRY OF TRIBAL AFFAIRS
 NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

TITLE
 HOSTEL-GIRLS
 SECTION



GROUND FLOOR PLAN.

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

**GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION
SOCIETY FOR TRIBAL STUDENTS**

TYPE 2										
DOOR	WINDOW	VENTILATOR	FIXED GLAZING	GRILL	SCHEDULE FOR TYPE I QUARTER					
TAG	CLEAR OPENING SIZE	SILL	UNTEL	Net Area (sqm)	Total (sqm)	LOCATION	MATERIAL	COMMENTS		
D1	1000 X 2100	0	2100	1	10	10	MAIN ENTRANCE DOOR	FLUSH DOOR	SINGLE LEAF	
D1	1000 X 2100	0	2100	4	1	4	TERRACE DOOR	MS SHEET DOOR	SINGLE LEAF	
D2	900 X 2100	0	2100	2	10	20	BEDROOM DOOR	FLUSH DOOR	SINGLE LEAF	
D2	900 X 2100	0	2100	2	10	20	BALCONY, UTILITY	LAMINATED DOOR WITH WIRE MESH	SINGLE LEAF	
D3	750 X 2100	0	2100	2	10	20	TOILET DOOR	FACED PRESSED LAMINATED DOOR	SINGLE LEAF	
W1	1500 X 1350	750	2100	2	10	20	BEDROOM1, BEDROOM2	STEEL GLAZED WINDOW		
W2	1500 X 1200	900	2100	1	10	10	LIVING / DINING HALL	STEEL GLAZED WINDOW		
W3	900 X 1200	900	2100	1	10	10	LIVING / DINING HALL	STEEL GLAZED WINDOW		
W4	900 X 1050	1050	2100	1	10	10	KITCHEN	STEEL GLAZED WINDOW		
V1	600 X 600	1500	2100	2	10	20	TOILET	STANDARD STEEL SECTION		
CG-1	2250 X 2100	0	2100	1	1	1	BLOCK FRONT ENTRY GATE	STANDARD STEEL SECTION	COLLAPSIBLE GATE	

N.K.
(NARENDRA KUMAR)

pk approval 10.02.23
(Pranav approval)

leant 13/4/23
(Rk Gang)

San SS 13/3/2023
(SANDEEP SOOD)

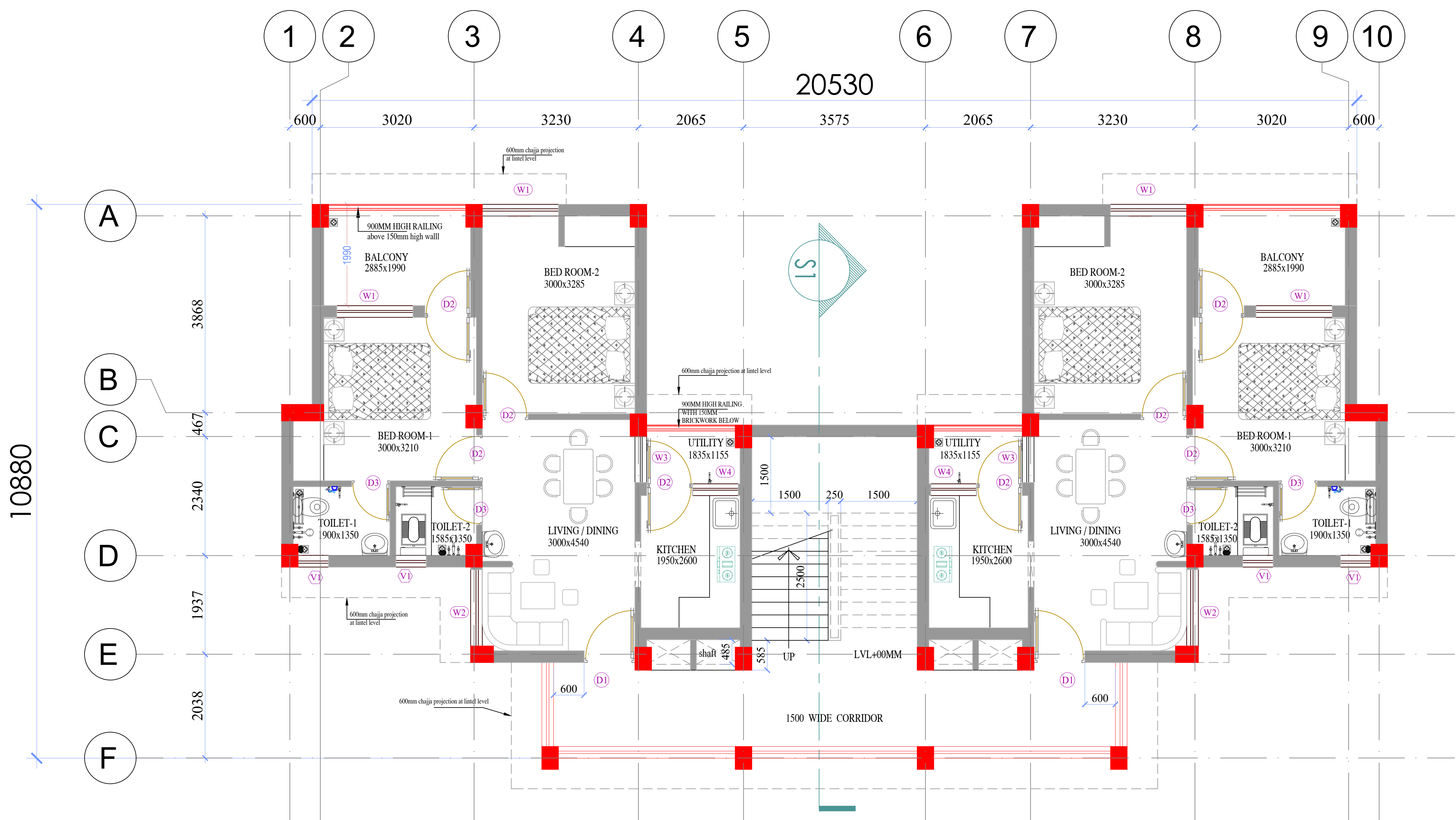
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : TYPE II QUARTER

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.- EMRS NAME/TYPE-II/AR_01

DATE - 09 MARCH 2023



TYPICAL FLOOR PLAN.

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

**GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS**

N.K.
(NARENDRA KUMAR)

pk Agrawal
(Approved 10.02.23)
(Approved Approval)

leant 13/3/23
(Rk Gang)

San SS
13/3/2023.
(SANDEEP SOOD)

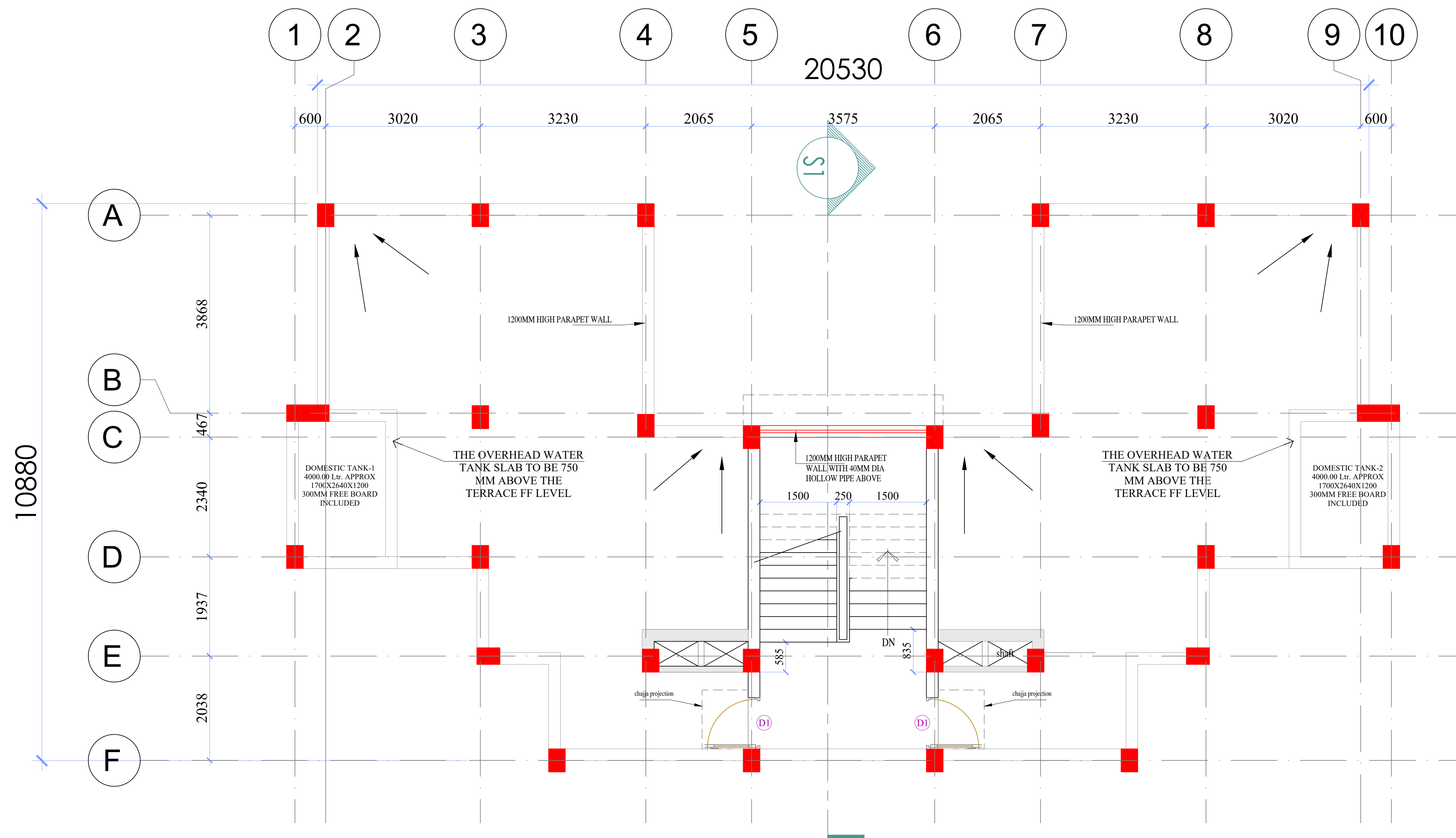
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : TYPE II QUARTER

DRAWING TITLE : FIRST FLOOR PLAN

DWG. NO.- EMRS NAME/TYPE-II/AR_02

DATE - 09 MARCH 2023



TERRACE FLOOR PLAN.

N.K.
(NARENDRA KUMAR)

P.K. Agrawal
(Checked Approval)

13/3/23
(R.K. Gang)

13/3/2023
(SANDEEP SOOD)

A.P.K.

A D P Keshri
Chief Technical Consultant

CATEGORY : TYPE II QUARTER

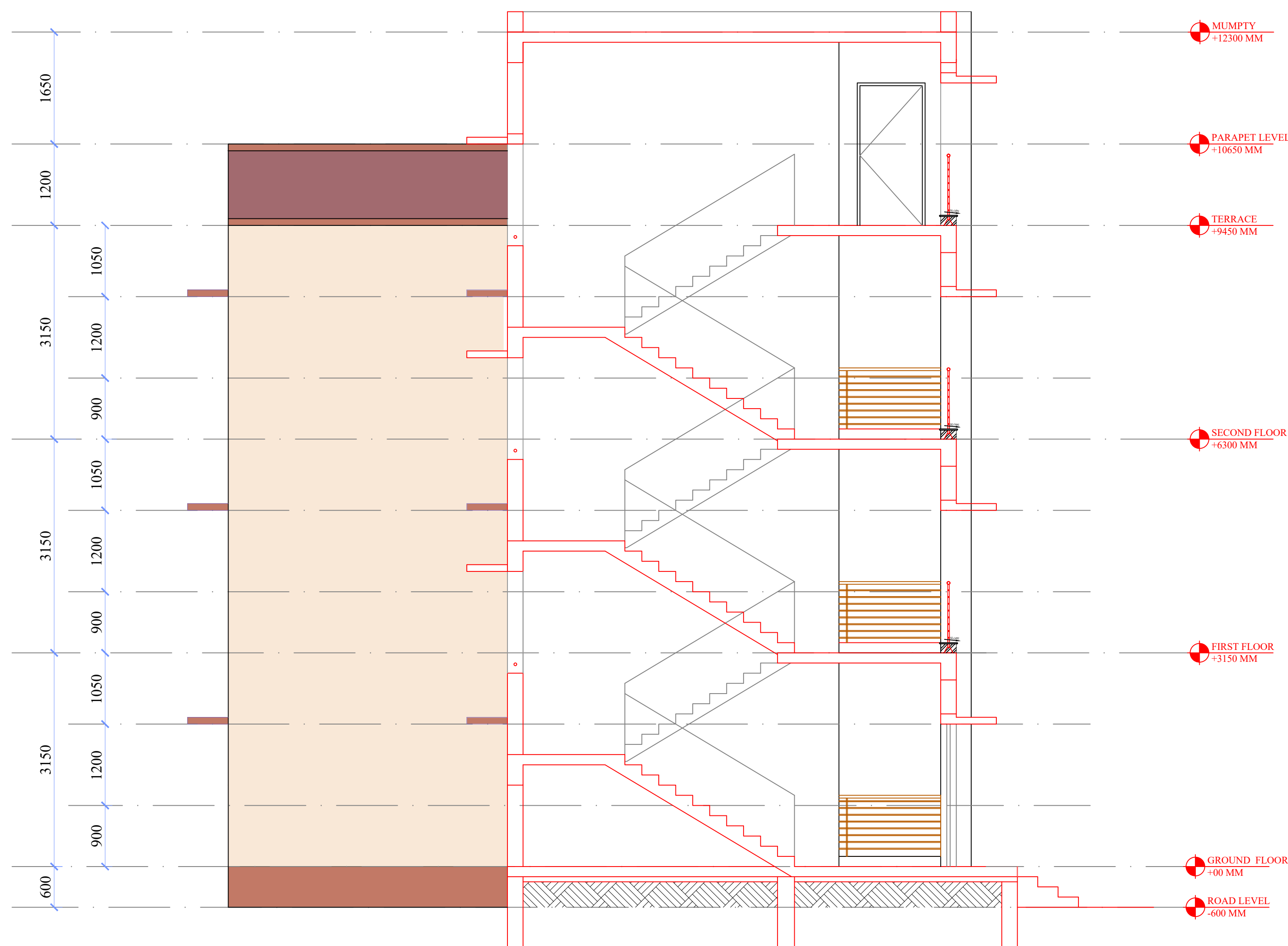
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DWG. NO.-
EMRS NAME/TYPE-II/AR_03

DATE - 09 MARCH 2023



SECTION : S1



N.K.
(NARENDRA KUMAR)

pk Agrawal 10.5.23
(Approved Agrawal)

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San SS 13/3/2023
(SANDEEP SOOD)

A.P.K.

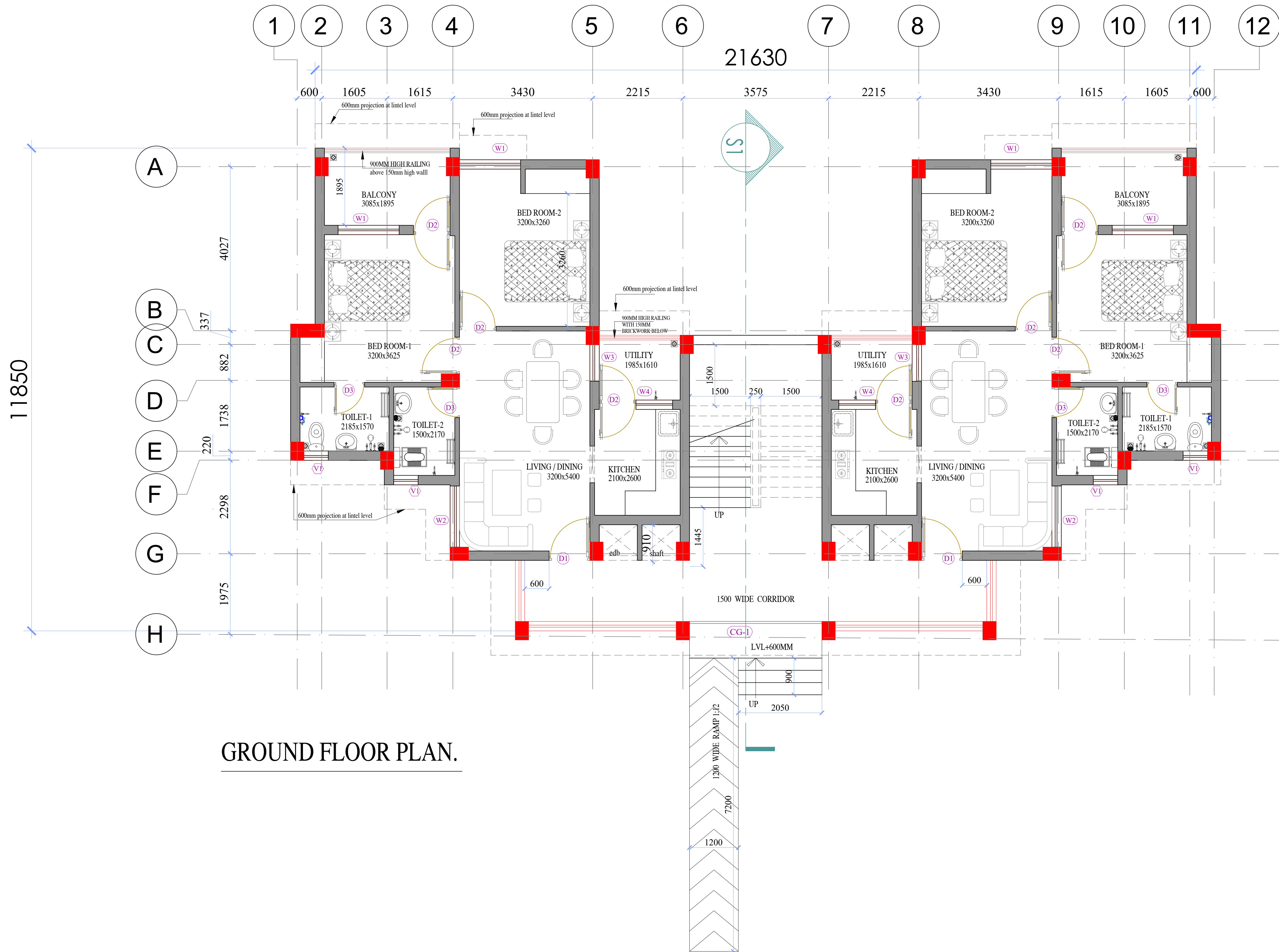
A D P Keshri
Chief Technical Consultant

CATEGORY : TYPE II QUARTER

DRAWING TITLE : SECTION

DWG. NO.-
EMRS NAME/TYPE-II/AR_05

DATE - 09 MARCH 2023



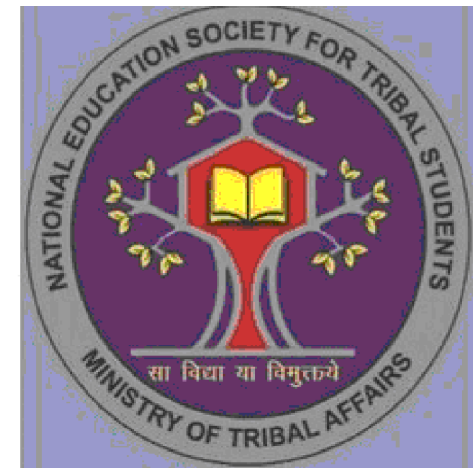
GROUND FLOOR PLAN.

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



TYPE III									
DOOR TAG	DOOR CLEAR OPENING SIZE	VENTILATOR SILL	FIXED GLAZING	GRILL	SCHEDULE FOR TYPE III QUARTER	MATERIAL	COMMENTS		
D1	1000 X 2100	0	2100	1	16	16	ENTRANCE DOOR	FLUSH DOOR	SINGLE LEAF
D1	1000 X 2100	0	2100	2	2	4	TERRACE DOOR	MS SHEET DOOR	SINGLE LEAF
D2	900 X 2100	0	2100	2	16	32	BEDROOM DOOR	FLUSH DOOR	SINGLE LEAF
D2	900 X 2100	0	2100	2	16	32	UTILITY BALCONY	PRELAMINATED DOOR WITH WIRE MESH FACTORY PRESSED LAMINATED DOOR	SINGLE LEAF
D3	750 X 2100	0	2100	2	16	32	TOILET DOOR	FLUSH DOOR	SINGLE LEAF
W1	1500 X 1350	750	2100	2	16	32	BEDROOM-1	STEEL GLAZED WINDOW	
W2	1500 X 1200	600	2100	1	16	16	LIVING / DINING	STEEL GLAZED WINDOW	
W3	900 X 1200	900	2100	1	16	16	LIVING / DINING	STEEL GLAZED WINDOW	
W4	900 X 1050	1050	2100	1	16	16	KITCHEN	STEEL GLAZED WINDOW	
V1	600 X 900	1500	2100	2	16	32	TOILET	STANDARD STEEL SECTION	
CG-1	3250 X 2100	0	2100	1	2	2	BLOCK FRONT ENTRY GATE	STANDARD STEEL SECTION	COLLAPSIBLE GATE

N.K.
(NARENDRA KUMAR)

pk Agrawal
(Checked Approval)

Leant 13/3/23
(Rk Gang)

San SS
13/3/2023
(SANDEEP SOOD)

A.P.K.

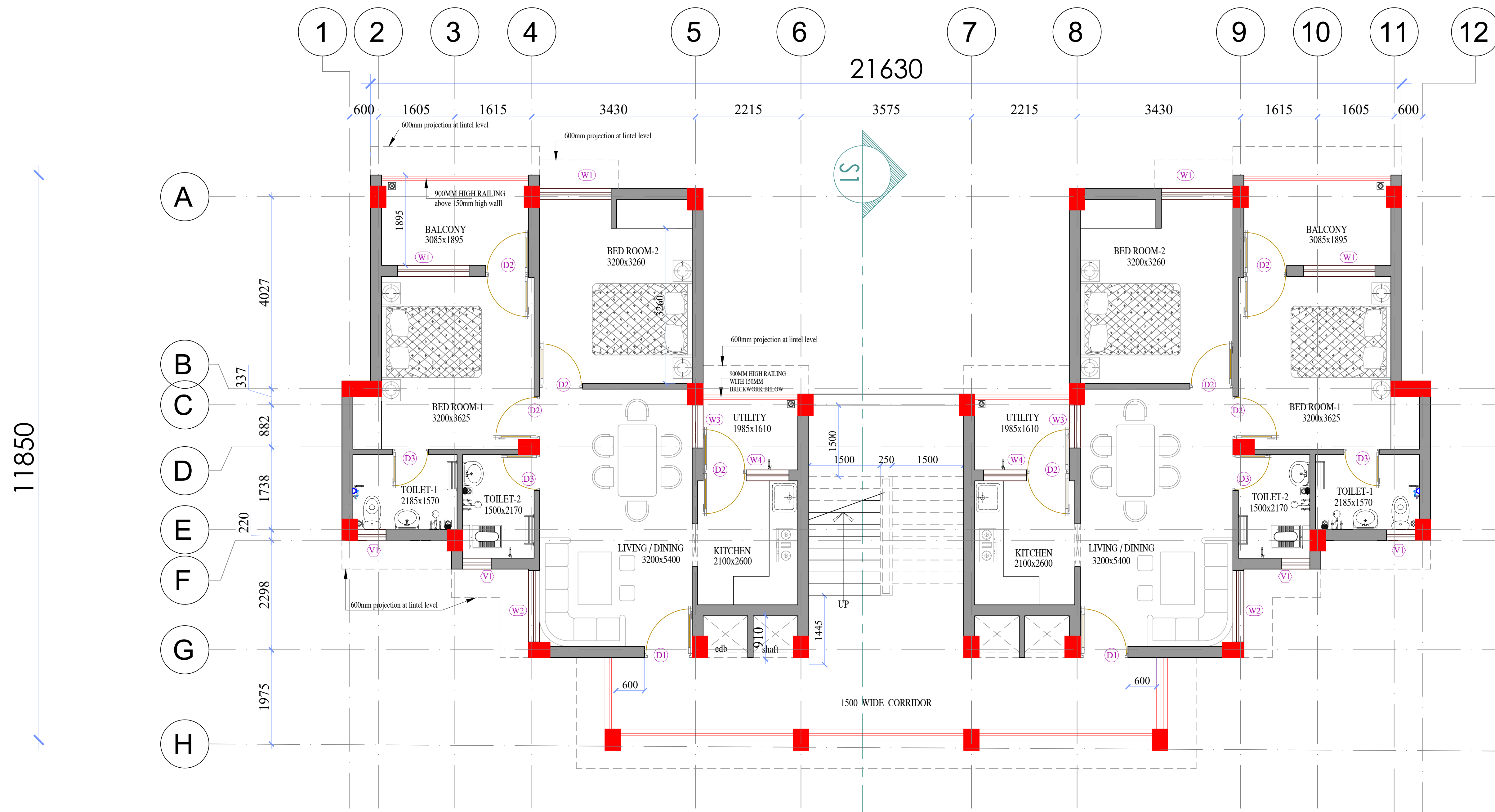
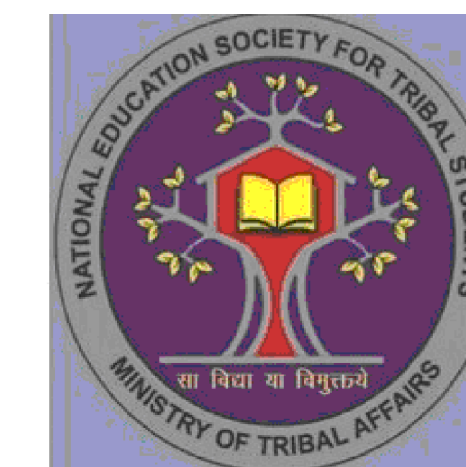
A D P Keshri
Chief Technical Consultant

CATEGORY : TYPE III QUARTER

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.-
EMRS NAME/TYPE-III/AR_01

DATE - 09 MARCH 2023



TYPICAL FLOOR PLAN.

N.K.
(NARENDRA KUMAR)

pk Agrawal
(Checked Approval)

leant 13/3/23
(Rk Gang)

San SS
13/3/2023
(SANDEEP SOOD)

A.P.K.

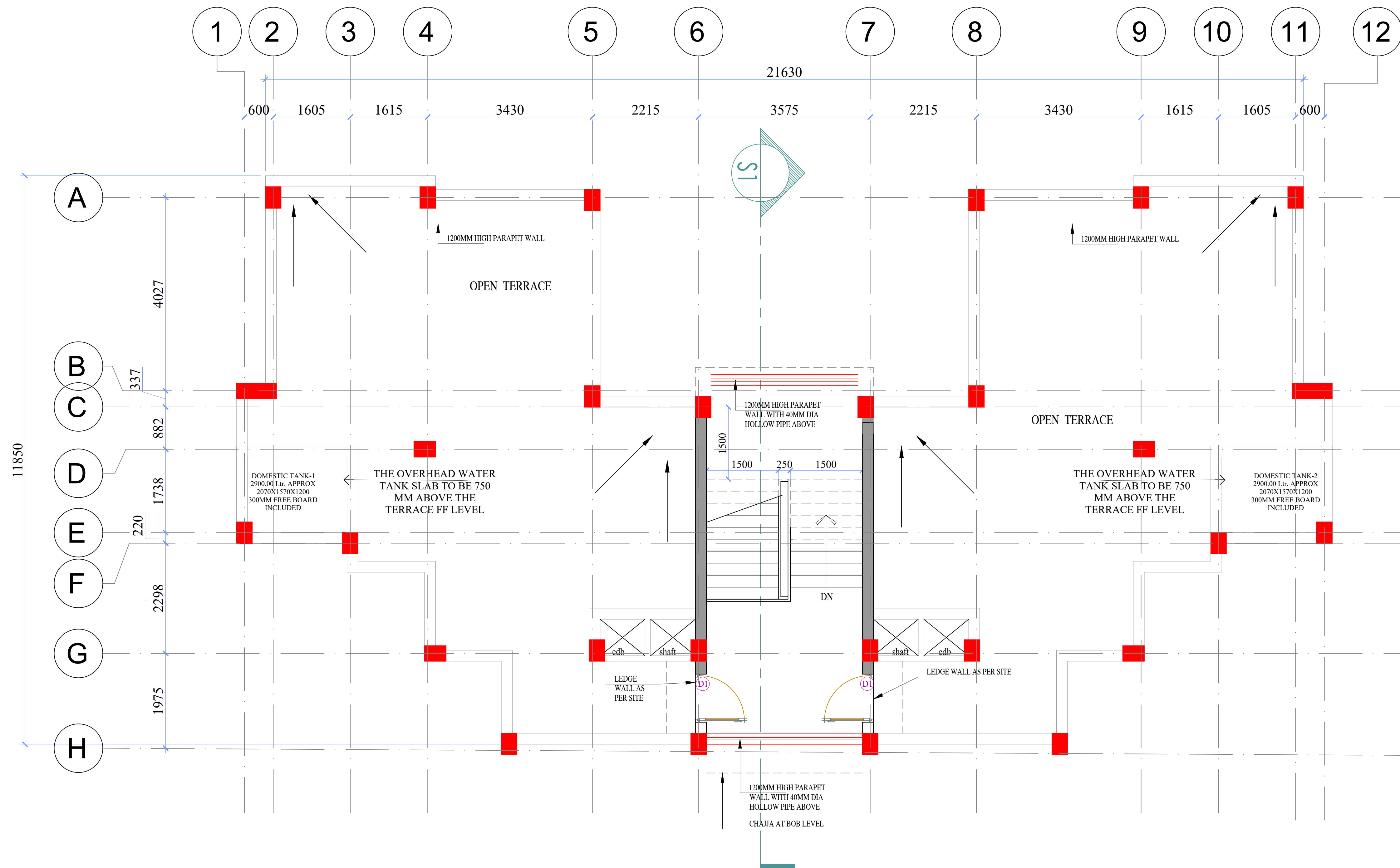
A D P Keshri
Chief Technical Consultant

CATEGORY : TYPE III QUARTER

DRAWING TITLE : TYPICAL FLOOR PLAN

DWG. NO.-
EMRS NAME/TYPE-III/AR_02

DATE - 09 MARCH 2023



PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



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CATEGORY : TYPE III QUARTER

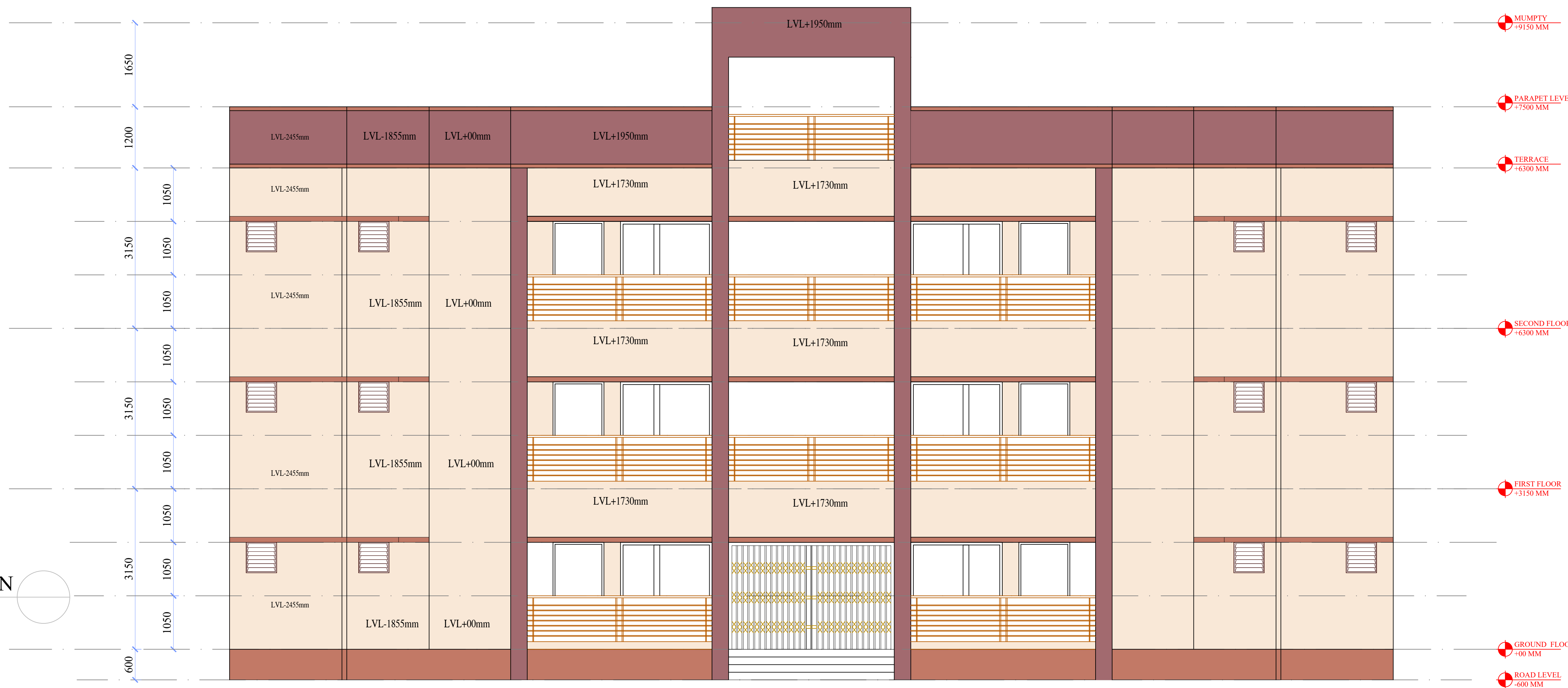
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EMRS NAME/TYPE-III/AR_03

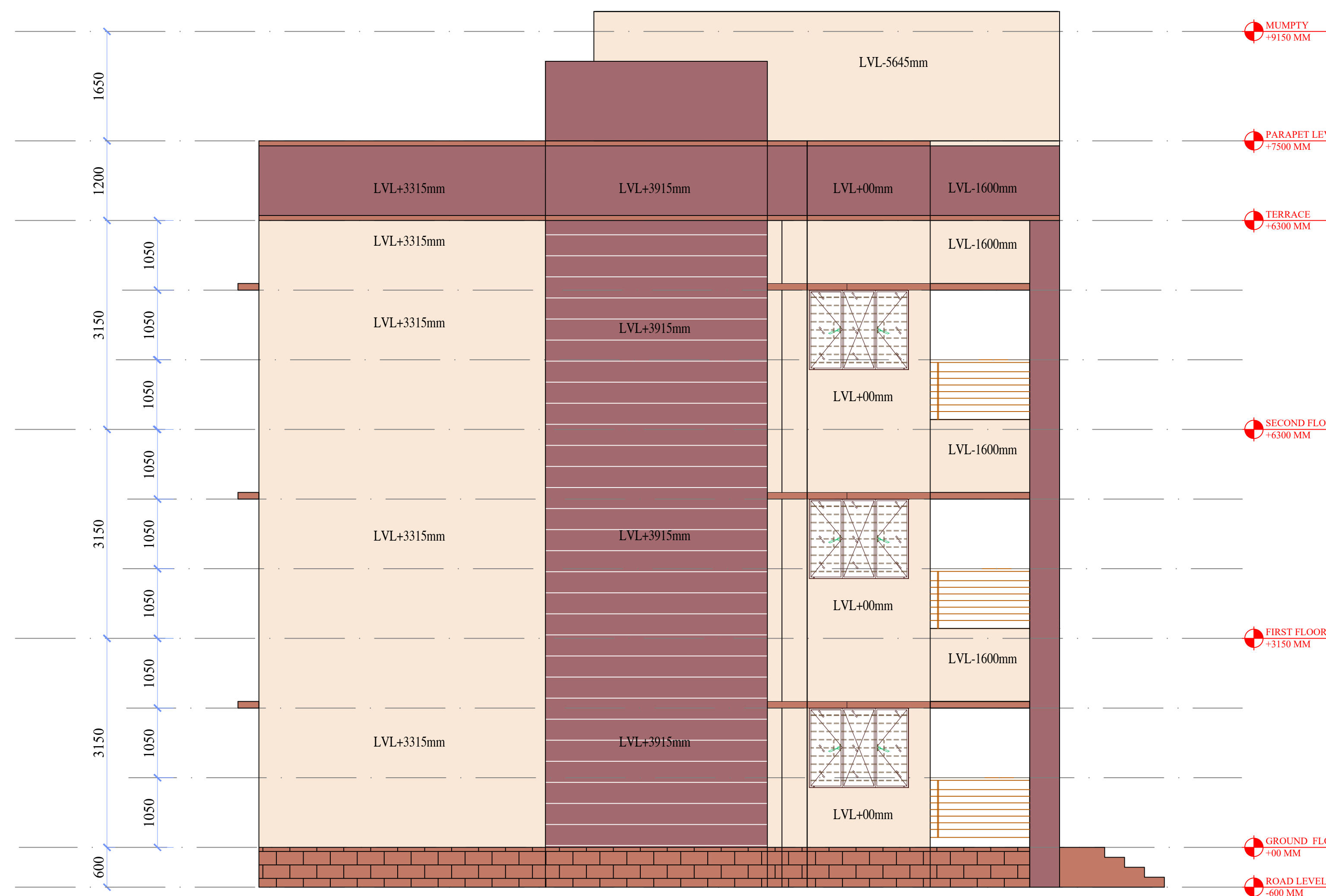
DATE - 09 MARCH 2023



FRONT ELEVATION



SIDE ELEVATION



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(Approved Approval)

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(R.K. Gang)

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(SANDEEP SOOD)

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Chief Technical Consultant

CATEGORY : TYPE III QUARTER

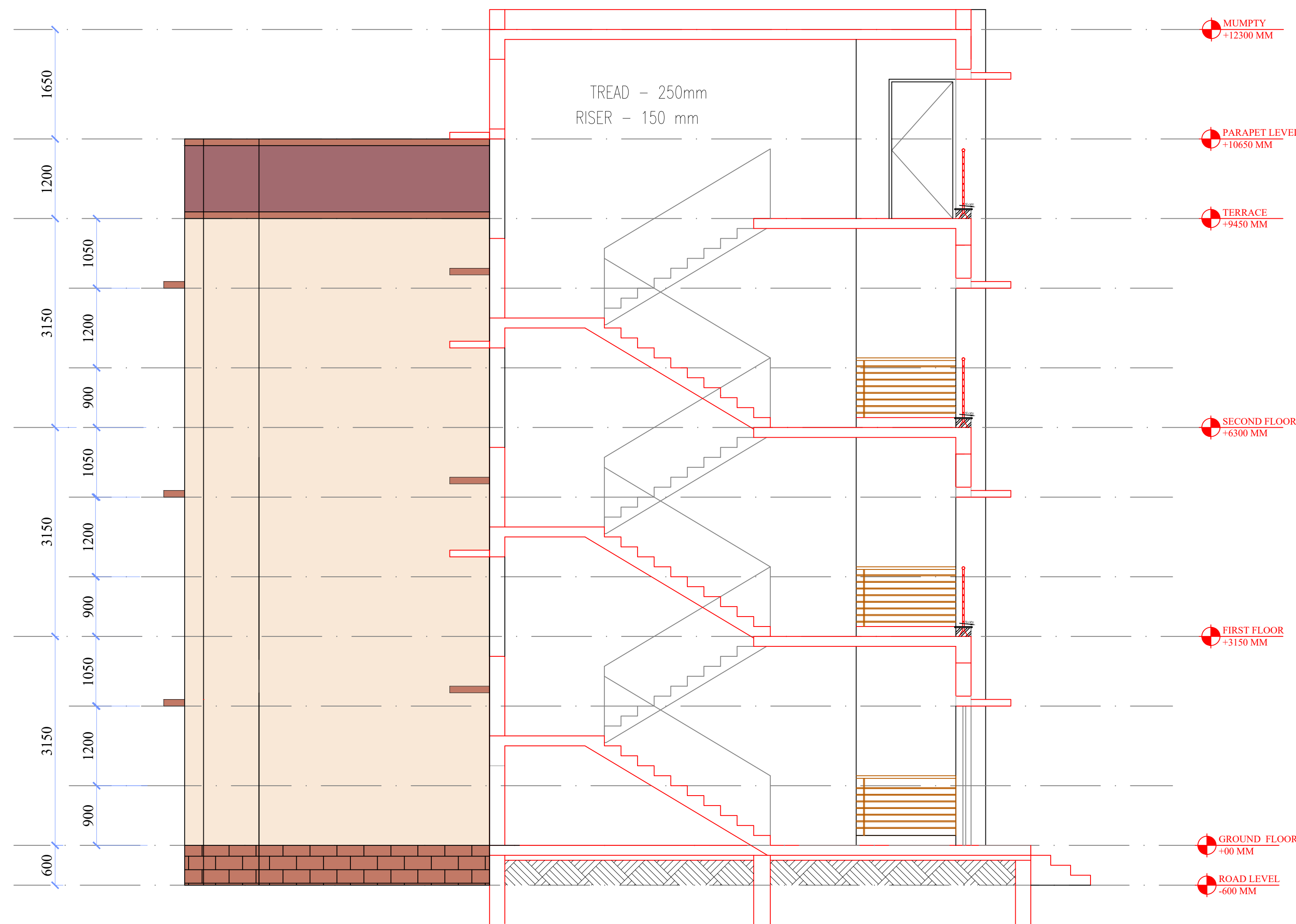
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DWG. NO.-
EMRS NAME/TYPE-III/AR_04

DATE - 09 MARCH 2023



SECTION : S1



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(SANDEEP SOOD)

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Chief Technical Consultant

CATEGORY : TYPE III QUARTER

DRAWING TITLE : SECTION

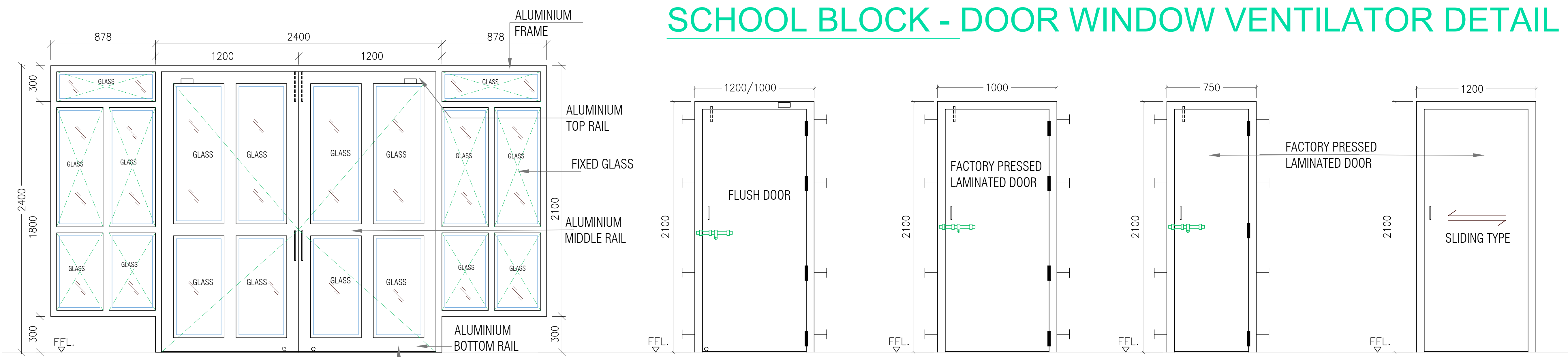
DWG. NO.-
EMRS NAME/TYPE-III/AR_05

DATE - 09 MARCH 2023

SCHOOL BLOCK - DOOR WINDOW VENTILATOR DETAIL

PROJECT - EMRS
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -
GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS



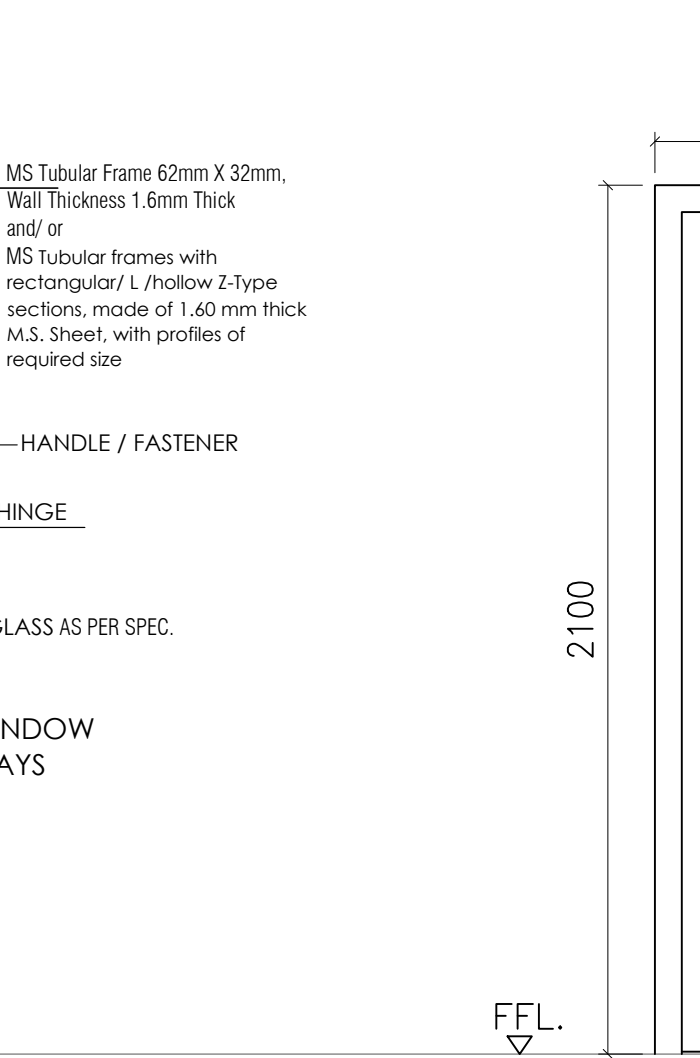
MAIN ENTRANCE DOOR
 MD - 2400 x 2400
 GL - 878X 2100 FIXED GLAZING ON SIDE

(CLASSROOM, LABS, LIBRARY)
 D1 - 1200 X 2100
(LAB STORE, ADMIN AREA)
 D2- 1000X2100

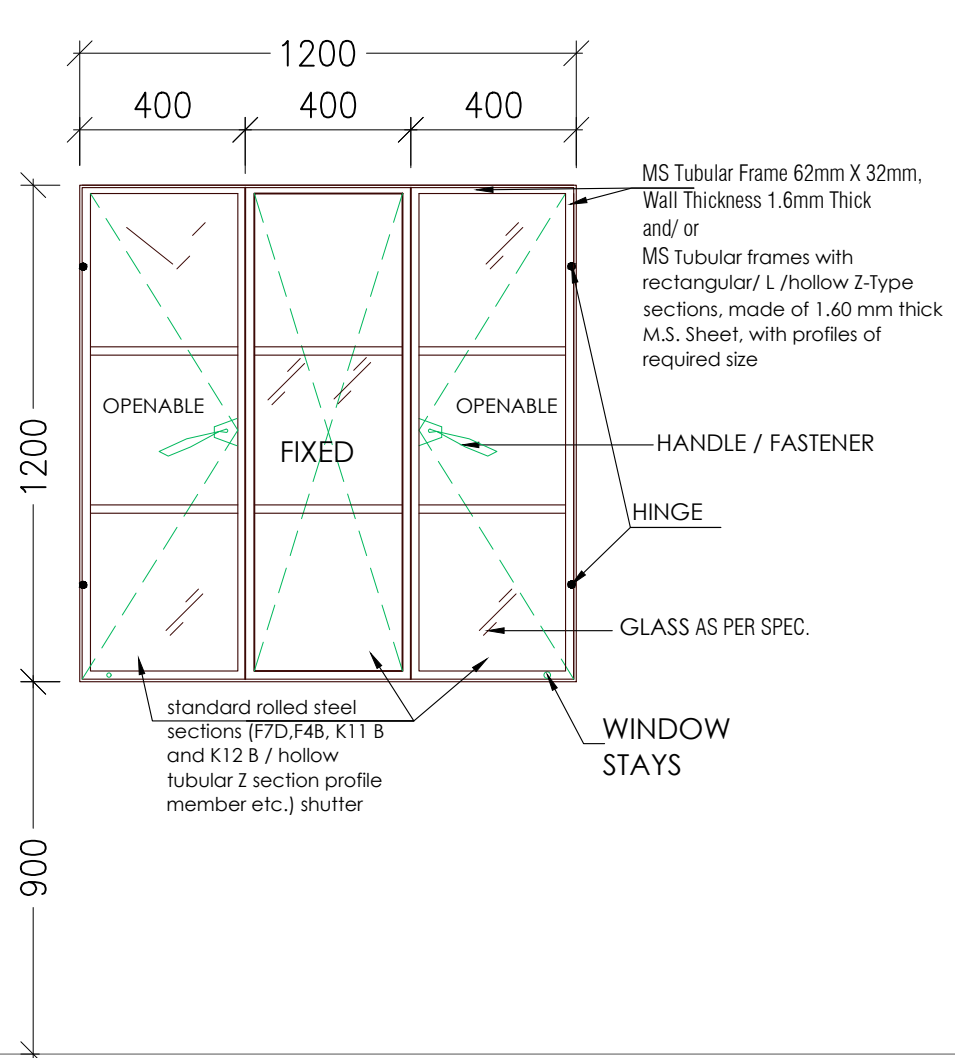
TOILET MAIN DOOR
 D2 - 1000 X 2100

TOILET INTERNAL DOOR
 D3 - 750 X 2100

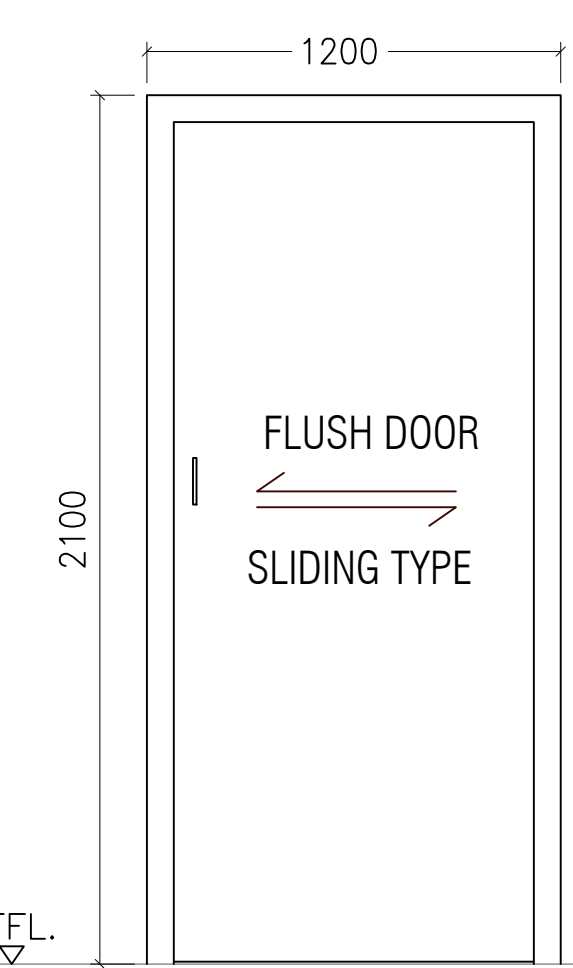
H. TOILET MAIN DOOR
 SD1 - 1200 X 2100



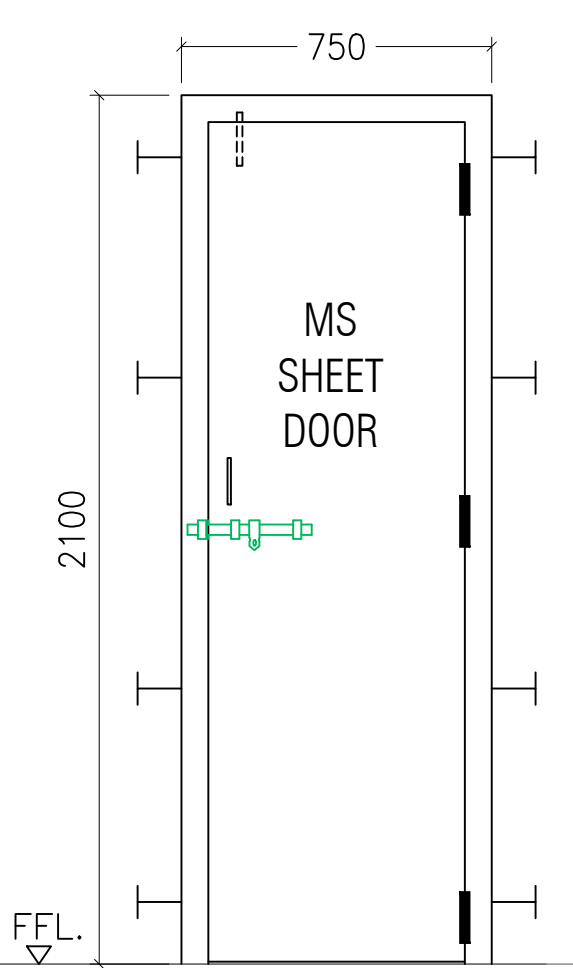
CLASSROOM, ADMIN AREA, LABS, CORRIDOR END
 W1 (1800X1200)



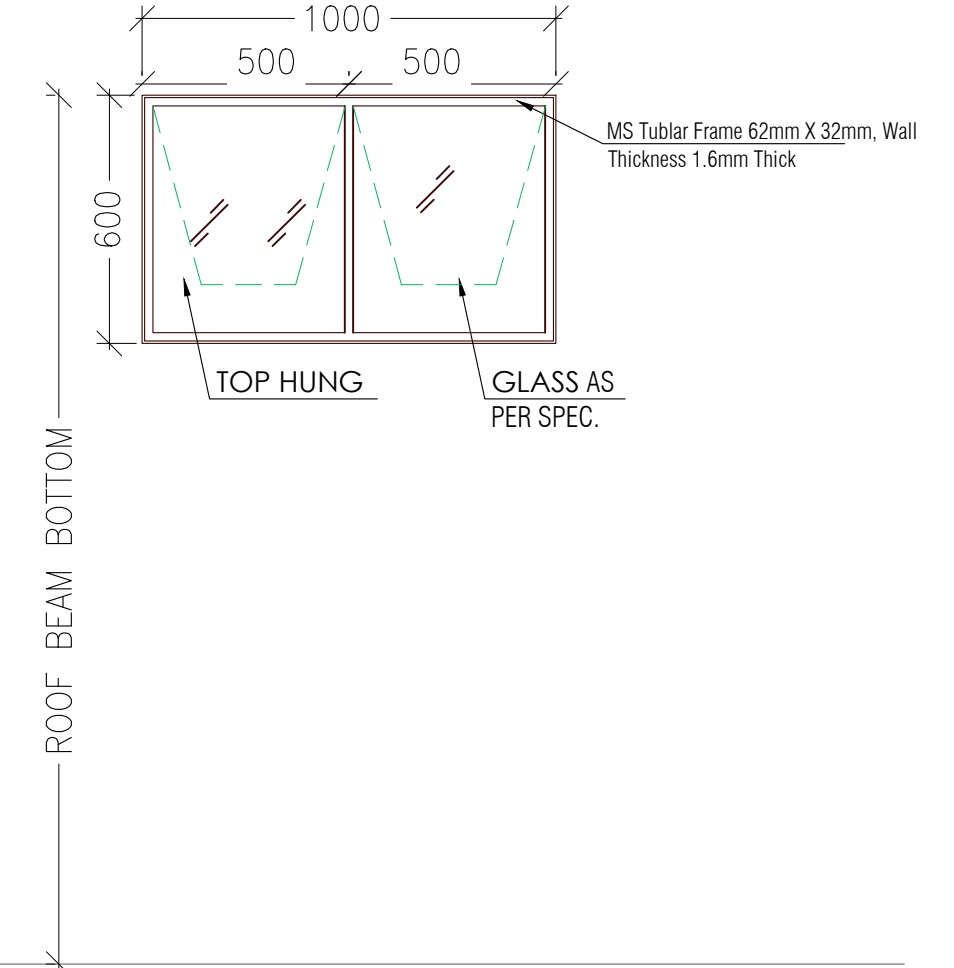
STORE, PANTRY
 W2 (1200X1200)



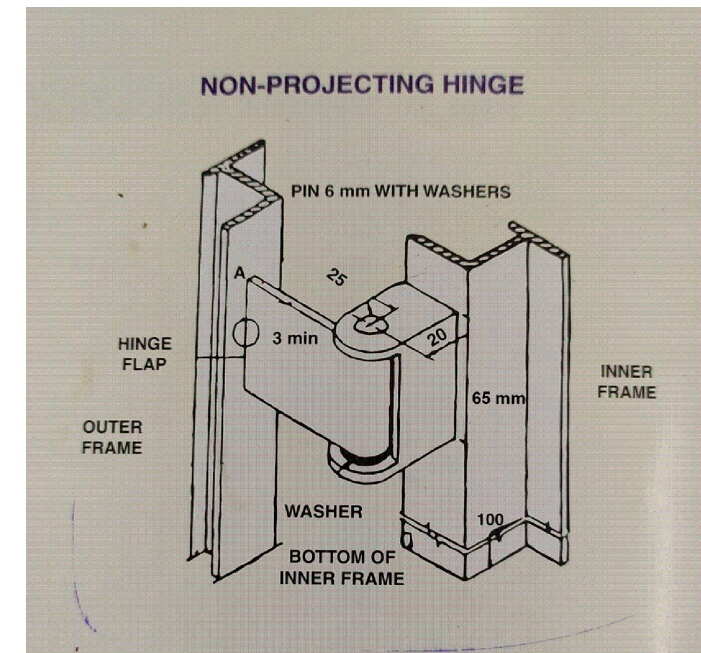
MEDICAL ROOM
 SD1 - 1200 X 2100



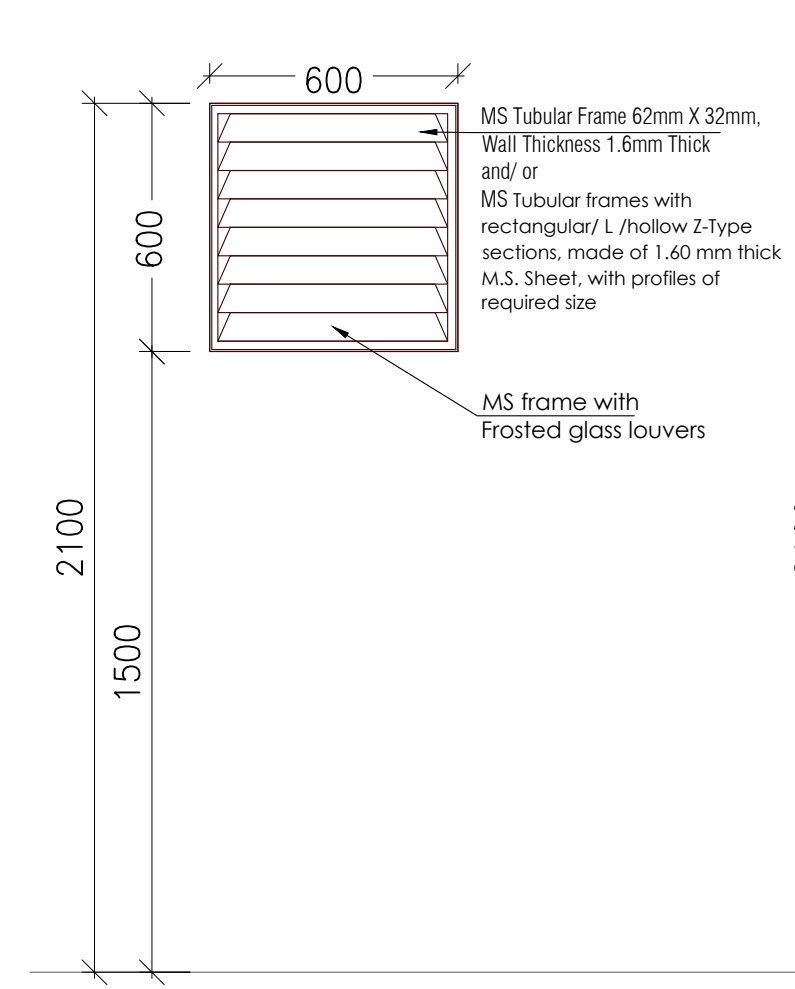
TERRACE DOOR
 D3- 750 X 2100



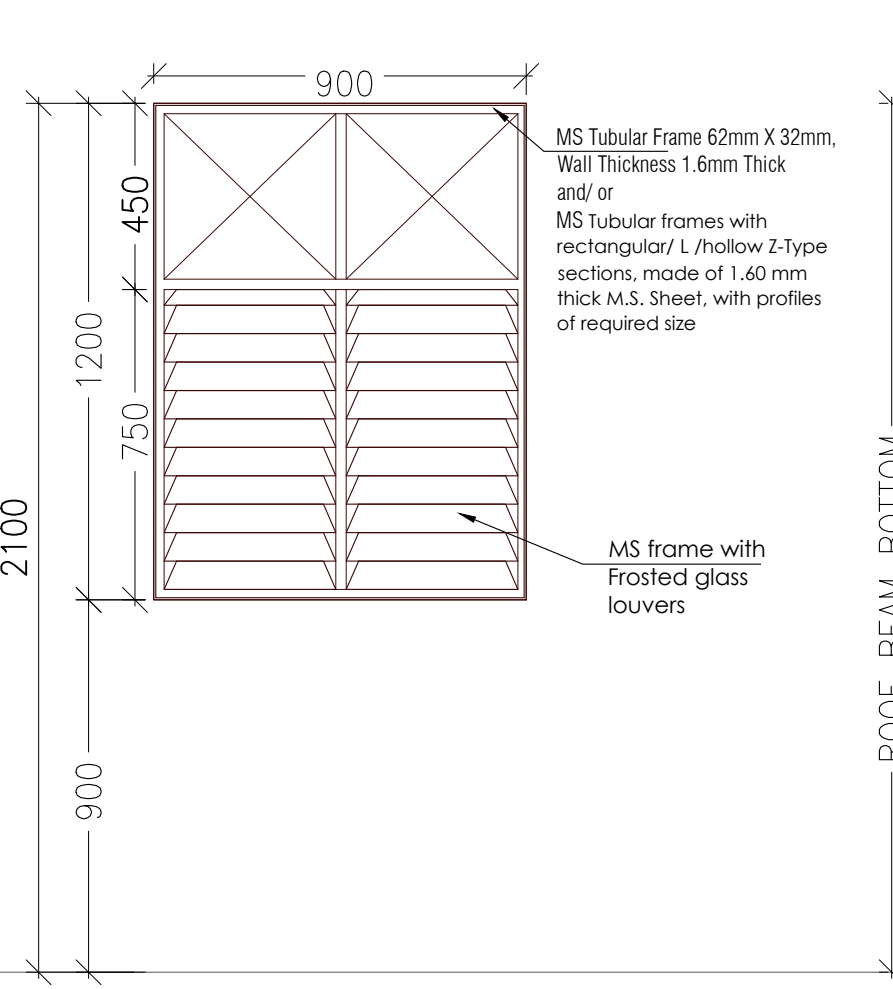
V5 (1000X600)
STAFFROOM, OFFICE,
V.PRINCIPAL, PRINCIPAL



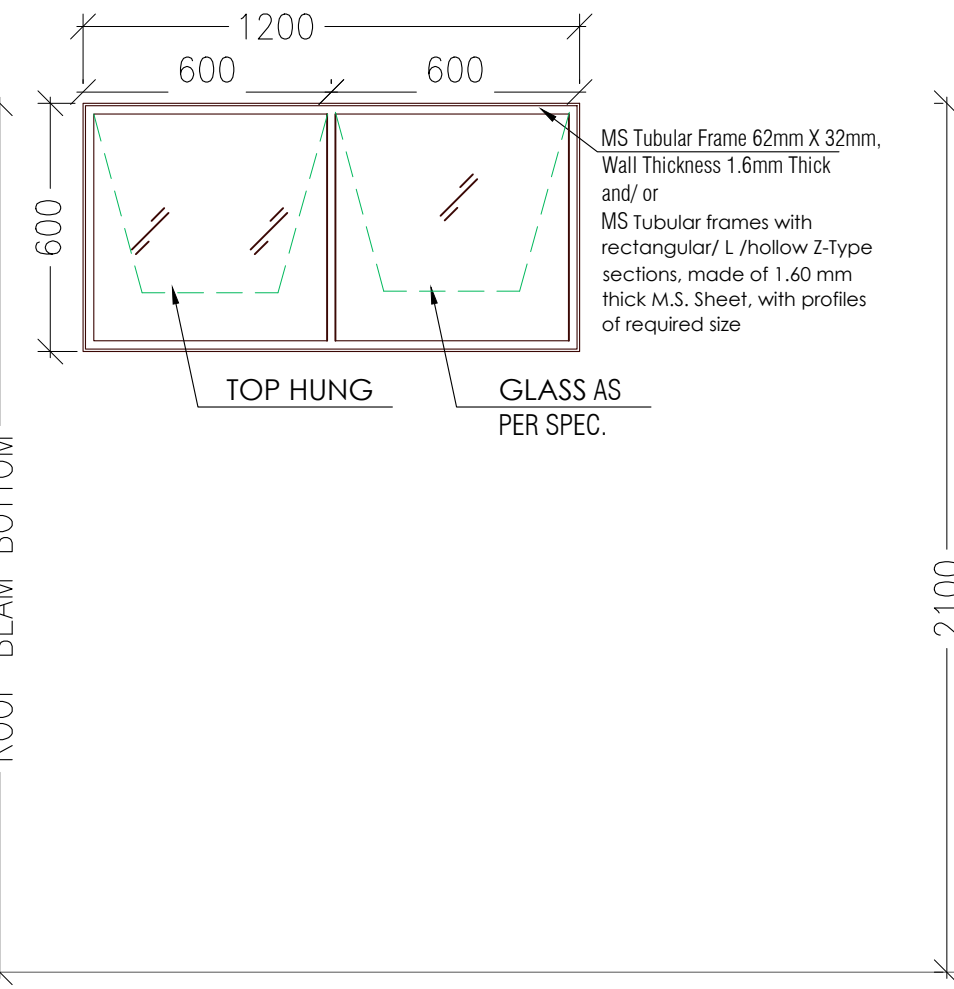
TYPICAL HINGE DETAIL



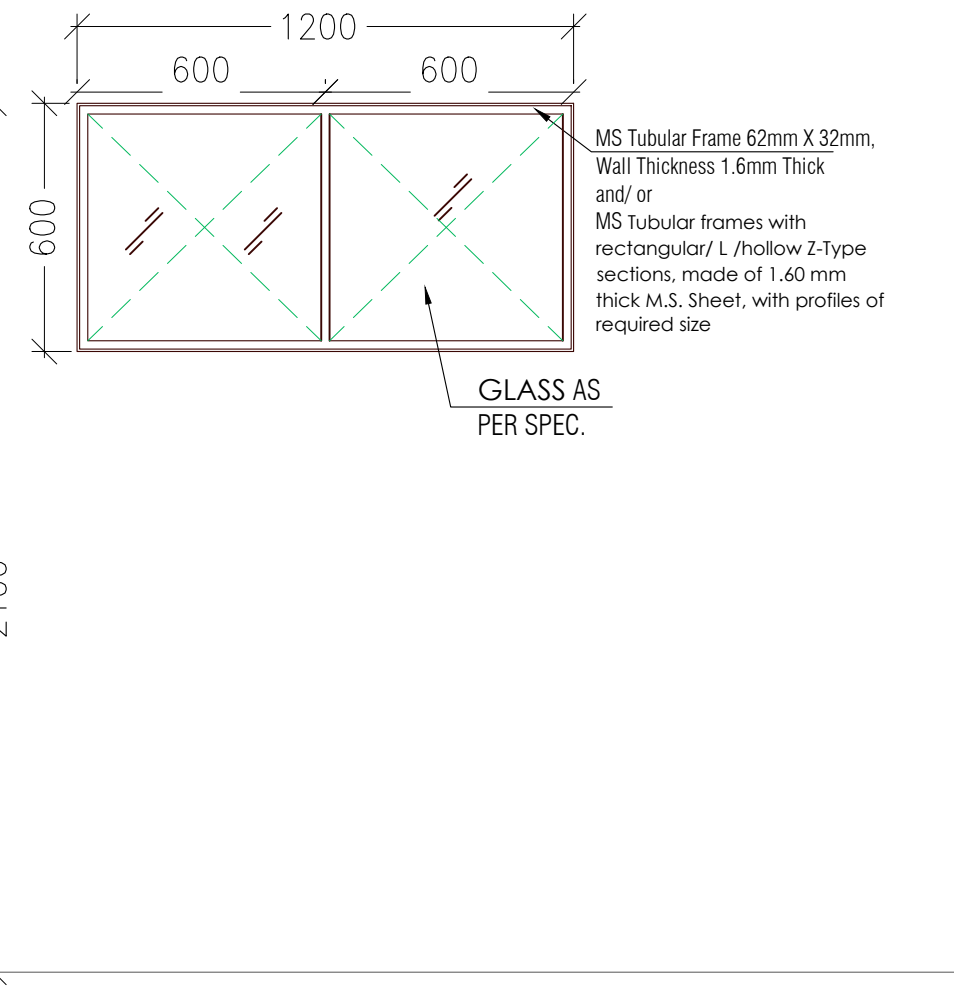
V1(600X600)
TOILET



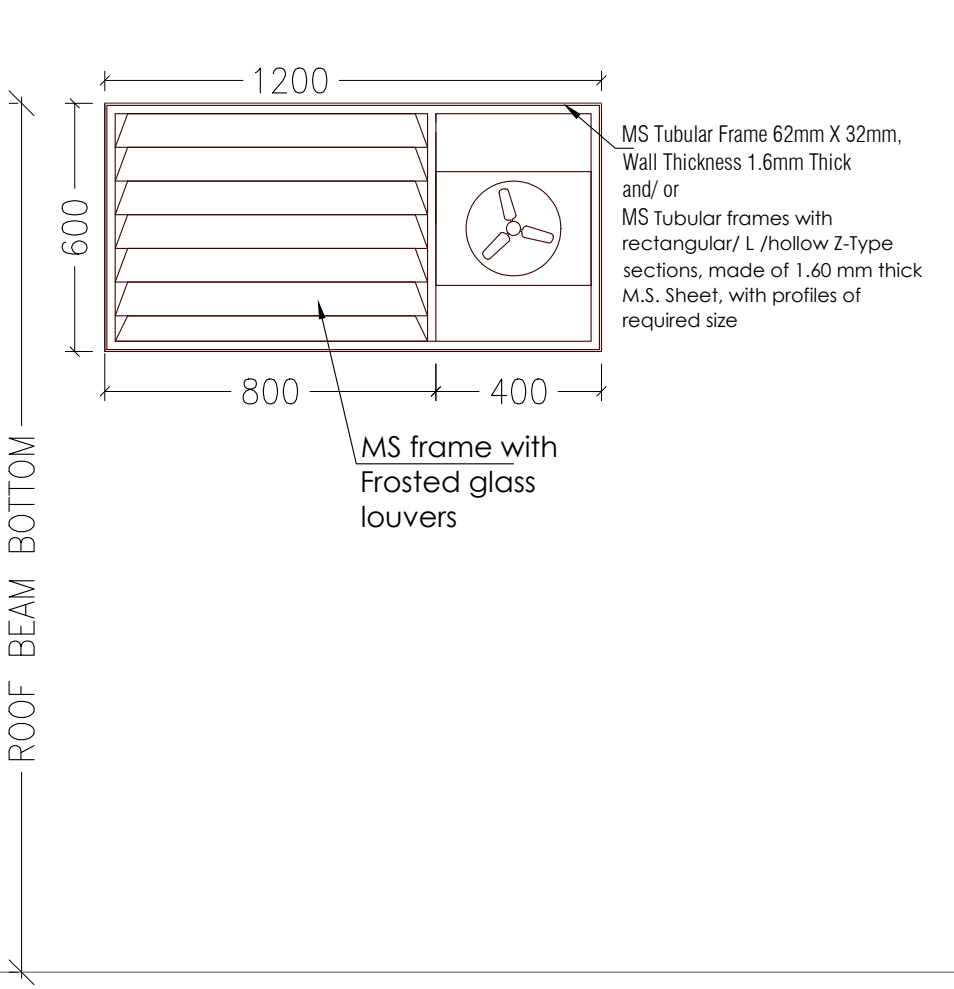
V2(900X1200)
TOILET



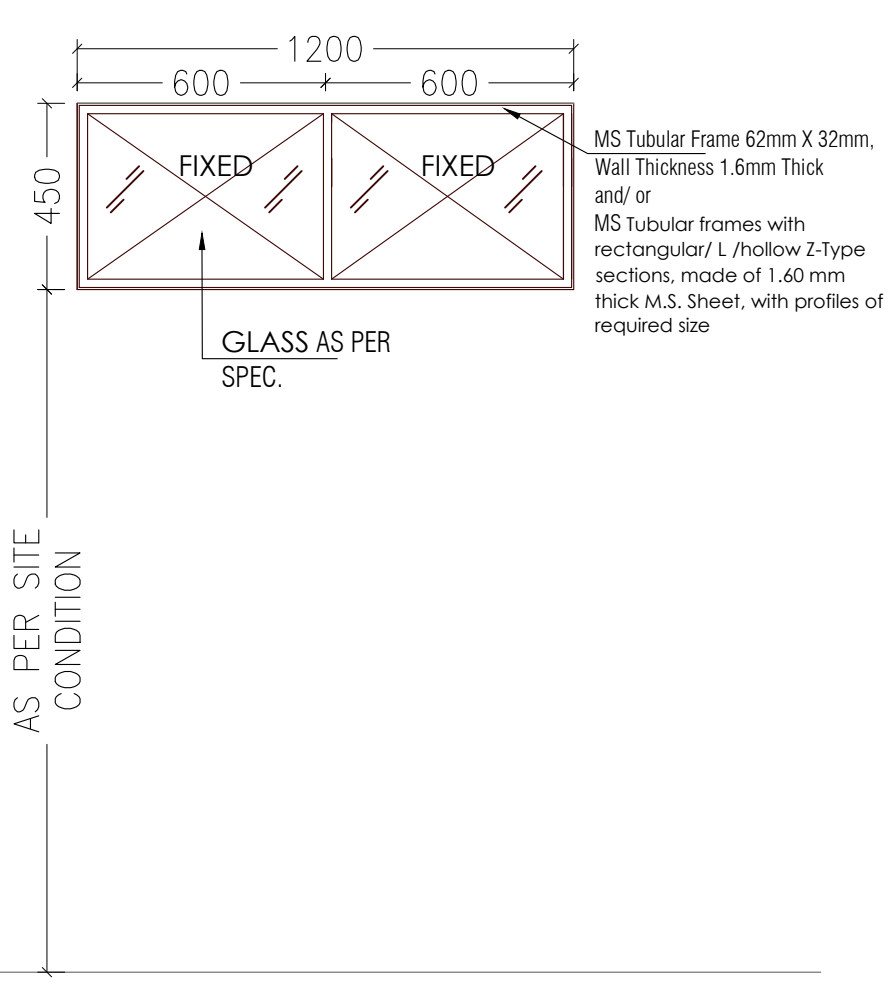
V3(1200X600)
CLASSROOM, ADMIN AREA,
LABS, RAMP



V3' (1200X600)
STORE, SERVER, MEDICAL



H.TOILET
V3''(1200x600)



STORE, MEDICAL ROOM, PANTRY, SERVER
V4(1200x450)

- NOTES -**
- FIXTURES SHALL BE AS PER CPWD SPECIFICATION**
 - GLAZED SHUTTERS WILL OPEN OUTSIDE**
 - WINDOW SHOULD BE FACTORY MADE TYPE WITH FLASH WELDING**
 - NESTS/ CPWD APPROVED MAKE SHALL ONLY BE PROVIDED**

N.K.
 (NARENDRA KUMAR)
 P.K. Agrawal 10/3/23
 (Pranav Agrawal)
 (CAWT 13/4/23
 (R.K. Gang)
 S.M.S. 13/3/2023.
 (SANDEEP SOOD)
A.P.K.

A D P Keshri
Chief Technical Consultant

CATEGORY :
 DOOR WINDOW DETAIL

DRAWING TITLE :
 SCHOOL DOOR WINDOW DETAIL

DWG. NO.-
 EMRS NAME/SCH/DWD/AR_01

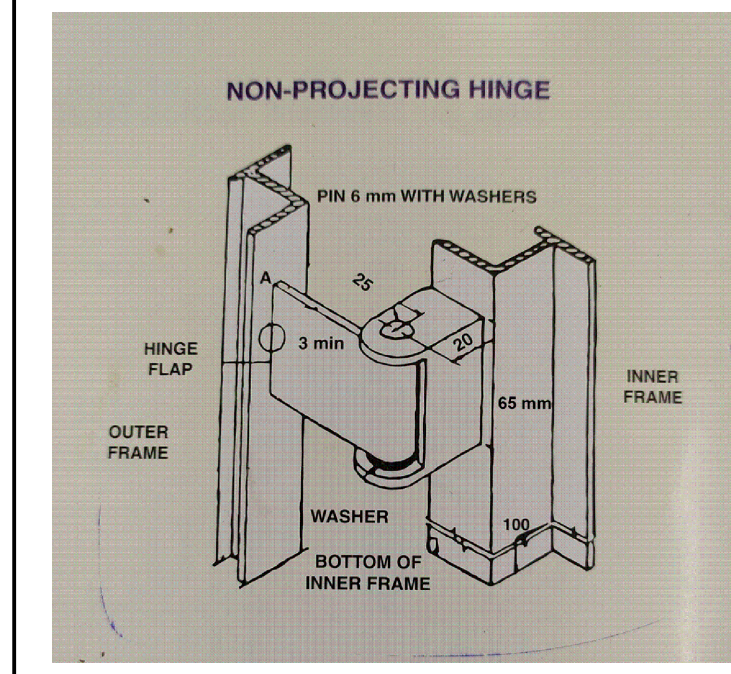
DATE - 09 MARCH 2023

SCHOOL BLOCK - GRILL DETAIL

PROJECT - EMRS
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -
**GOVERNMENT OF INDIA
 MINISTRY OF TRIBAL AFFAIRS
 NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS**

- NOTES -**
- 1. FIXTURES SHALL BE AS PER CPWD SPECIFICATION**
 - 2. GLAZED SHUTTERS WILL OPEN OUTSIDE**
 - 3. WINDOW SHOULD BE FACTORY MADE TYPE WITH FLASH WELDING**
 - 5. NESTS/ CPWD APPROVED MAKE SHALL ONLY BE PROVIDED**



TYPICAL HINGE DETAIL

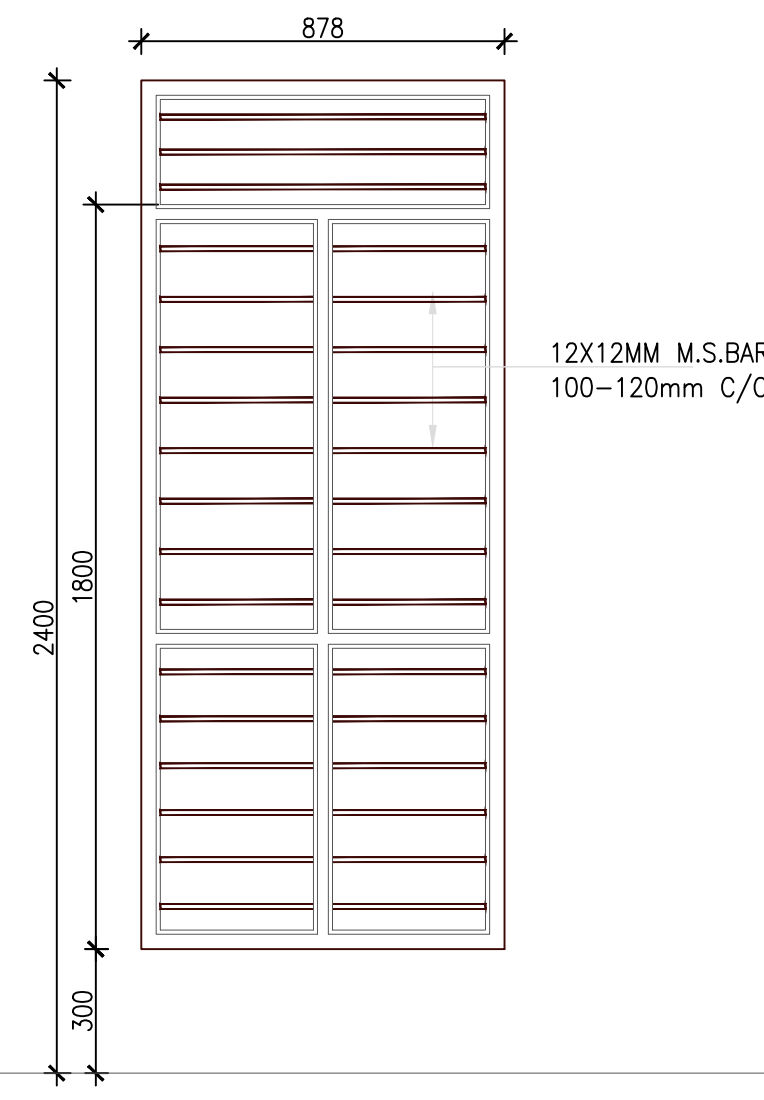
N.K.
 (NARENDRA KUMAR)
 P.K. Agrawal 10.03.23
 (Prasad Agrawal)
 (CAJNT 13/4/23)
 (R.K. Gang)
 24.03.23
 13/3/2023.
 (SANDEEP SOOD)
A.P.K.
A D P Keshri
 Chief Technical Consultant

CATEGORY :
 DOOR WINDOW DETAIL

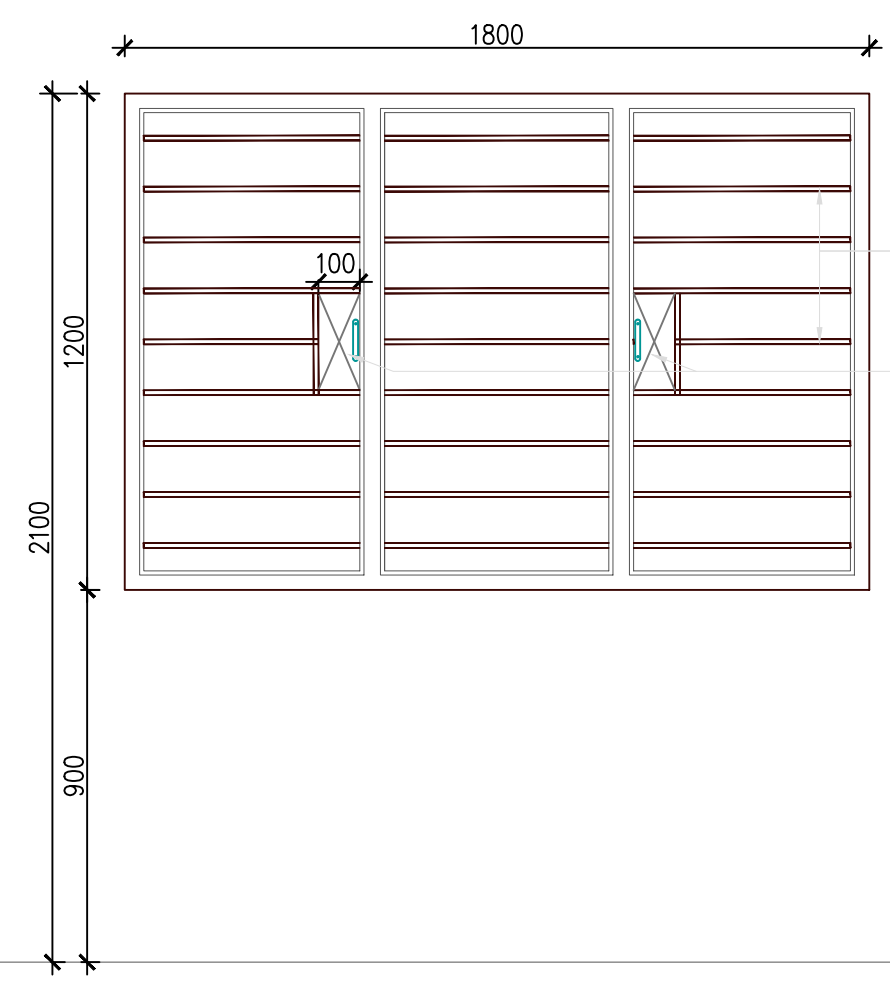
DRAWING TITLE :
 SCHOOL GRILL AND COLLAPSIBLE DETAIL

DWG. NO.-
 EMRS NAME/SCH/DWD/AR_02

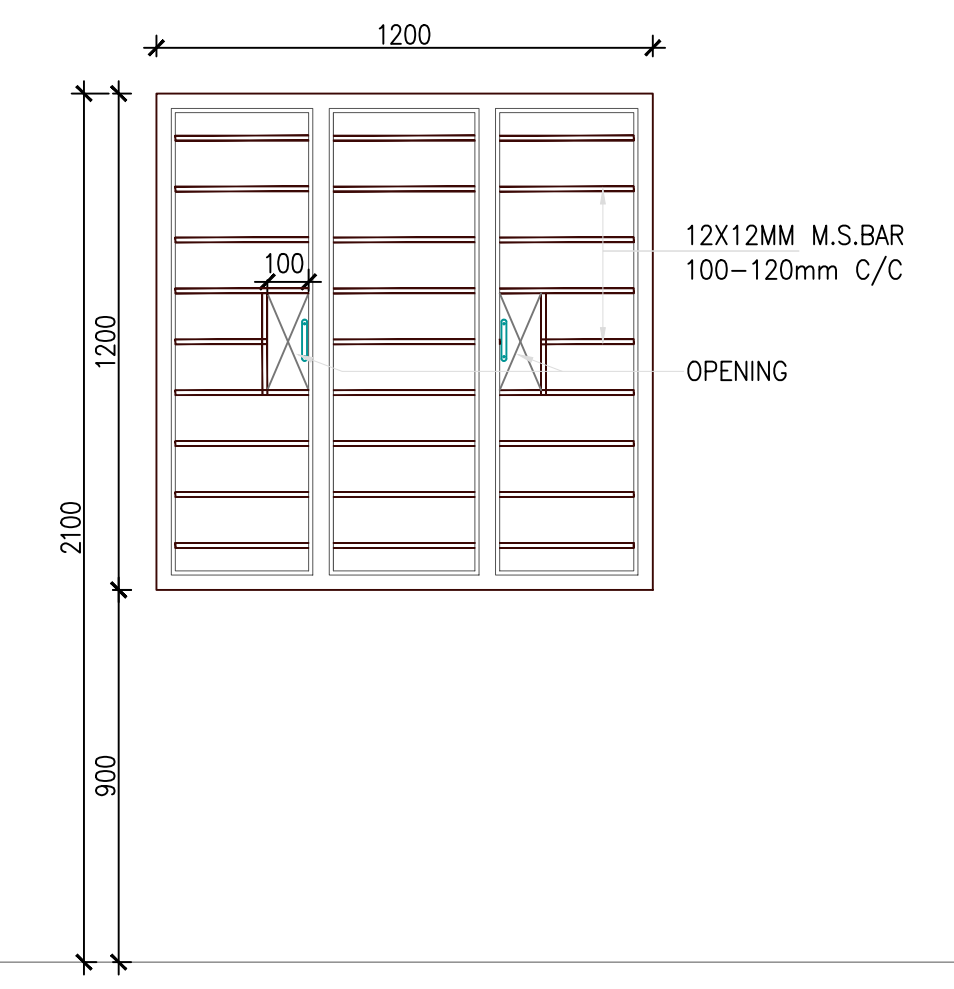
DATE - 09 MARCH 2023



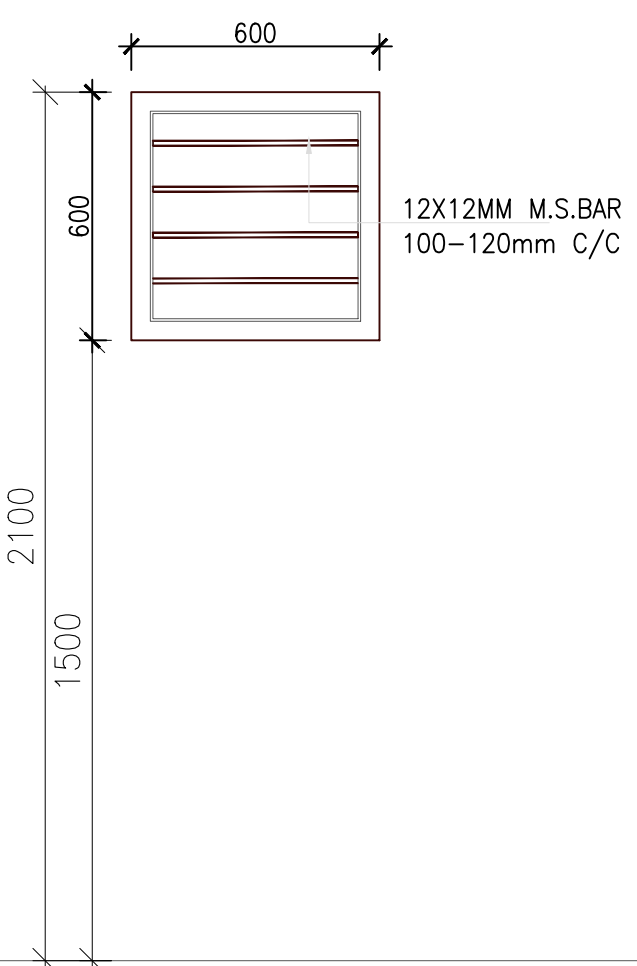
GRILL ELEVATION
 MAIN ENTRANCE
 GL -878 x 2100



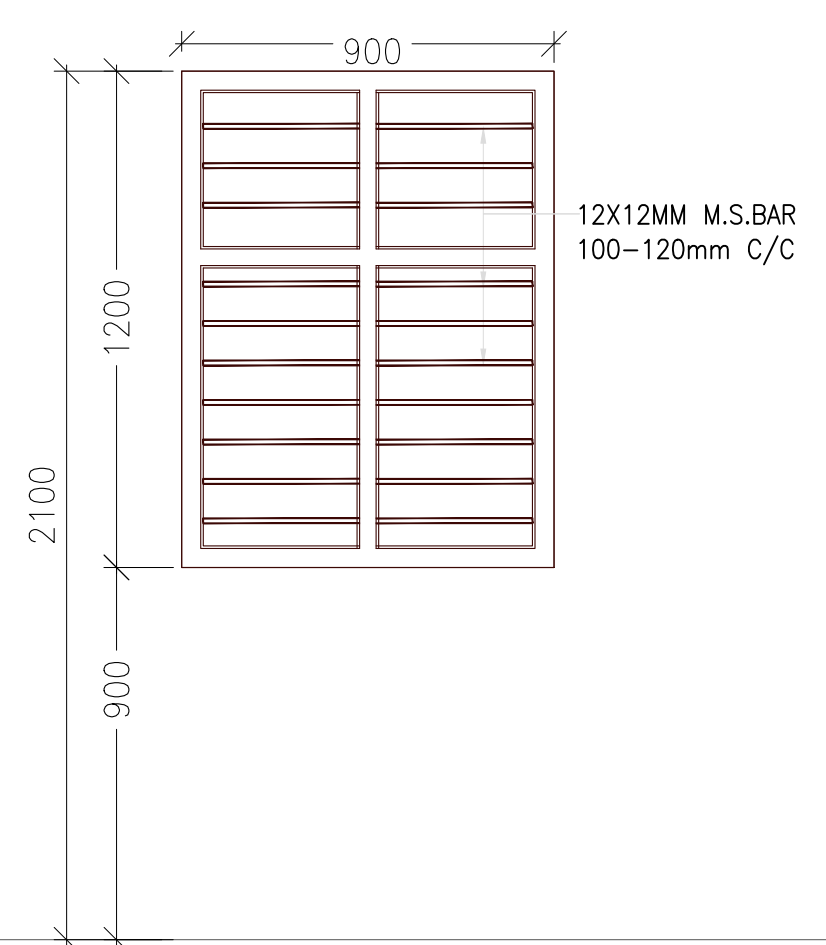
GRILL ELEVATION
 CLASSROOM, ADMIN AREA, LABS, CORRIDOR END
 W1 (1800X1200)



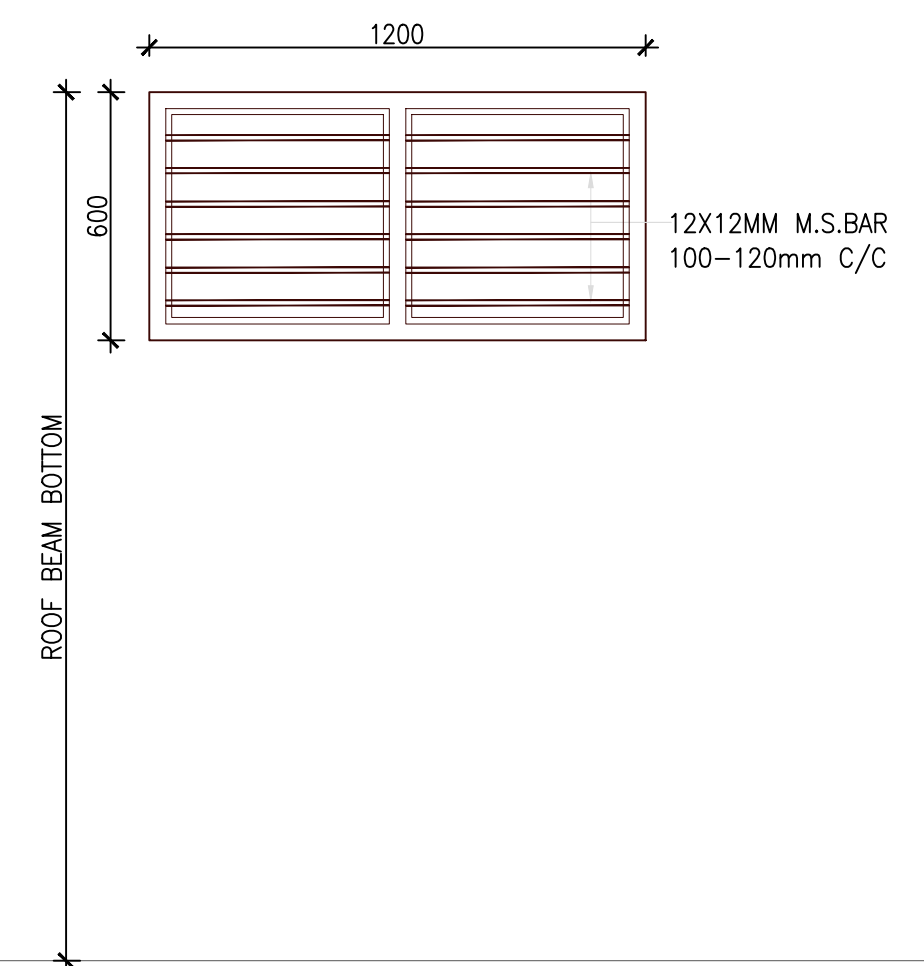
GRILL ELEVATION
 STORE, PANTRY
 W2 (1200X1200)



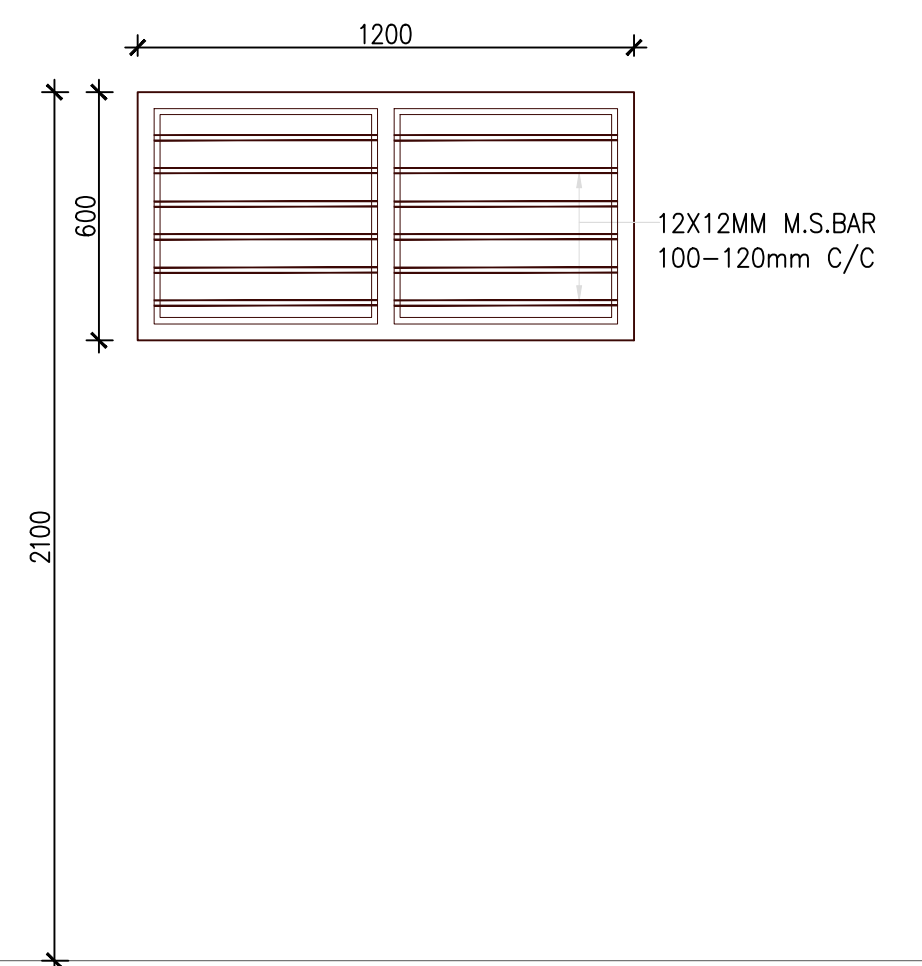
GRILL ELEVATION
 TOILET
 V1 - VENTILATOR 1
 600 x 600



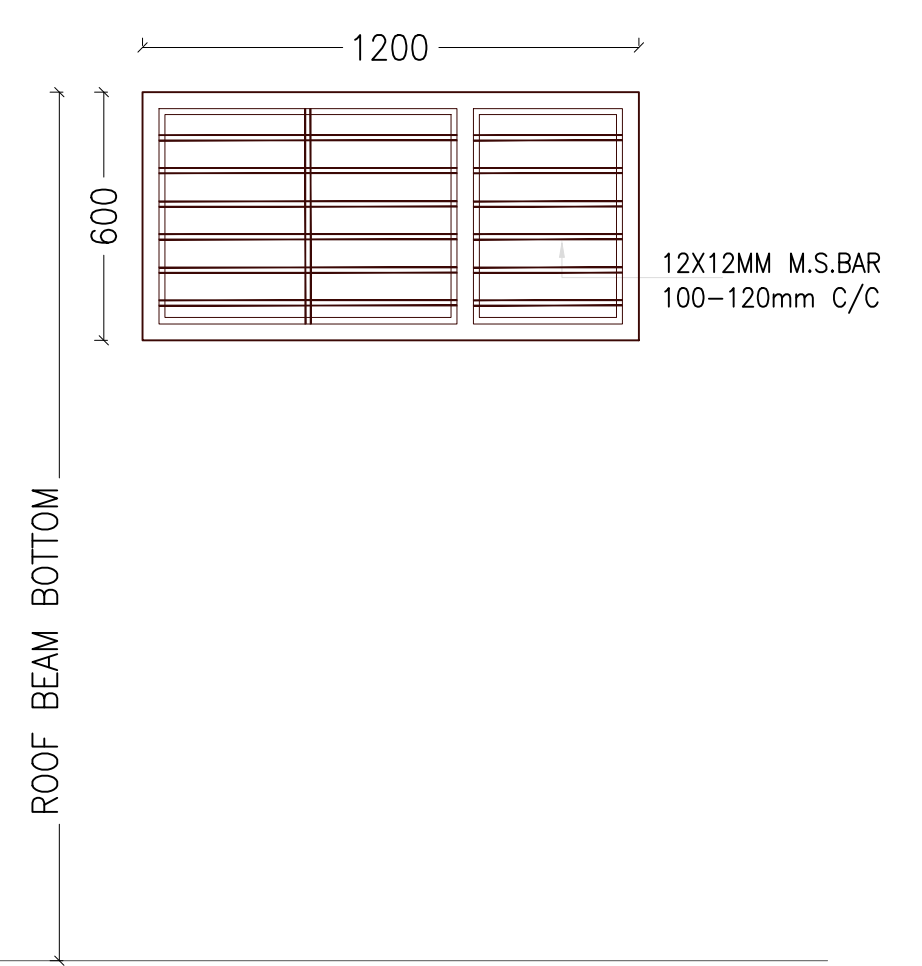
GRILL ELEVATION
 TOILET
 V2 - VENTILATOR 2
 900 x 1200



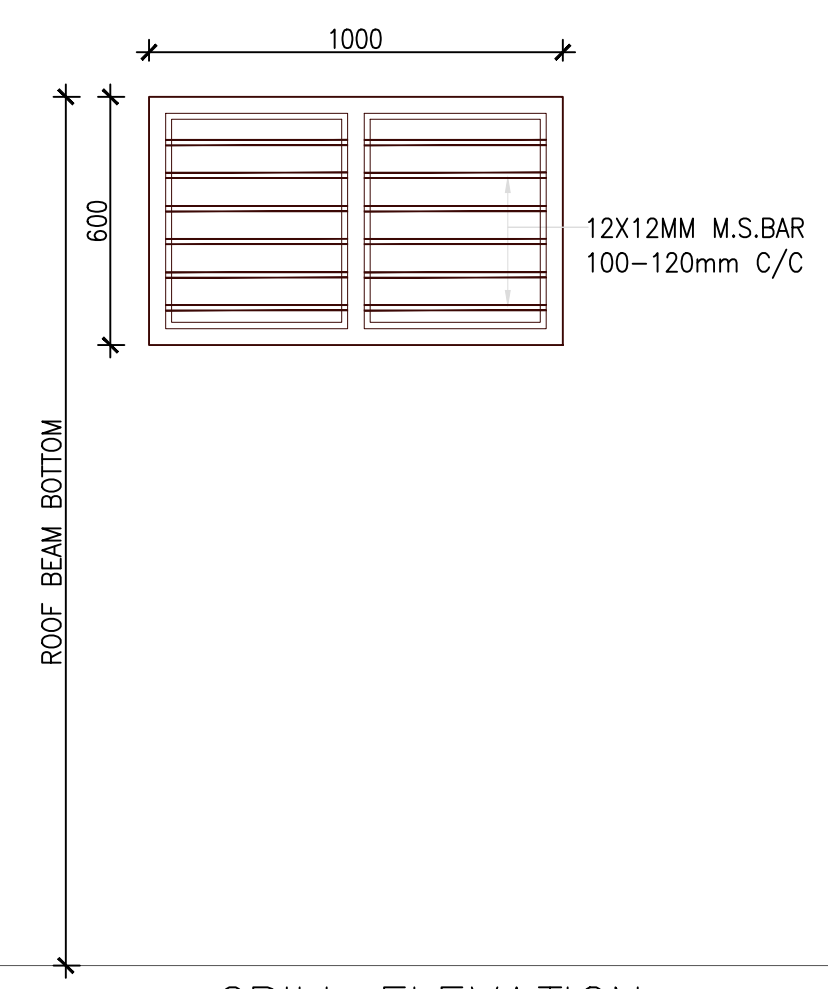
GRILL ELEVATION
 CLASSROOM, ADMIN AREA, LABS, RAMP
 V3 - VENTILATOR 3
 1200 x 600



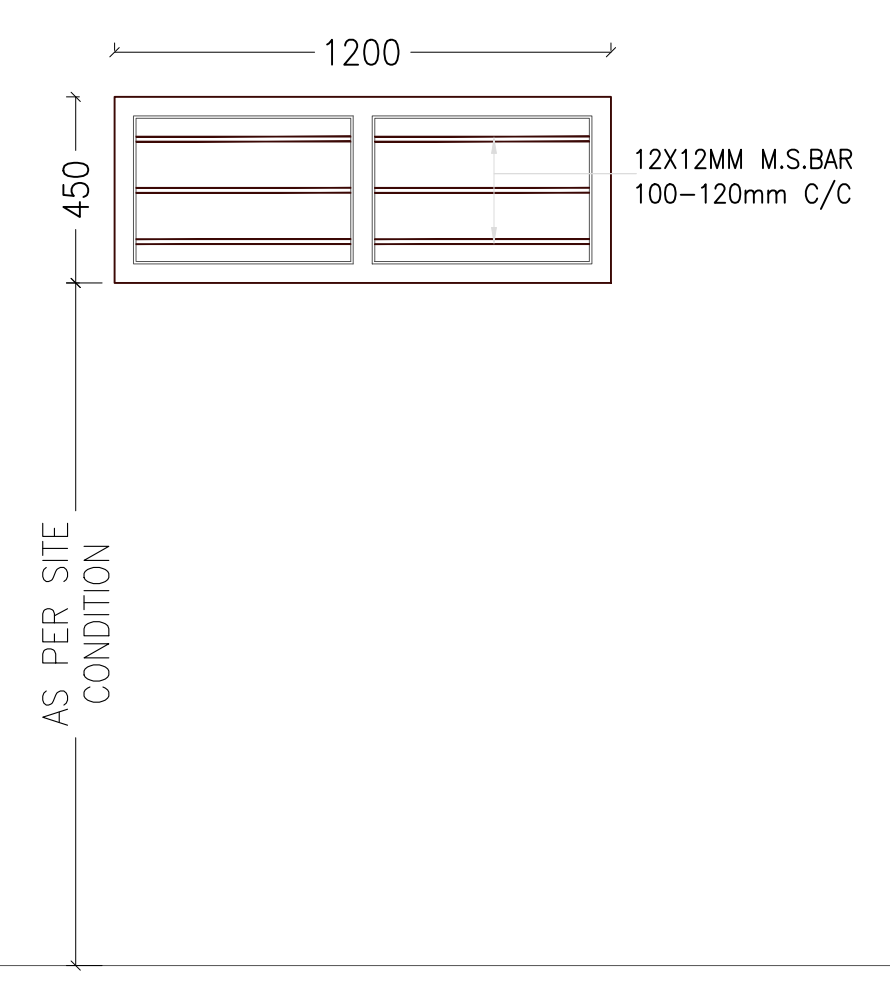
GRILL ELEVATION
 STORE, SERVER, MEDICAL
 V3' - VENTILATOR 3'
 1200 x 600



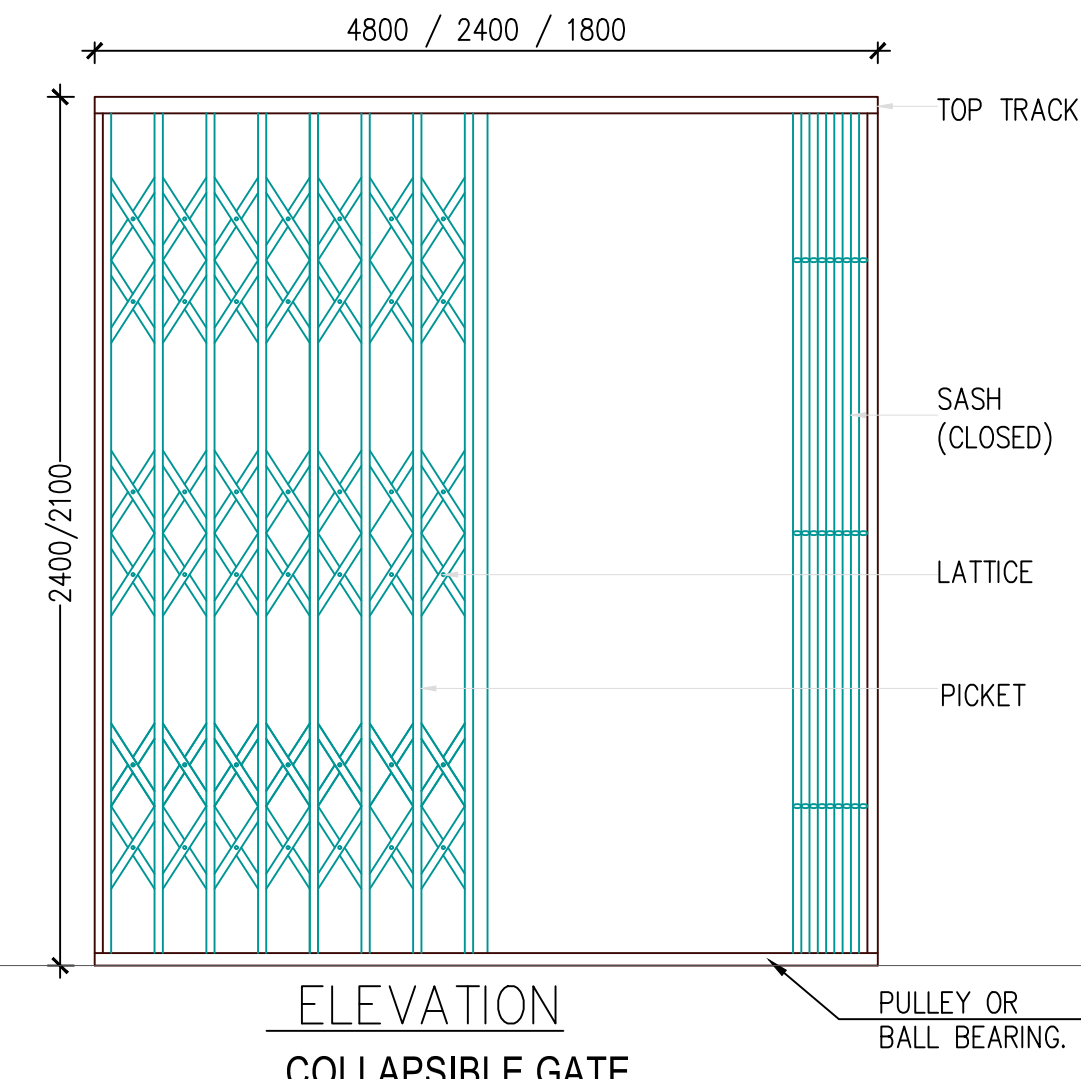
GRILL ELEVATION
 H.TOILET
 V3'' - VENTILATOR 3''
 1200 x 600



GRILL ELEVATION
 V5 (1000X600)
 STAFFROOM, OFFICE,
 V.PRINCIPAL, PRINCIPAL



ELEVATION
 STORE, MEDICAL ROOM, PANTRY, SERVER
 V4(1200x450)



ELEVATION
 COLLAPSIBLE GATE
 CG1 - 4800 x 2400 (MAIN ENTRANCE GATE)
 CG2 - 2400 x 2100 (CORRIDOR EXITS)
 CG3 - 1800 x 2100 (CORRIDOR EXIT)

HOSTEL BLOCK- DOOR WINDOW VENTILATOR DETAIL

PROJECT - EMRS

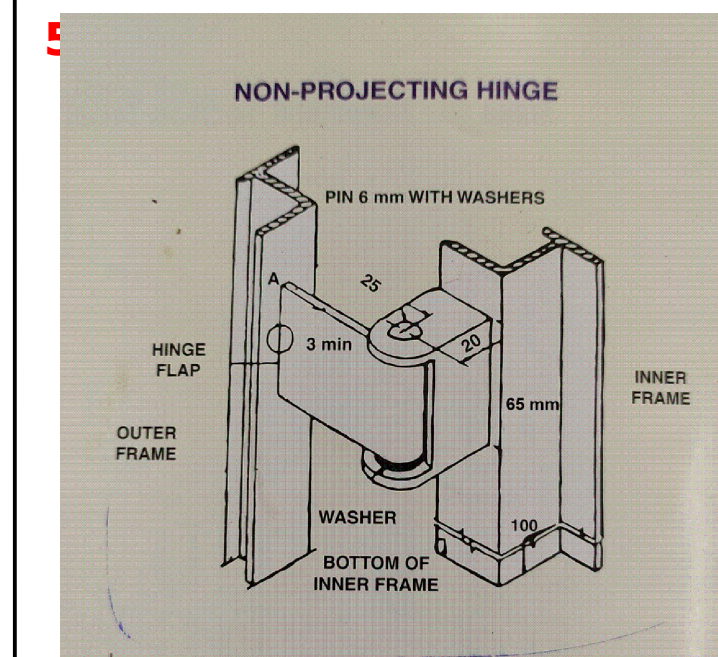
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS

NOTES -

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2. GLAZED SHUTTERS WILL OPEN OUTSIDE
3. WIRE MESH SHUTTER WILL OPEN INSIDE WINDOW SHOULD BE FACTORY MADE TYPE WITH FLASH WELDING
4. APPROVED MAKE SHALL ONLY BE PROVIDED



TYPICAL HINGE DETAIL

N.K.
(NARENDRA KUMAR)
PK Agrawal 10/3/23
(Pranav Agrawal)
CAJNT 13/3/23
(R.K. Gang)
SUN 13/3/23
(SANDEEP SOOD)
APK

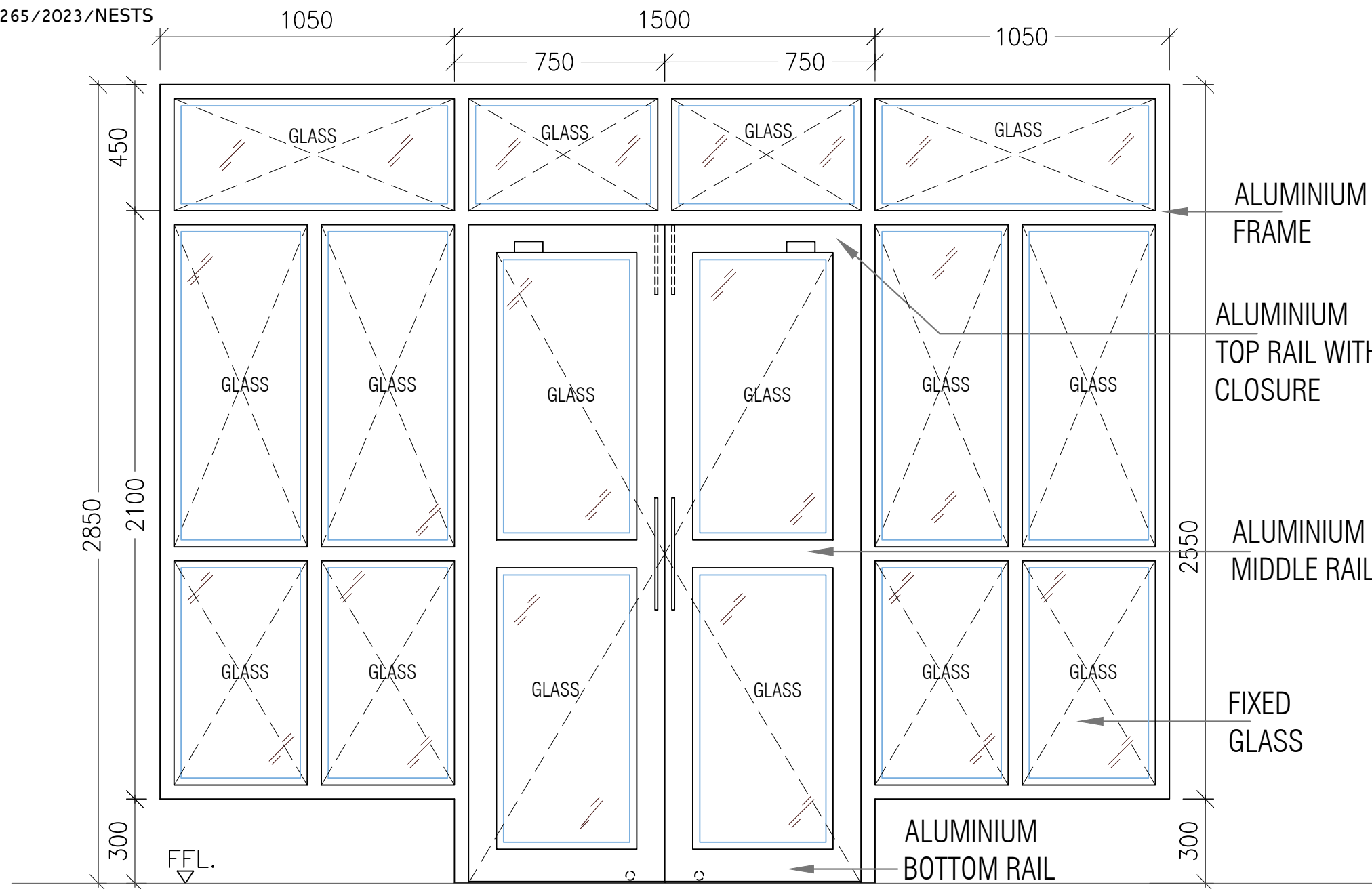
A D P Keshri
Chief Technical Consultant

CATEGORY : DOOR WINDOW DETAIL

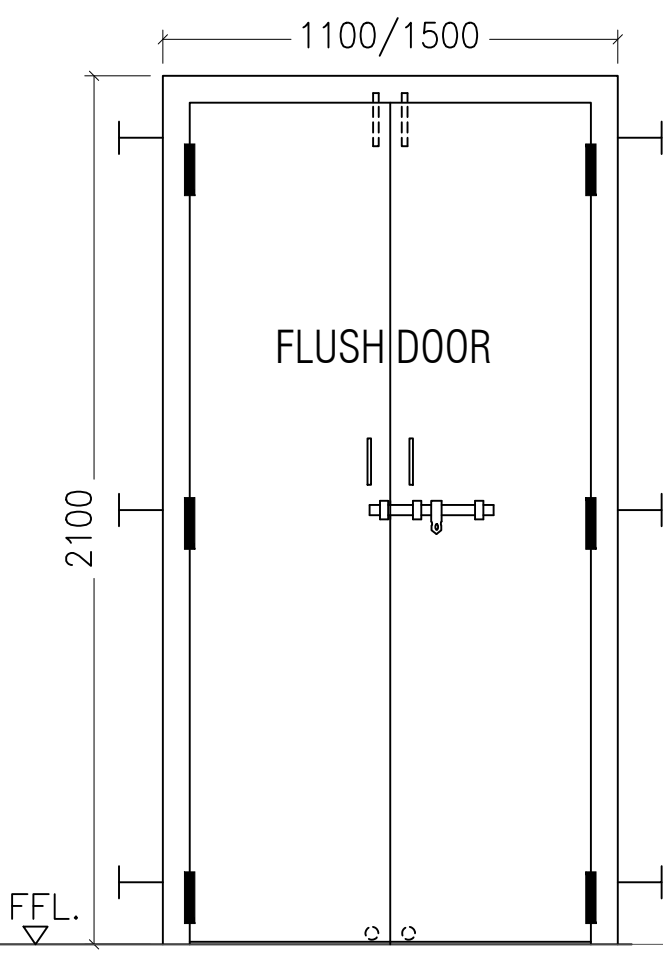
DRAWING TITLE : HOSTEL DOOR WINDOW DETAIL

DWG. NO.- EMRS NAME/HOSTEL/DWD/AR_01

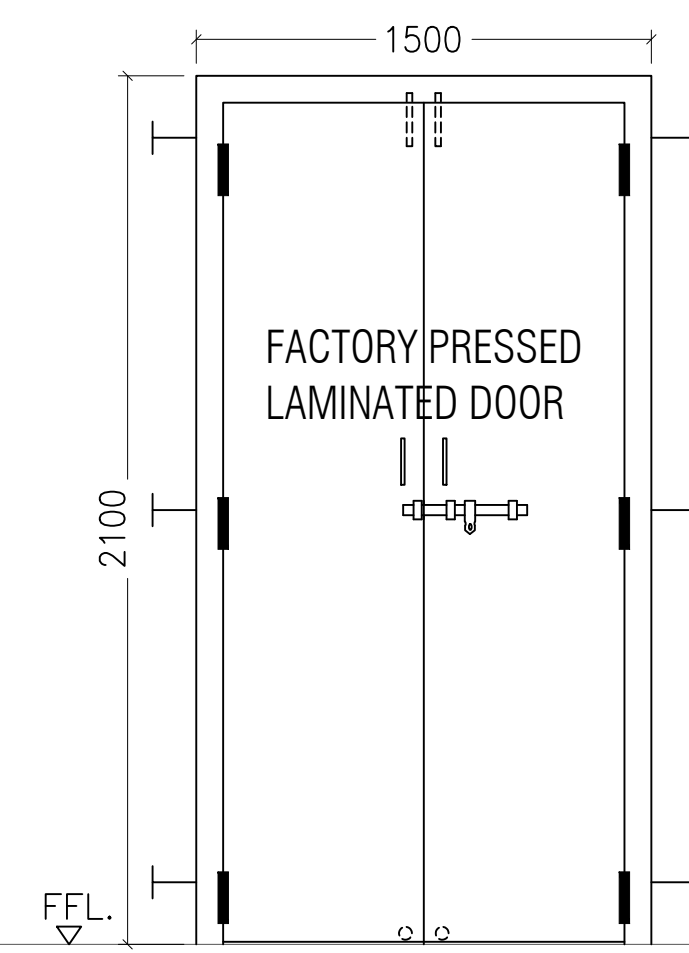
DATE - 09 MARCH 2023



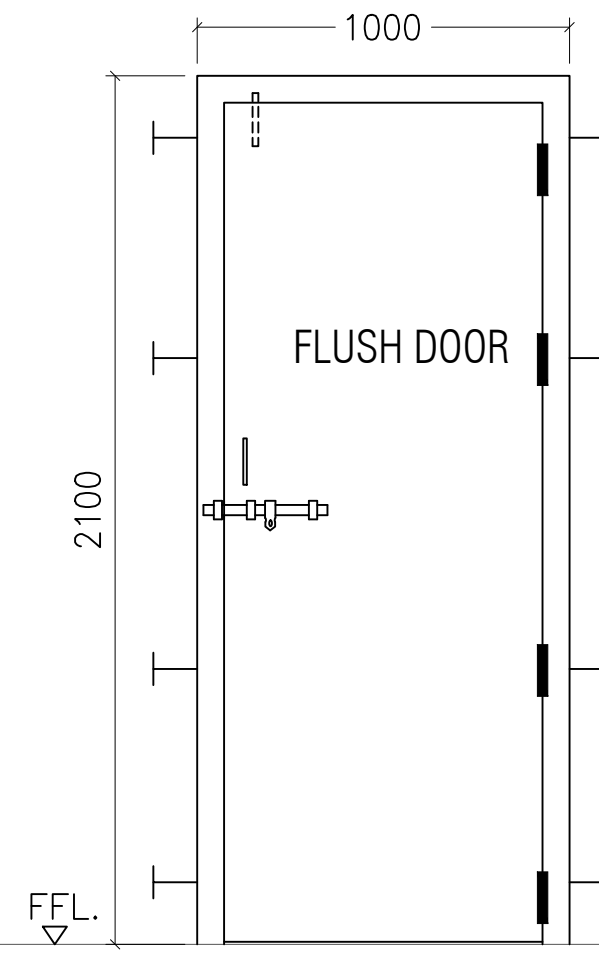
MAIN ENTRANCE DOOR
MD - 1500 x 2400
V3 - 1500 X 450 FIXED GLAZING ABOVE DOOR
GL - 1050X 2550 FIXED GLAZING ON SIDE



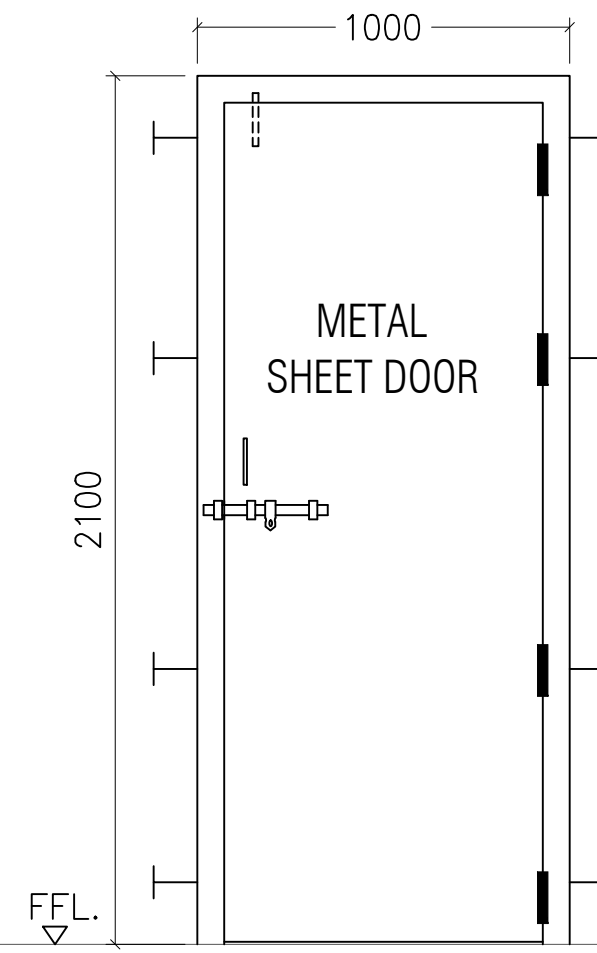
DINING HALL ENTRY & KITCHEN BACK SIDE ENTRY
D1 - 1500 X 2100
DORMITORY, CORRIDOR
EXIT & KITCHEN
D2 - 1100 X 2100



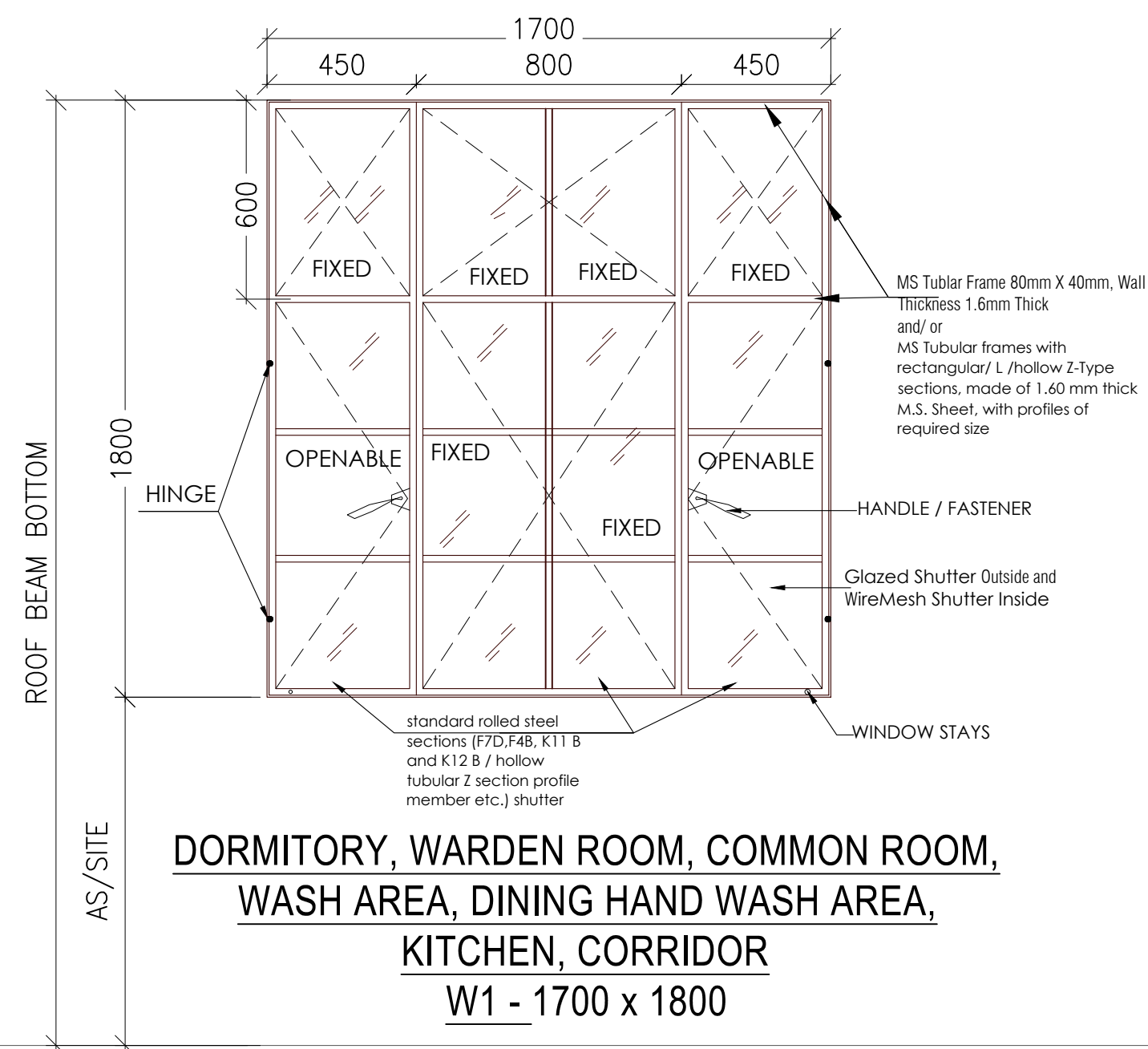
KITCHEN WASH, STORE BACK SIDE ENTRY
D1 - 1500 X 2100



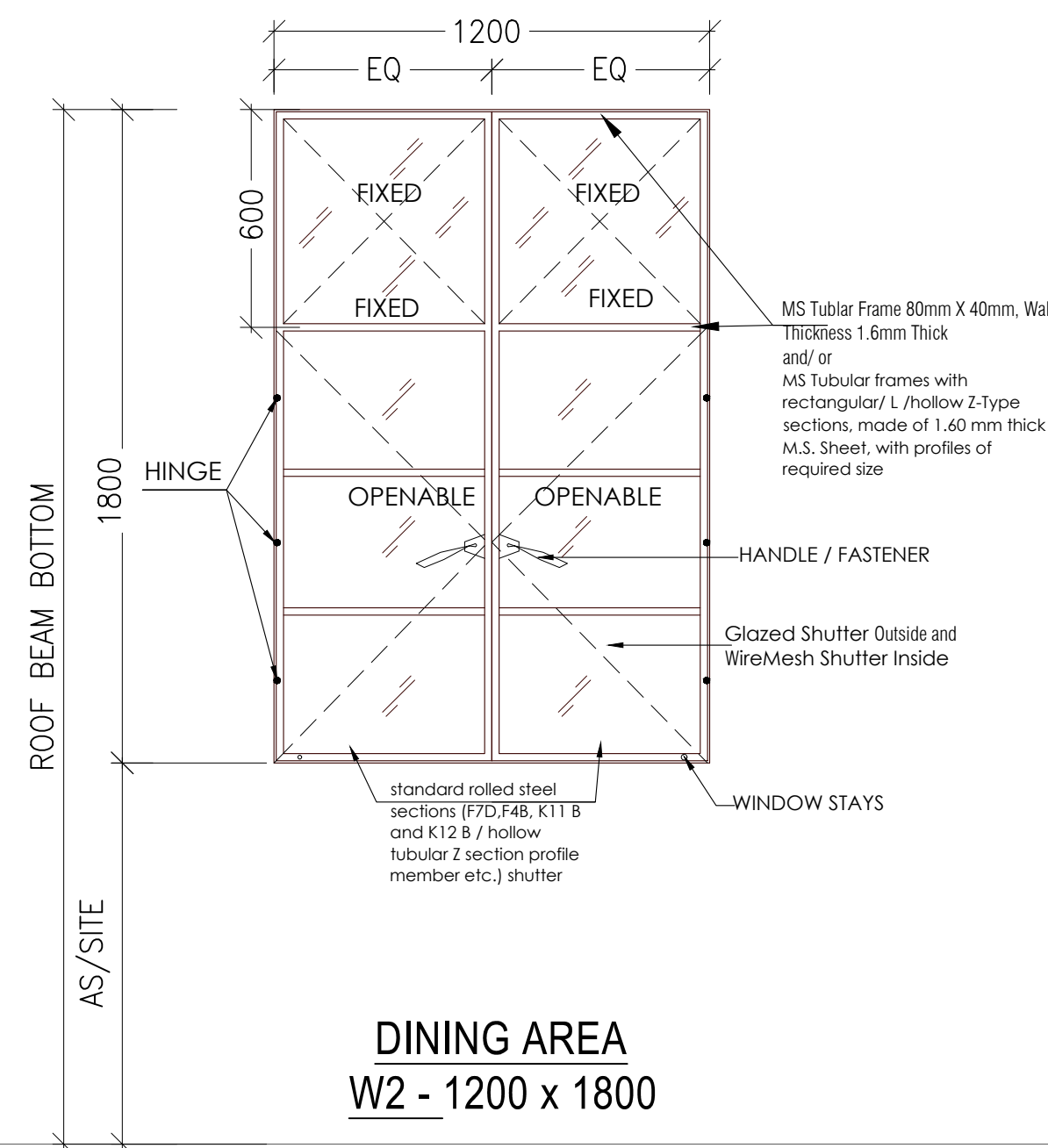
WARDEN ROOM & COMMON ROOM
D3 - 1000 X 2100



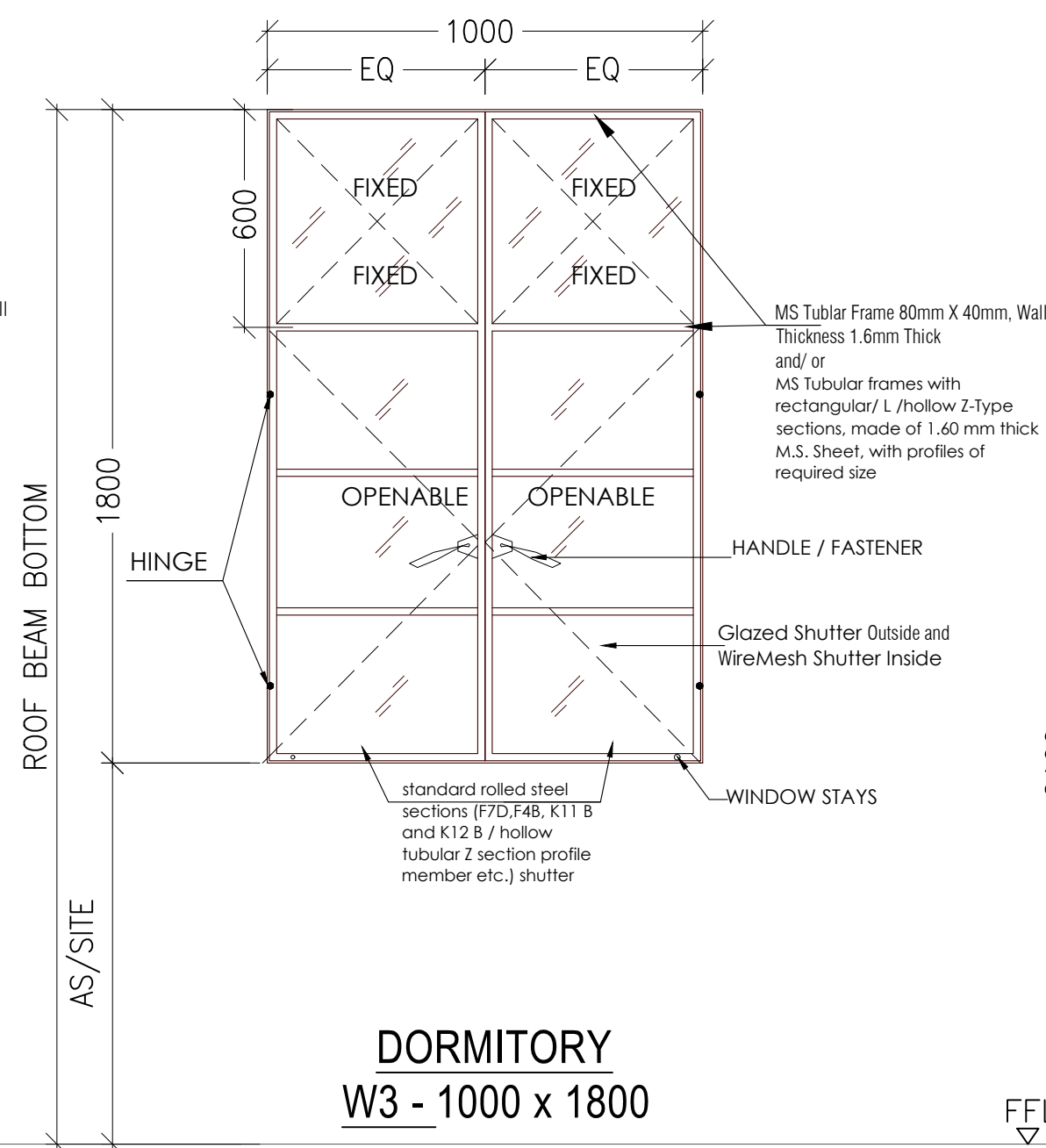
TERRACE
D3 - 1000 X 2100



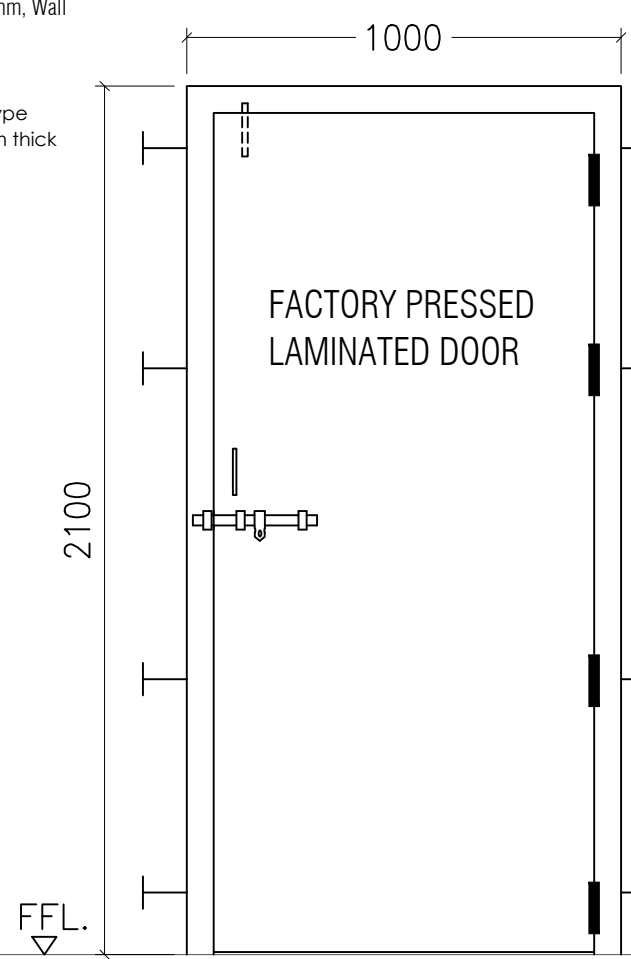
DORMITORY, WARDEN ROOM, COMMON ROOM, WASH AREA, DINING HAND WASH AREA, KITCHEN, CORRIDOR
W1 - 1700 x 1800



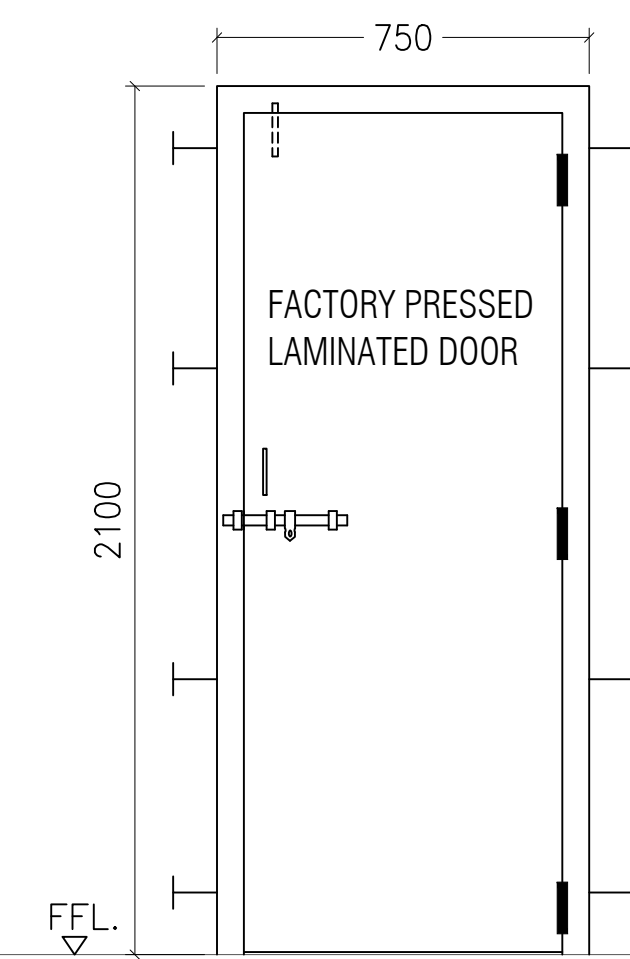
DINING AREA
W2 - 1200 x 1800



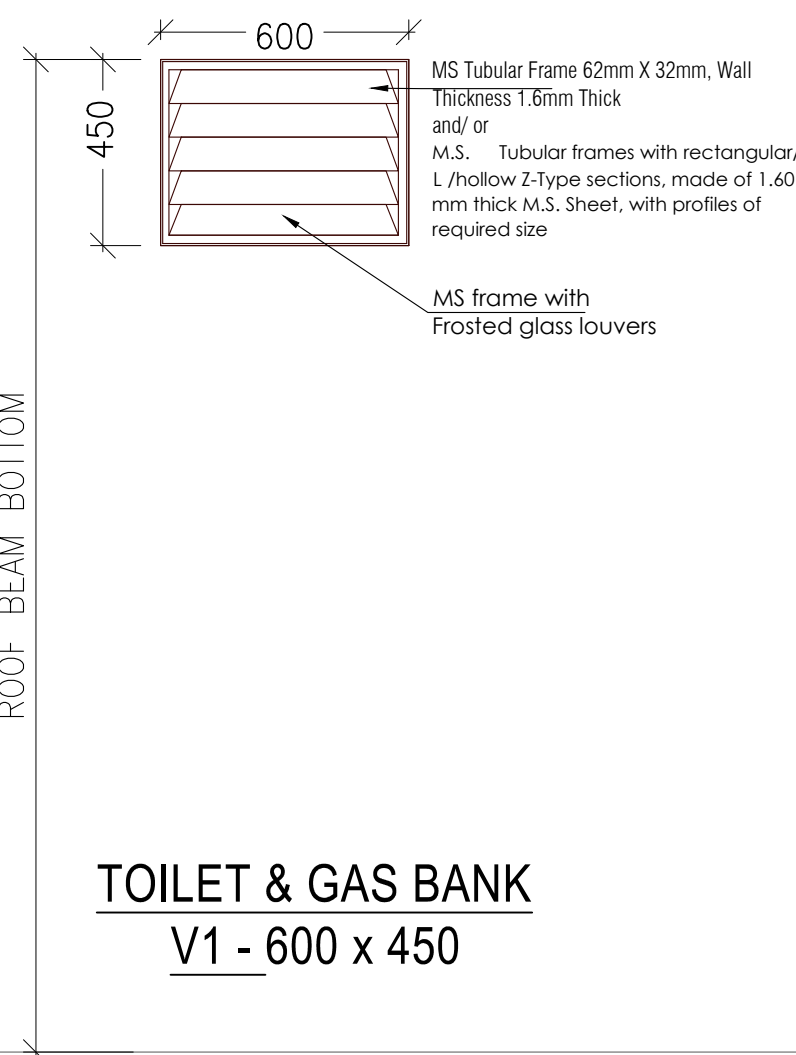
DORMITORY
W3 - 1000 x 1800



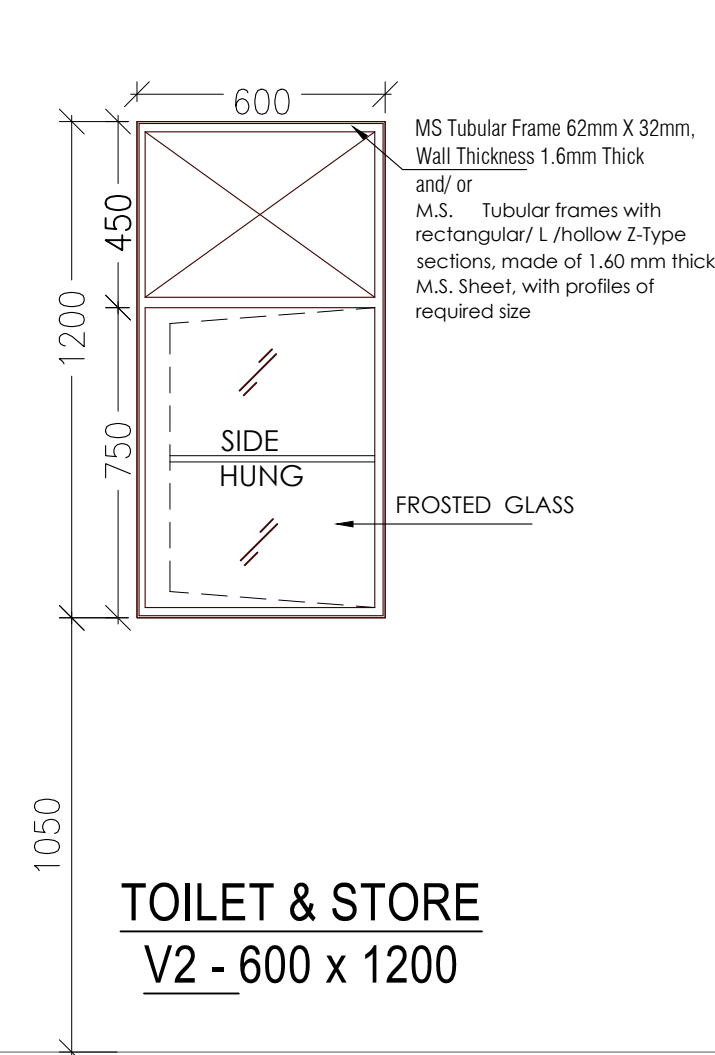
TOILET MAIN ENTRY, 1ST FLOOR TERRACE
D3 - 1000 X 2100



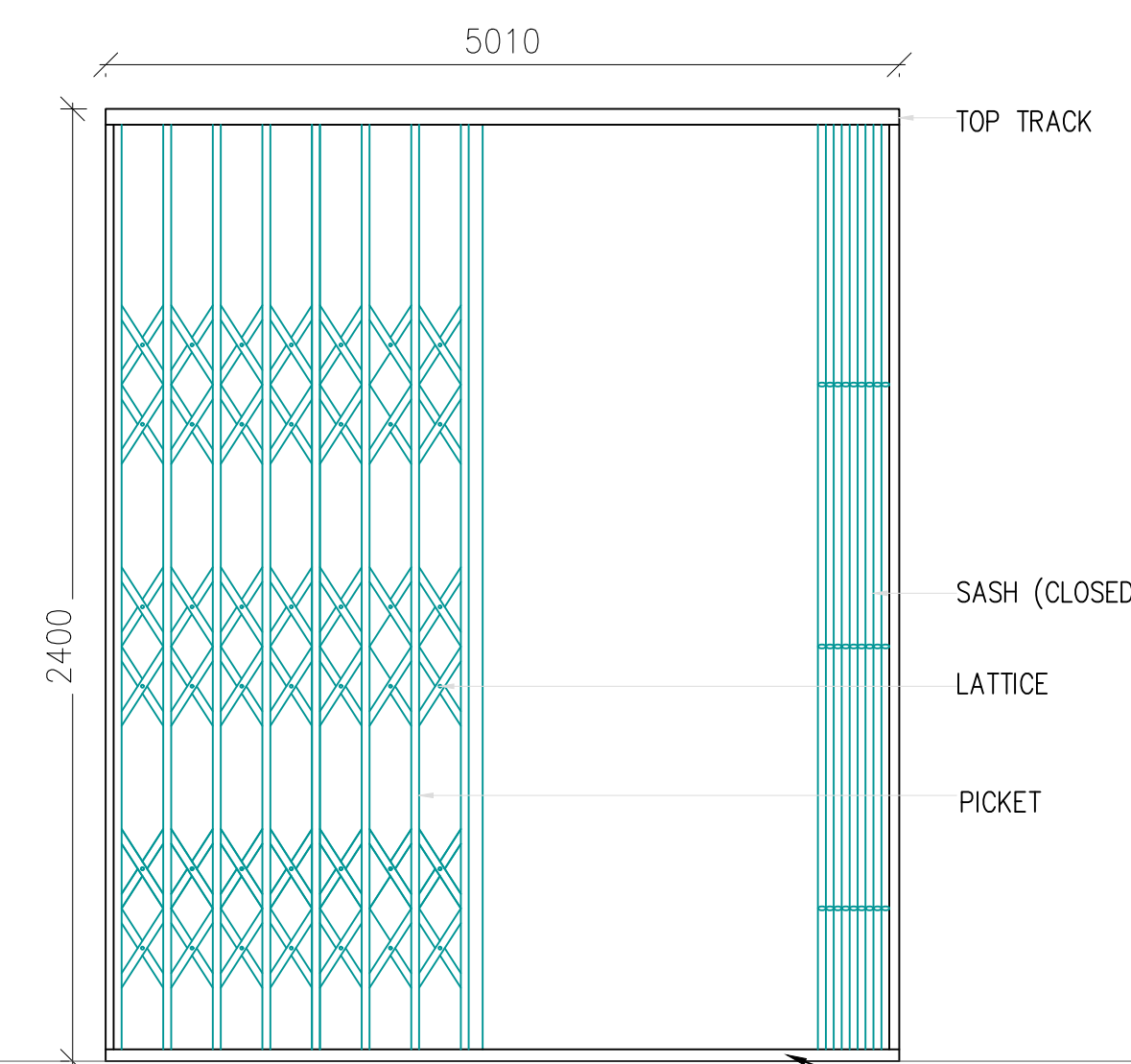
TOILET INTERNAL DOOR
D4- 750X2100



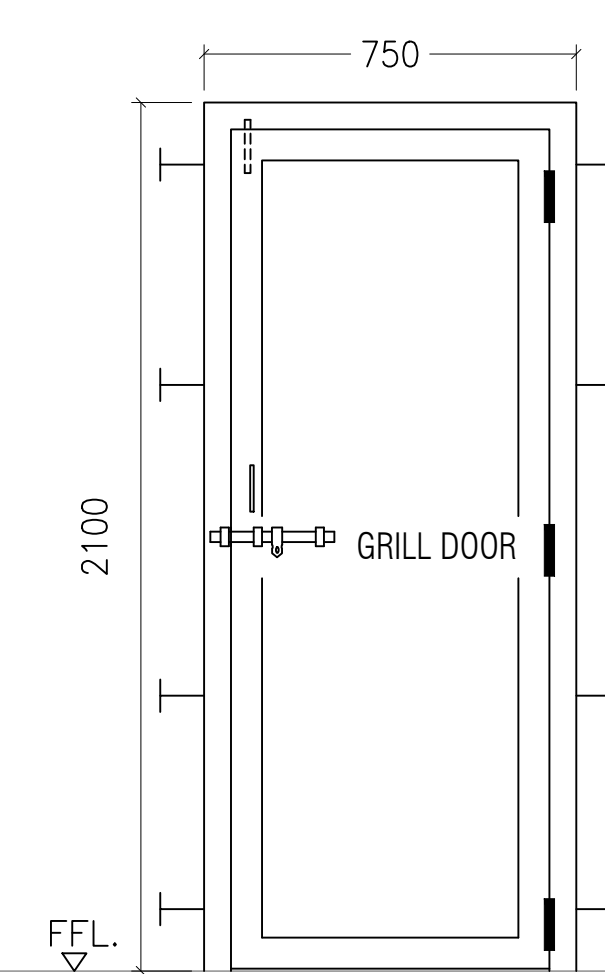
TOILET & GAS BANK
V1 - 600 x 450



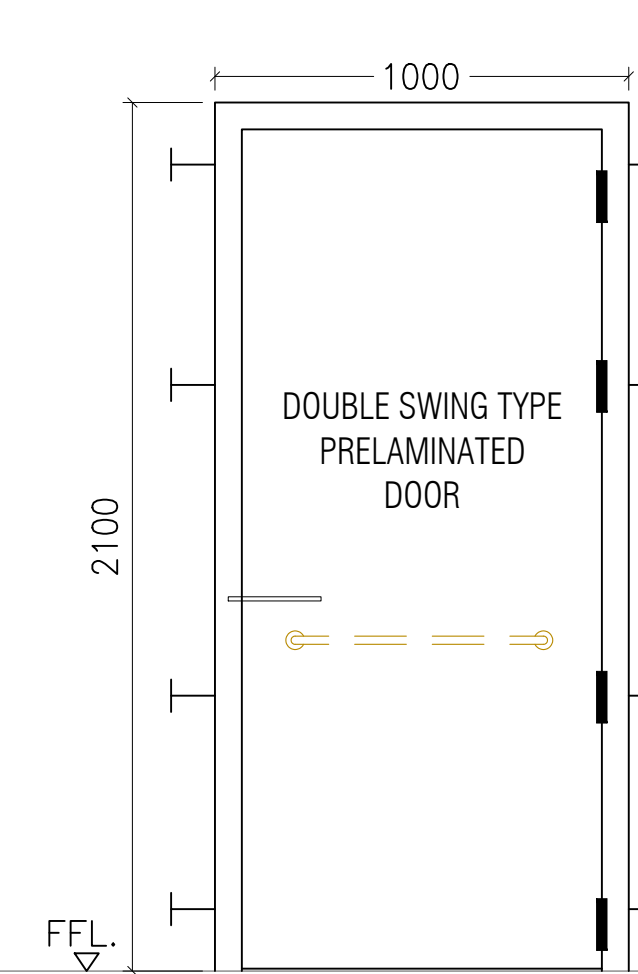
TOILET & STORE
V2 - 600 x 1200



COLLAPSIBLE GATE
CG - 5010 X 2400



GAS BANK DOOR
D4 - 750 X 2100



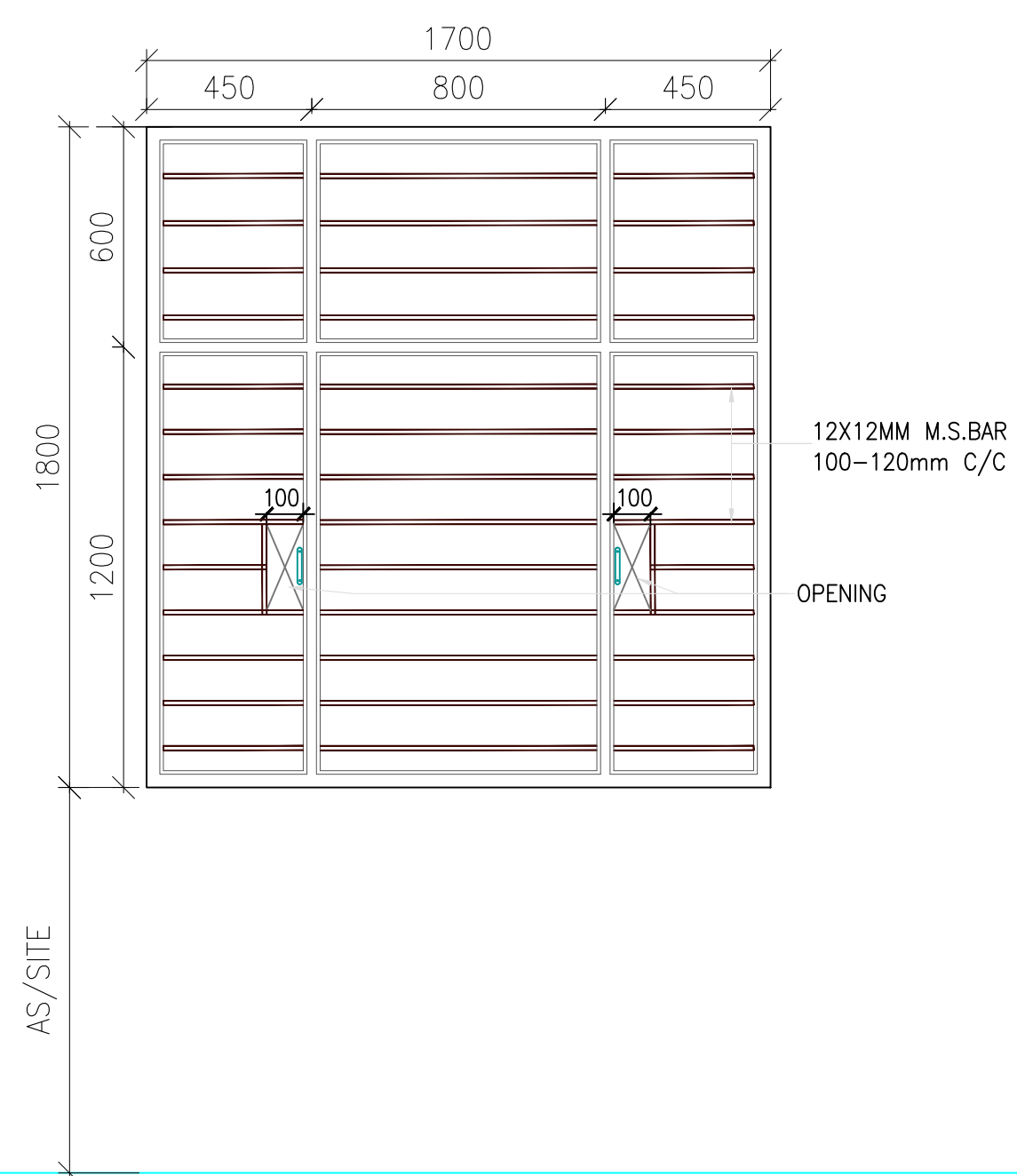
H.TOILET MAIN DOOR
SD- 1000 X 2100

HOSTEL BLOCK - GRILL AND COLLAPSIBLE DETAIL

PROJECT - EMRS
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

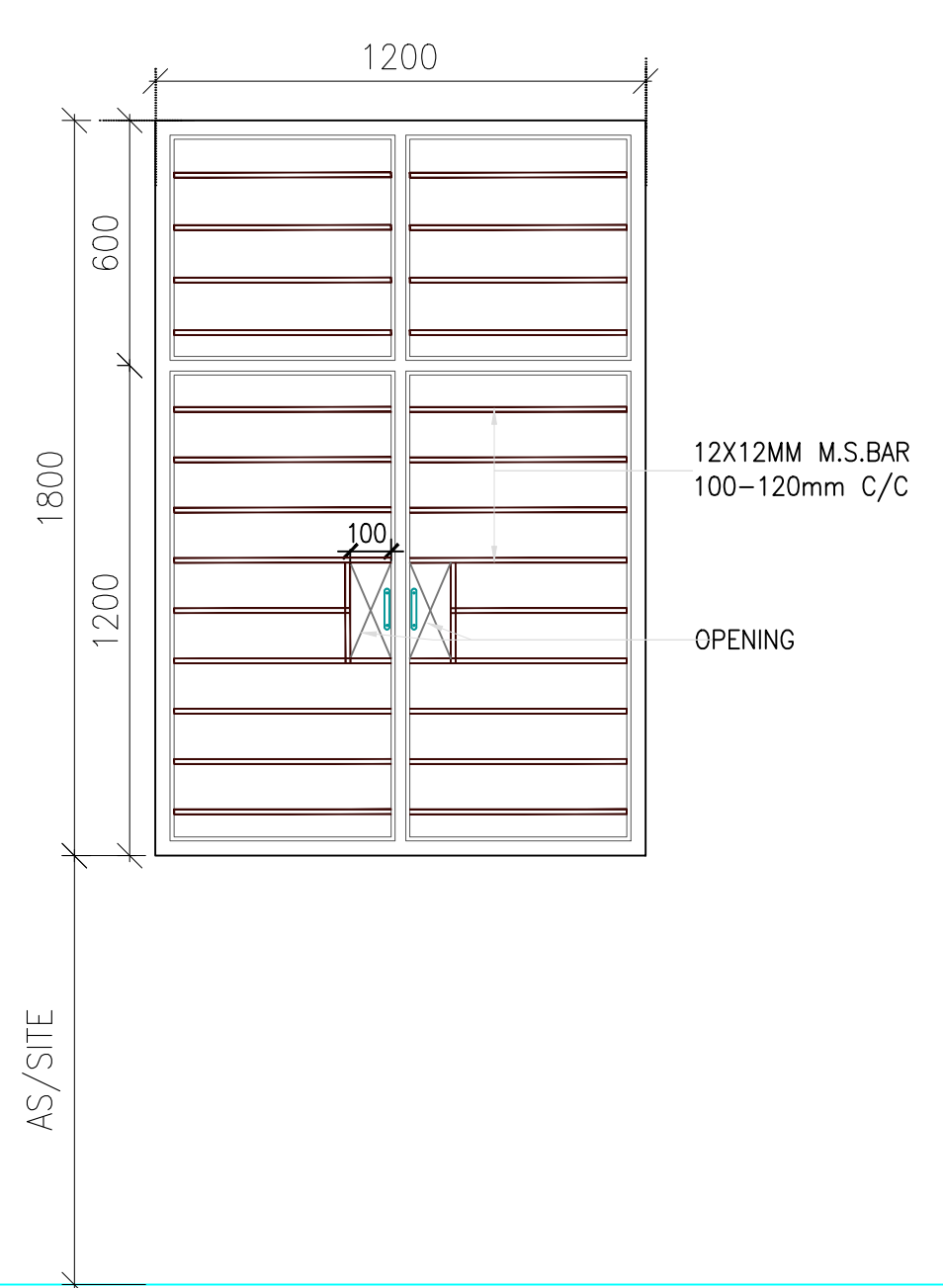
CLIENT -
**GOVERNMENT OF INDIA
 MINISTRY OF TRIBAL AFFAIRS
 NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS**

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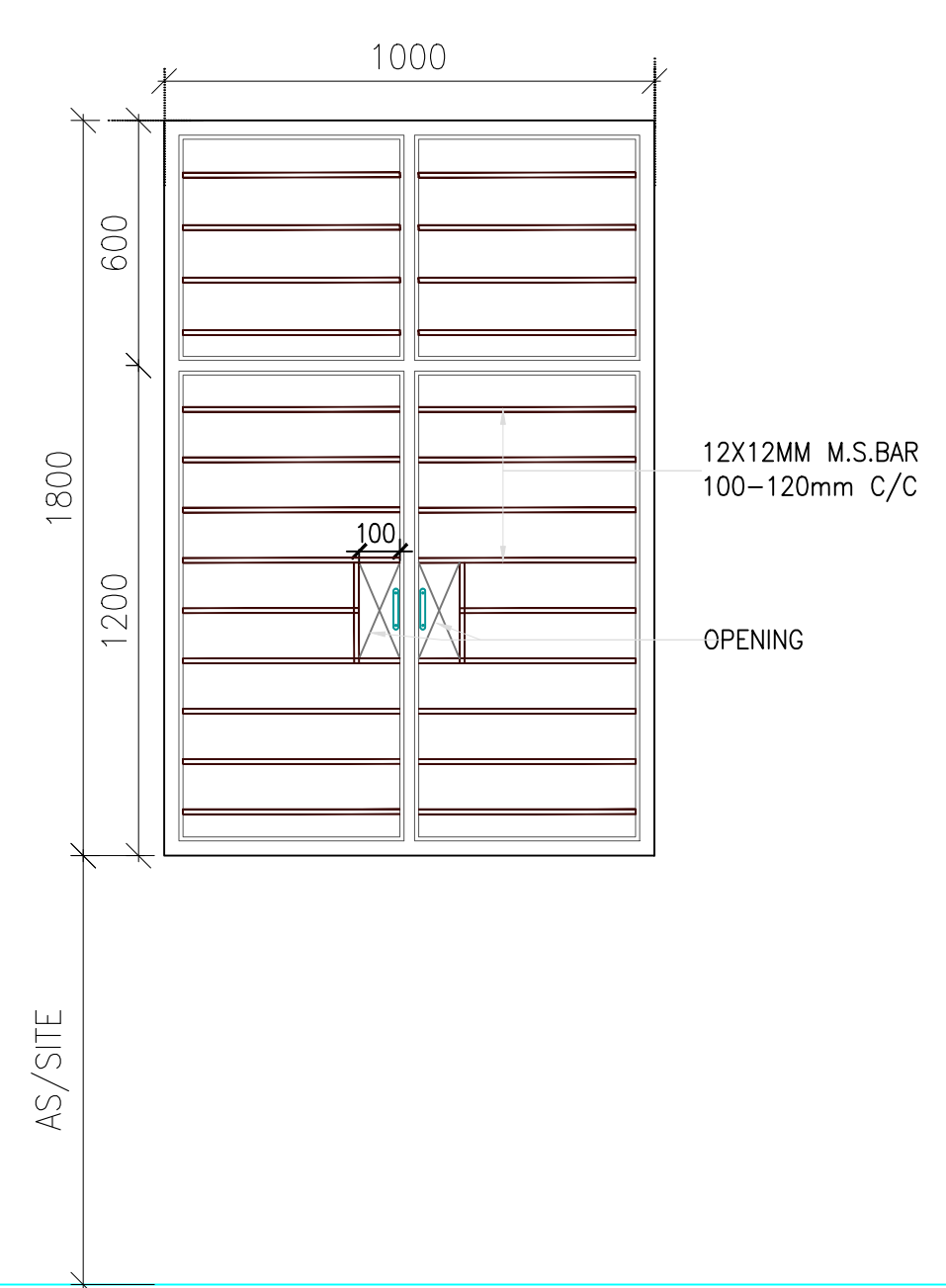
GRILL ELEVATION

DORMITORY, WARDEN ROOM, COMMON ROOM,
 WASH AREA, DINING HAND WASH AREA,
 KITCHEN, CORRIDOR
W1 - 1700 x 1800



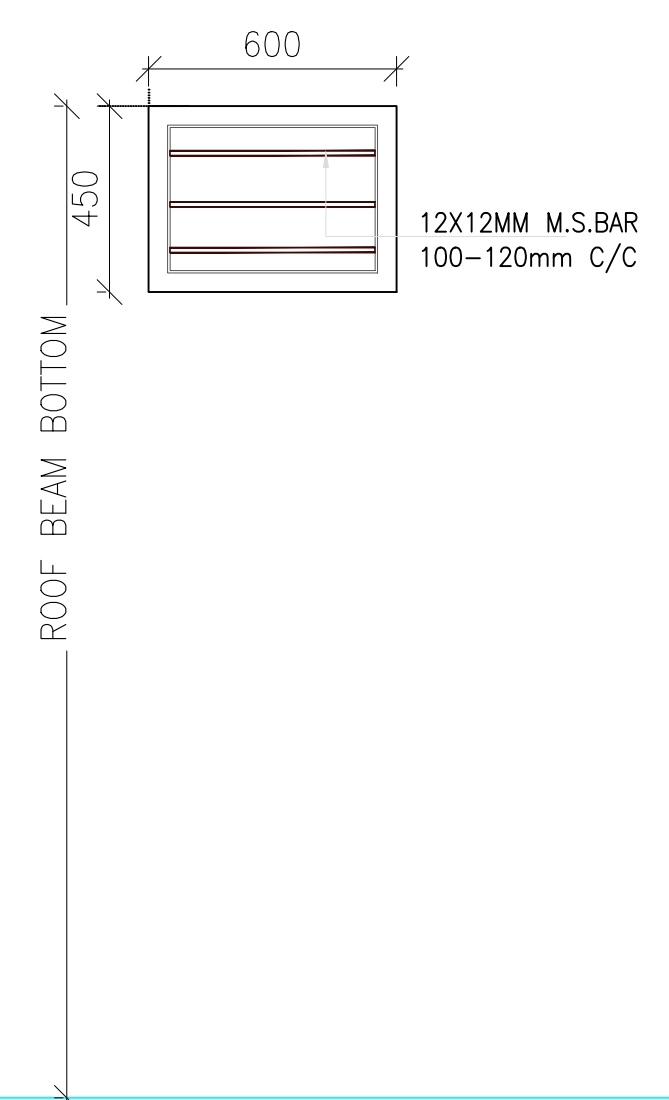
GRILL ELEVATION

DINING AREA
W2 - 1200 x 1800



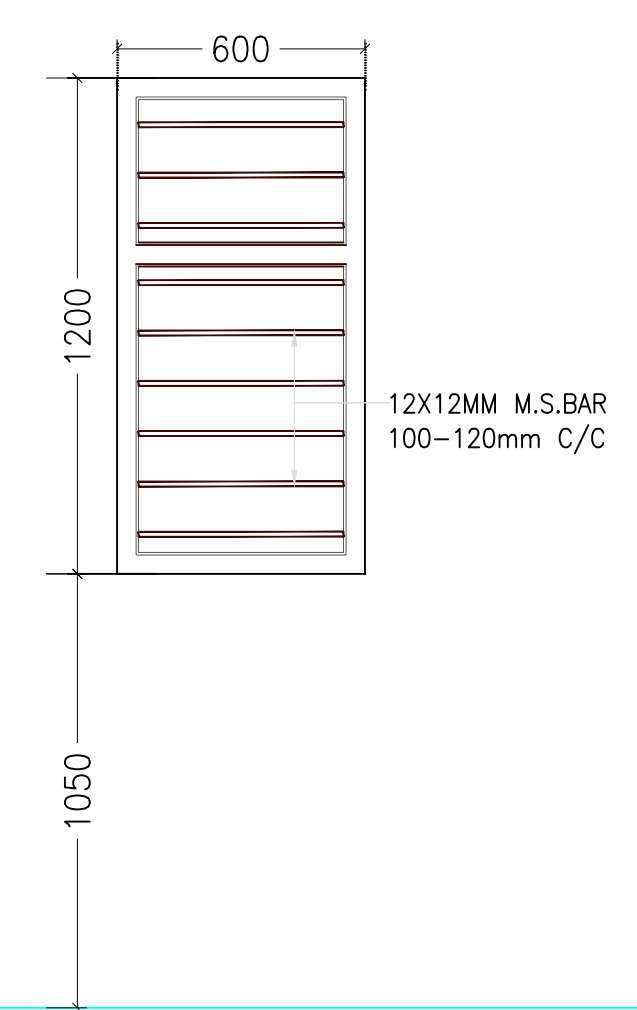
GRILL ELEVATION

DORMITORY
W3 - 1000 x 1800



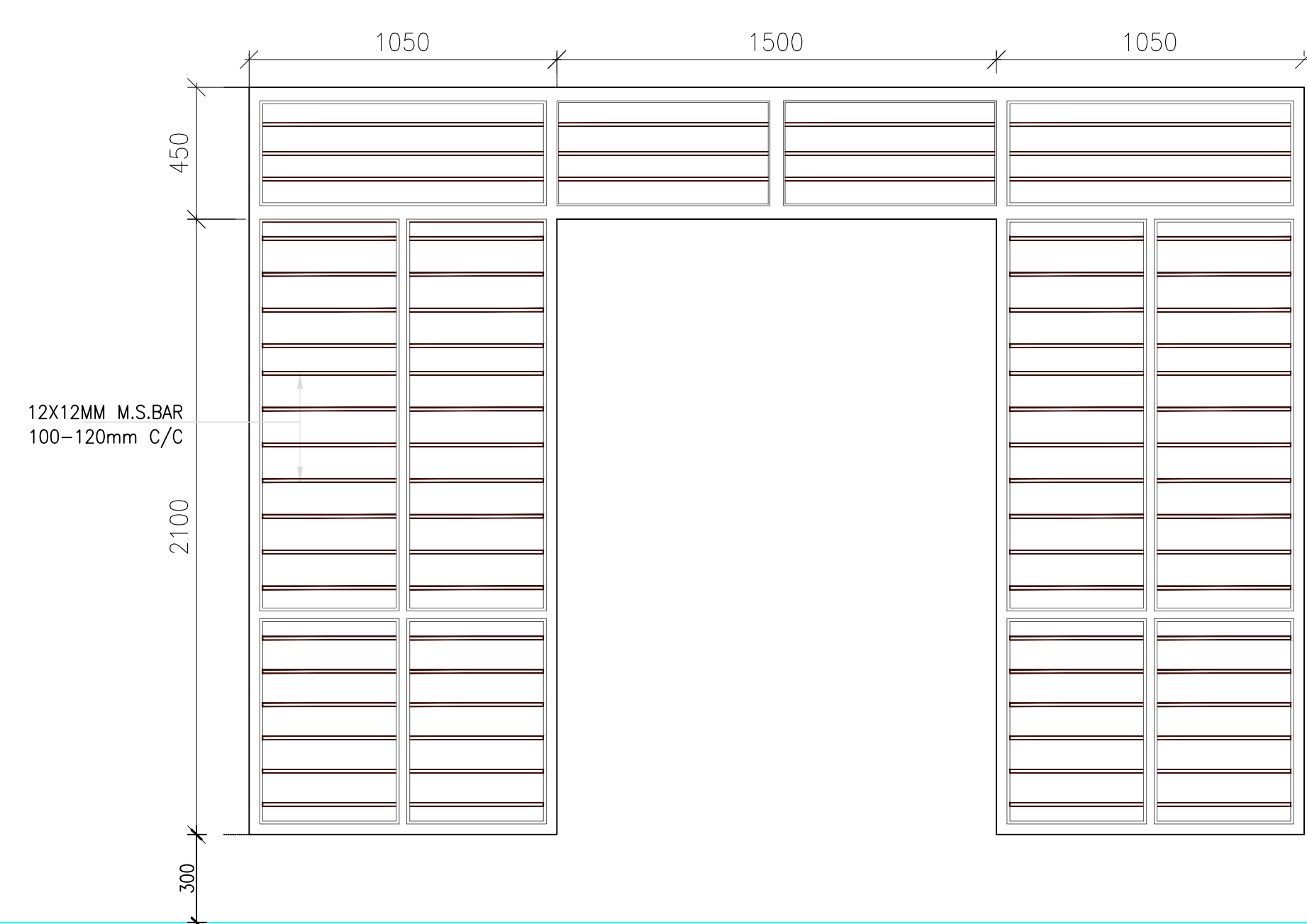
GRILL ELEVATION

TOILET & GAS BANK
V1 - 600 x 450



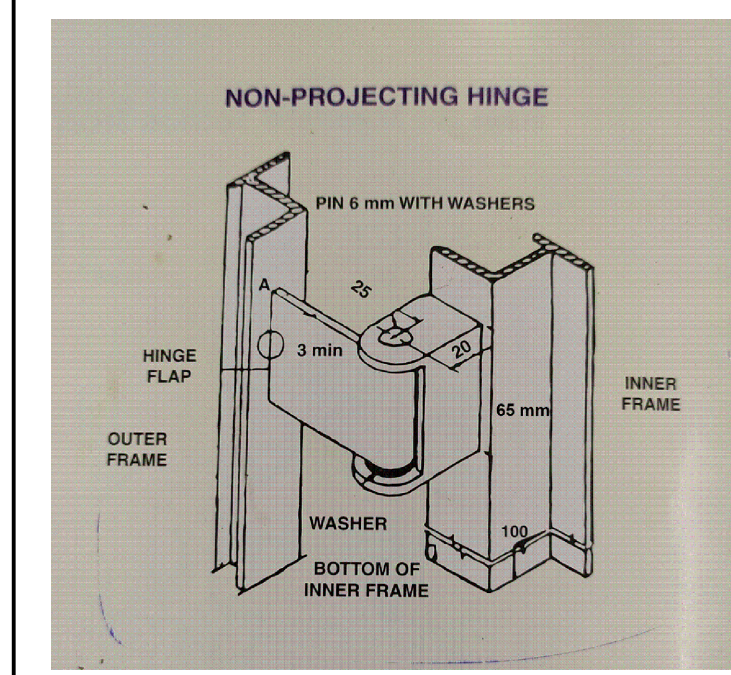
GRILL ELEVATION

TOILET & STORE
V2 - 600 x 1200



GRILL ELEVATION

MAIN ENTRANCE DOOR GRILL
 V3 - 1500 X 450 FIXED GLAZING ABOVE DOOR
 GL - 1050X 2550 FIXED GLAZING ON SIDE



TYPICAL HINGE DETAIL

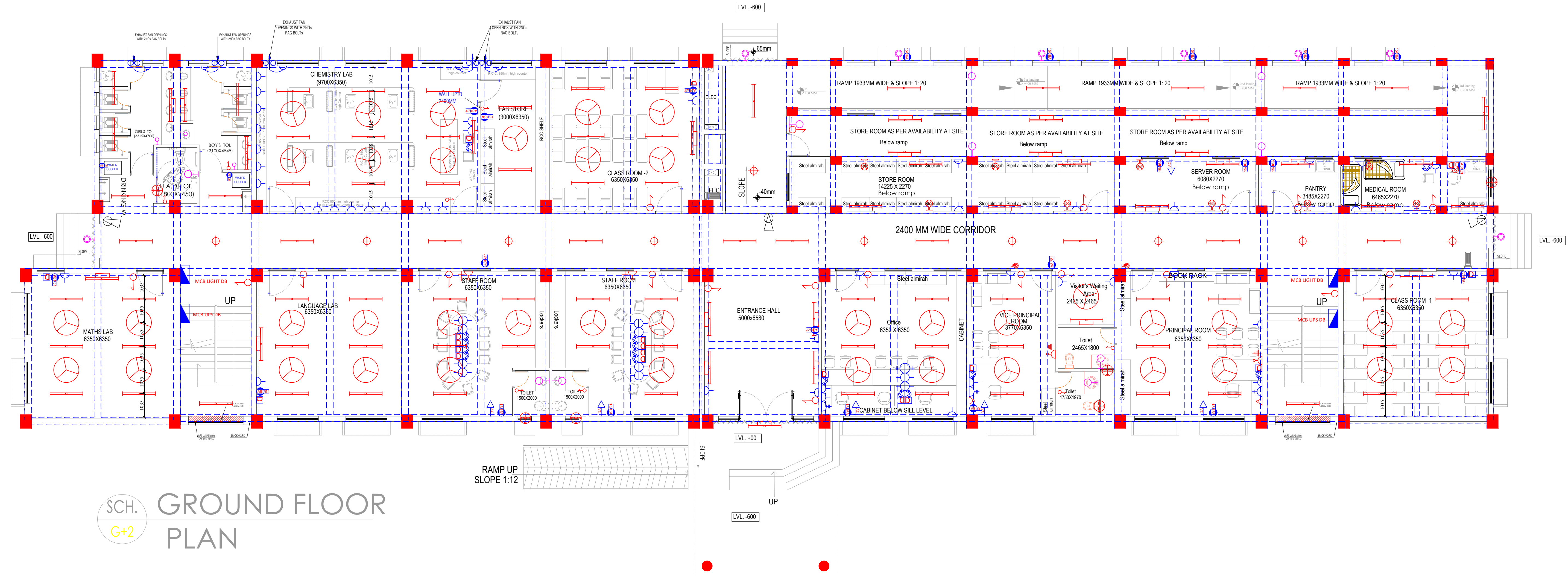
N.K.
 (NARENDRA KUMAR)
 P.K. Agrawal 10/3/23
 (Pranav Agrawal)
 (CAVIT 13/4/23)
 (R.K. Gang)
 2nd SS 13/3/2023.
 (SANDEEP SOOD)
A.P.K.
A D P Keshri
 Chief Technical Consultant

CATEGORY :
 DOOR WINDOW DETAIL

DRAWING TITLE :
 HOSTEL GRILL AND COLLAPSIBLE DETAIL

DWG. NO.-
 EMRS NAME/HOSTEL/DWD/AR_02

DATE - 09 MARCH 2023



SCH. GROUND FLOOR PLAN
G+2

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT
	2x6A UPS PLUG POINT
	TELEPHONE OUTLET
	DATA OUTLET

(Signature)
VIRENDER KUMAR
(Signature)
R.K. SIMHARANI
(Signature)
A.P. KESHRI
A P Keshri
Chief Technical Consultant

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200mm
	WALL FAN
	20W BULKHEAD FITTING

LEGENDS :

SYMBOL	DESCRIPTION
	EXHAUST FAN 300mm DIA METAL BODY
	MCB DISTRIBUTION BOARD
	2X6A PLUG POINT FOR TV
	TELEVISION POINT
	BATTEN HOLDER WITH 20W LED BULB
	BELL
	DOME/BULLET CAMERA
	POWER/PLUG POINT FOR PROJECTOR IN CEILING

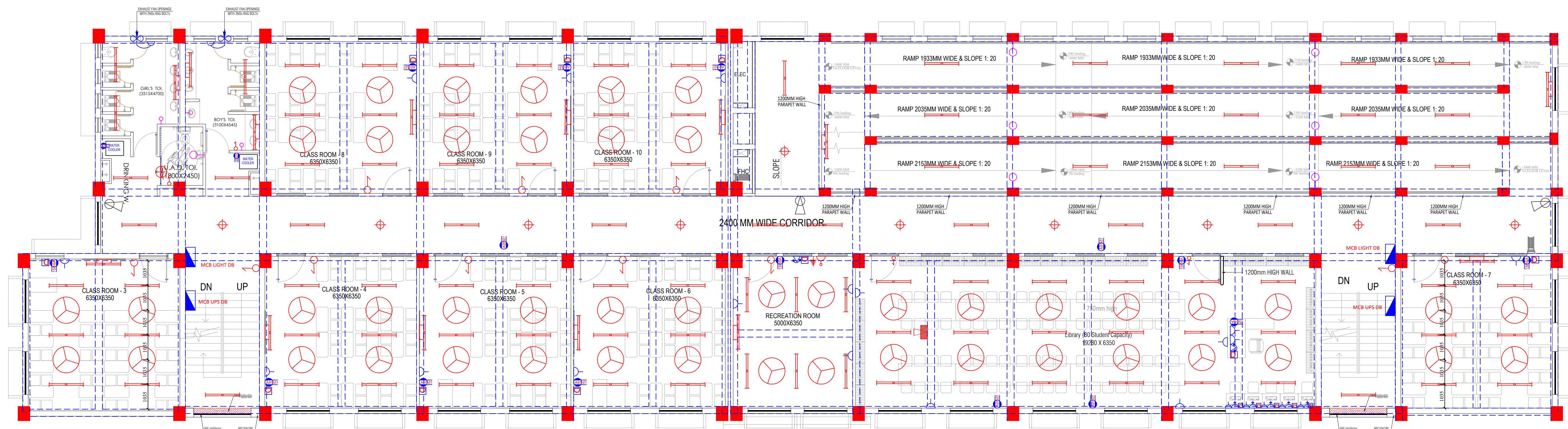
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_01

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

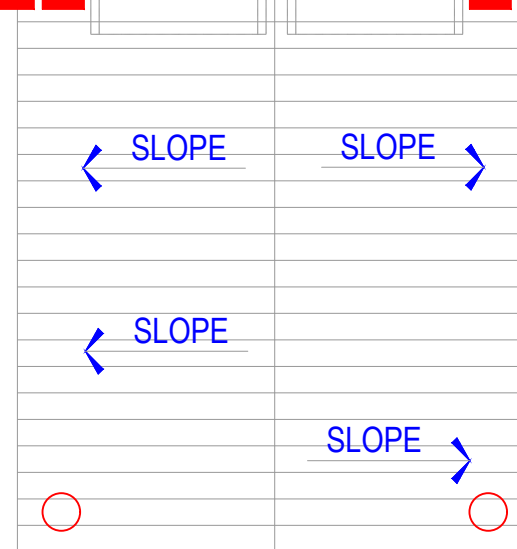
SCHOOL
GROUND FLOOR PLAN



SCH. **FIRST FLOOR PLAN**
G+2

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT
	2x6A UPS PLUG POINT
	TELEPHONE OUTLET
	DATA OUTLET



(VIRENDER KUMAR)
(R.K. SIMHAR)
A D P Keshri
Chief Technical Consultant

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200mm
	WALL FAN
	20W BULKHEAD FITTING

LEGENDS :

SYMBOL	DESCRIPTION
	EXHAUST FAN 300mm DIA METAL BODY
	MCB DISTRIBUTION BOARD
	2X6A PLUG POINT FOR TV
	TELEVISION POINT
	BATTEN HOLDER WITH 20W LED BULB
	BELL
	DOME/BULLET CAMERA
	POWER/PLUG POINT FOR PROJECTOR IN CEILING

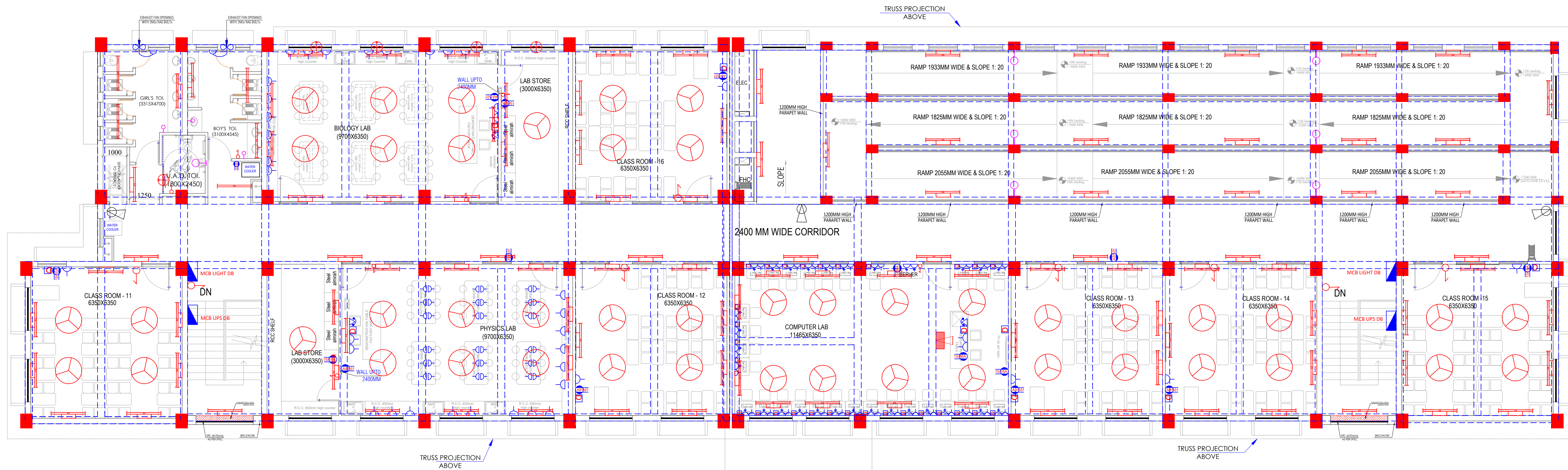
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_02

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

SCHOOL
FIRST FLOOR PLAN



SCH. **SECOND FLOOR PLAN**
G+2

ENTRANCE PORCH
ROOF BELOW

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT
	2x6A UPS PLUG POINT
	TELEPHONE OUTLET
	DATA OUTLET

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200mm
	WALL FAN
	20W BULKHEAD FITTING

LEGENDS :

SYMBOL	DESCRIPTION
	EXHAUST FAN 300mm DIA METAL BODY
	MCB DISTRIBUTION BOARD
	2X6A PLUG POINT FOR TV
	TELEVISION POINT
	BATTEN HOLDER WITH 20W LED BULB
	BELL
	DOME/BULLET CAMERA
	POWER/PLUG POINT FOR PROJECTOR IN CEILING

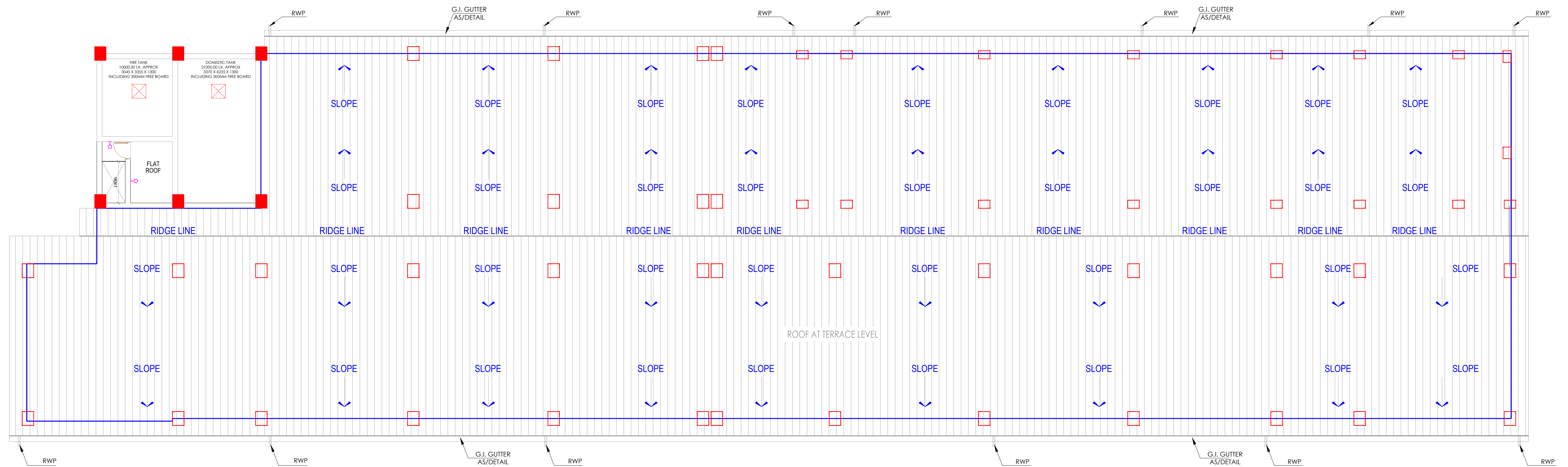
(Signature)
VIRENDER KUMAR
(Signature)
R.K. SIMHAR
(Signature)
A.P.K. Keshri
Chief Technical Consultant

DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_03
**SCHOOL
SECOND FLOOR PLAN**

SCALE:

**MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)**



SCH. **TERRACE FLOOR PLAN**
 G+2

(Signature)
 (VIRENDER KUMAR)

(Signature)
 (R.K. SINGH)

(Signature)
A D P Keshri
 Chief Technical Consultant

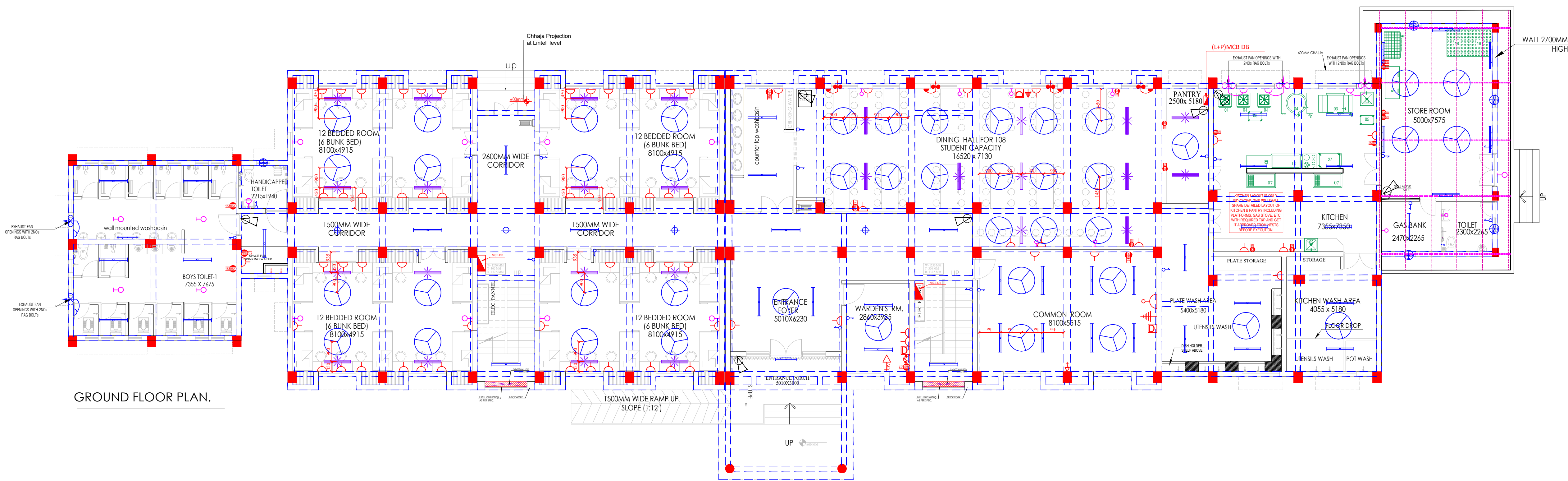
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DWG. NO.-
 EMRS NAME/SCH/AR_04

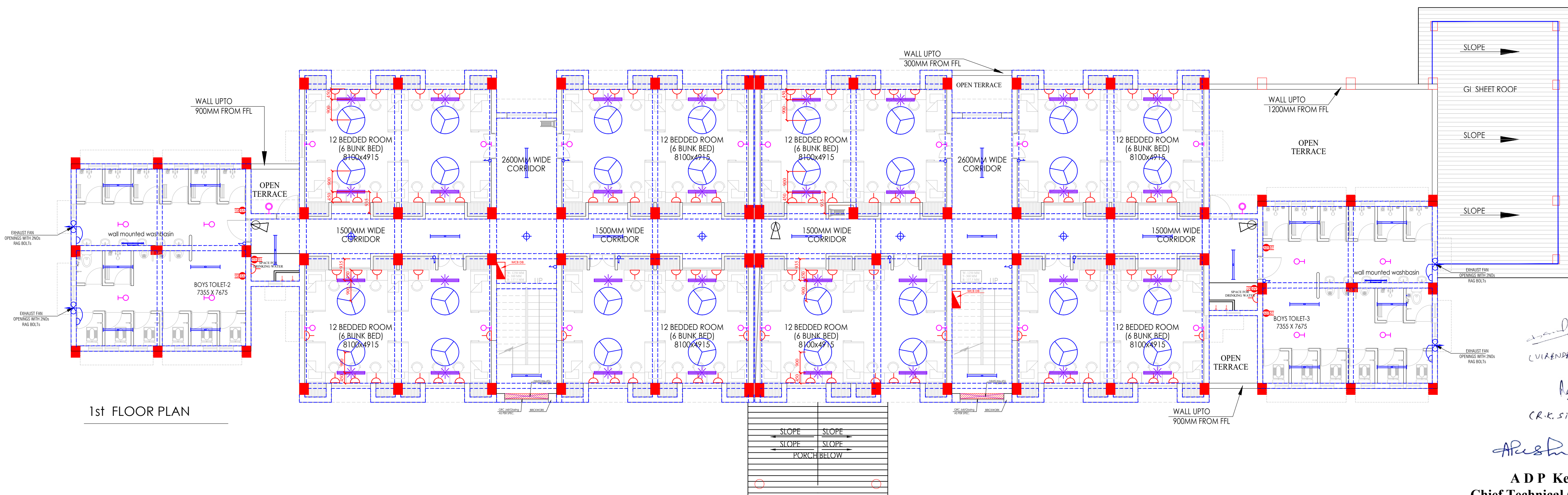
SCALE:

MINISTRY OF TRIBAL AFFAIRS
 NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

SCHOOL
 ROOF FLOOR PLAN



GROUND FLOOR PLAN.



1st FLOOR PLAN

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT FOR TV
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT WITH SWITCH BOARD
	TELEPHONE OUTLET
	DATA OUTLET

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	40W LED CEILING MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 450mm DIA METAL BODY
	EXHAUST FAN 300mm DIA PLASTIC BODY
	EXHAUST FAN 300mm DIA METAL BODY
	MCB DISTRIBUTION BOARD
	BATTEN HOLDER WITH LED BULB
	BULKHEAD LIGHT
	DOME/BULLET CAMERA

A D P Keshri
Chief Technical Consultant

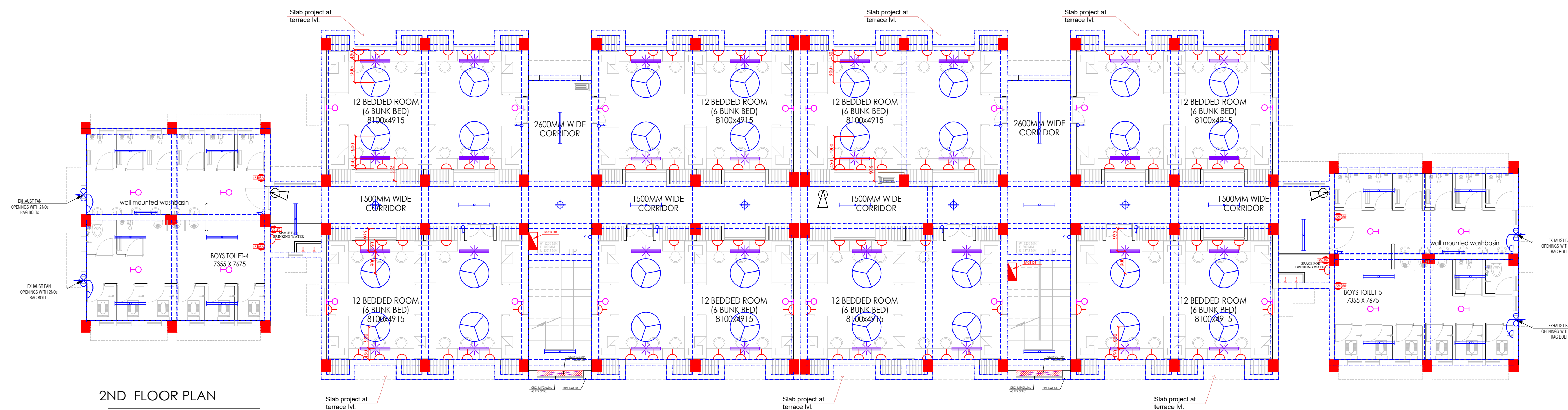
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/BH/AR_01

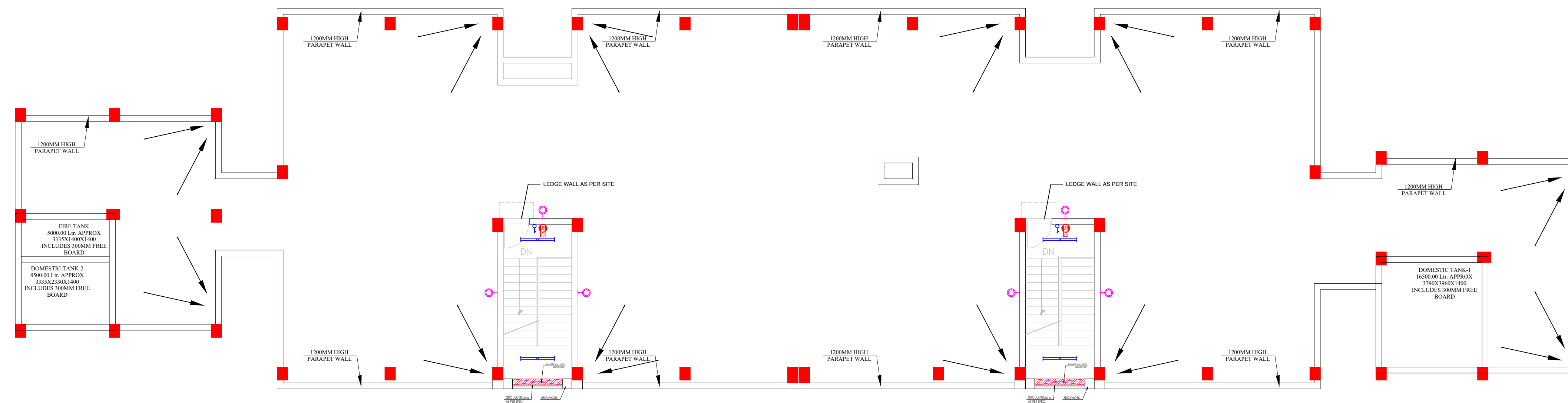
SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

TITLE
HOSTEL-BOYS



2ND FLOOR PLAN



TERRACE FLOOR

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT FOR TV
	TELEVISION POINT
	5/6A LIGHT PLUG POINT WITH SWITCH BOARD
	TELEPHONE OUTLET
	DATA OUTLET

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	40W LED CEILING MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 450mm DIA METAL BODY
	EXHAUST FAN 300mm DIA PLASTIC BODY
	EXHAUST FAN 300mm DIA METAL BODY
	MCB DISTRIBUTION BOARD
	BATTEN HOLDER WITH LED BULB
	BULKHEAD LIGHT
	DOME/BULLET CAMERA

A D P Keshri
Chief Technical Consultant

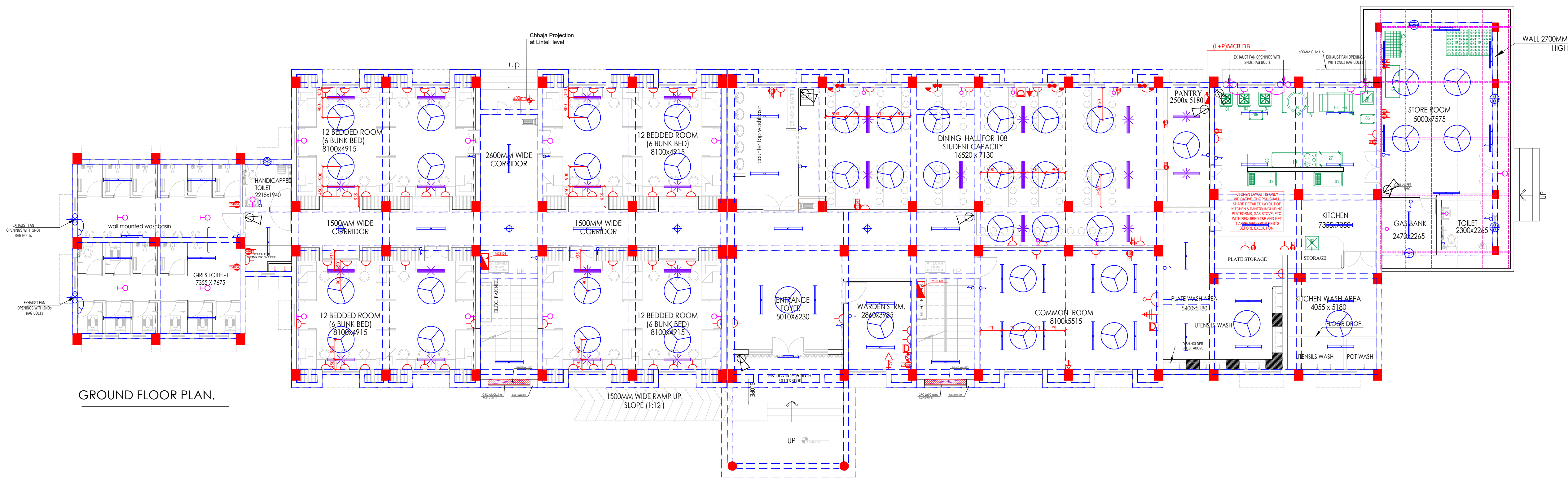
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/BH/AR_02

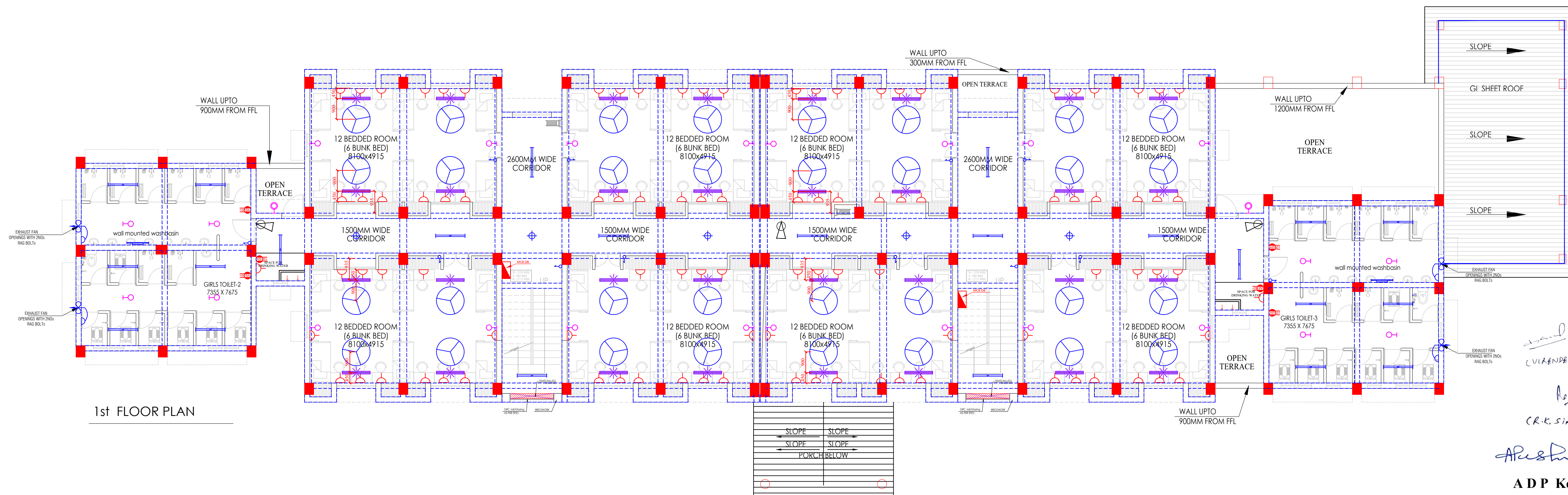
SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

TITLE
HOSTEL-BOYS



GROUND FLOOR PLAN.



1st FLOOR PLAN

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT FOR TV
	TELEVISION POINT
	5/6A LIGHT PLUG POINT WITH SWITCH BOARD
	TELEPHONE OUTLET
	DATA OUTLET

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	40W LED CEILING MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 450mm DIA METAL BODY
	EXHAUST FAN 300mm DIA PLASTIC BODY
	EXHAUST FAN 300mm DIA METAL BODY
	MCB DISTRIBUTION BOARD
	BATTEN HOLDER WITH LED BULB
	BULKHEAD LIGHT
	DOME/BULLET CAMERA

A.P.K. Keshri
Chief Technical Consultant

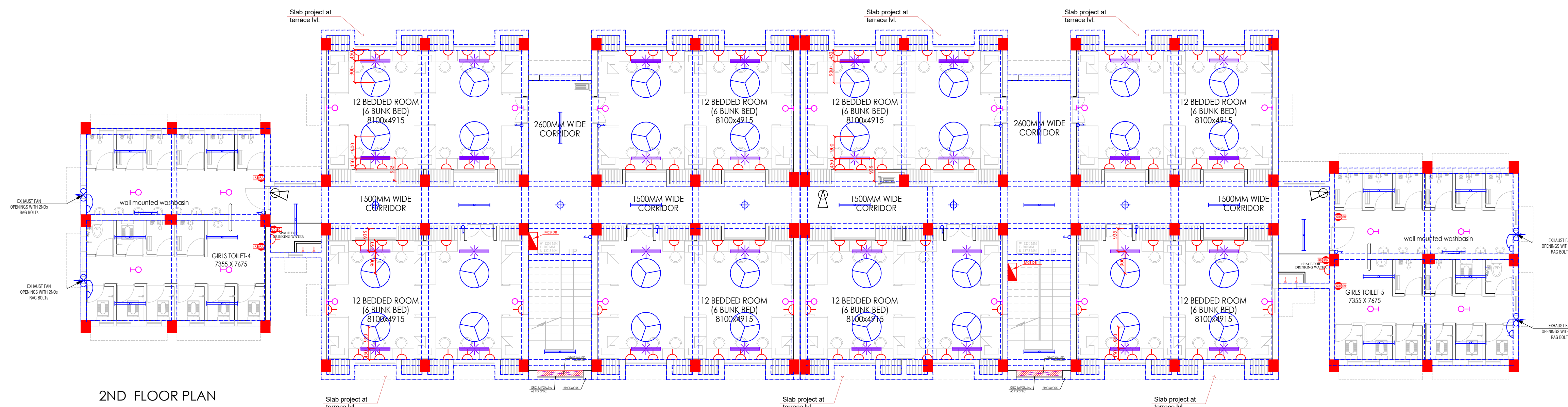
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/GH/AR_01

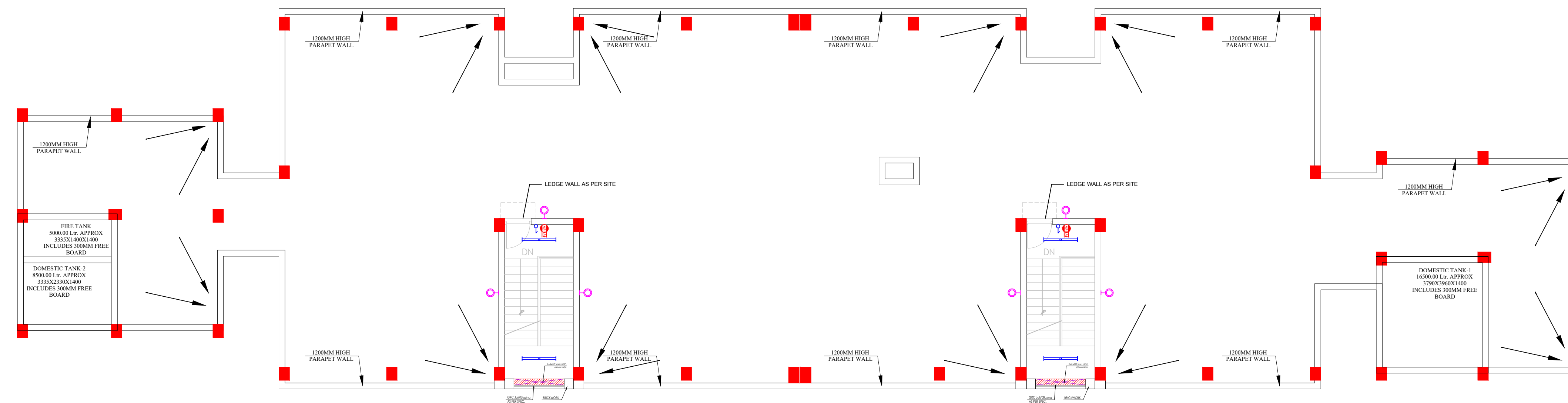
SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

TITLE
HOSTEL-GIRLS



2ND FLOOR PLAN



TERRACE FLOOR

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT FOR TV
	TELEVISION POINT
	5/6A LIGHT PLUG POINT WITH SWITCH BOARD
	TELEPHONE OUTLET
	DATA OUTLET

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	40W LED CEILING MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 450mm DIA METAL BODY
	EXHAUST FAN 300mm DIA PLASTIC BODY
	EXHAUST FAN 300mm DIA METAL BODY
	MCB DISTRIBUTION BOARD
	BATTEN HOLDER WITH LED BULB
	BULKHEAD LIGHT
	DOME/BULLET CAMERA

A D P Keshri
Chief Technical Consultant

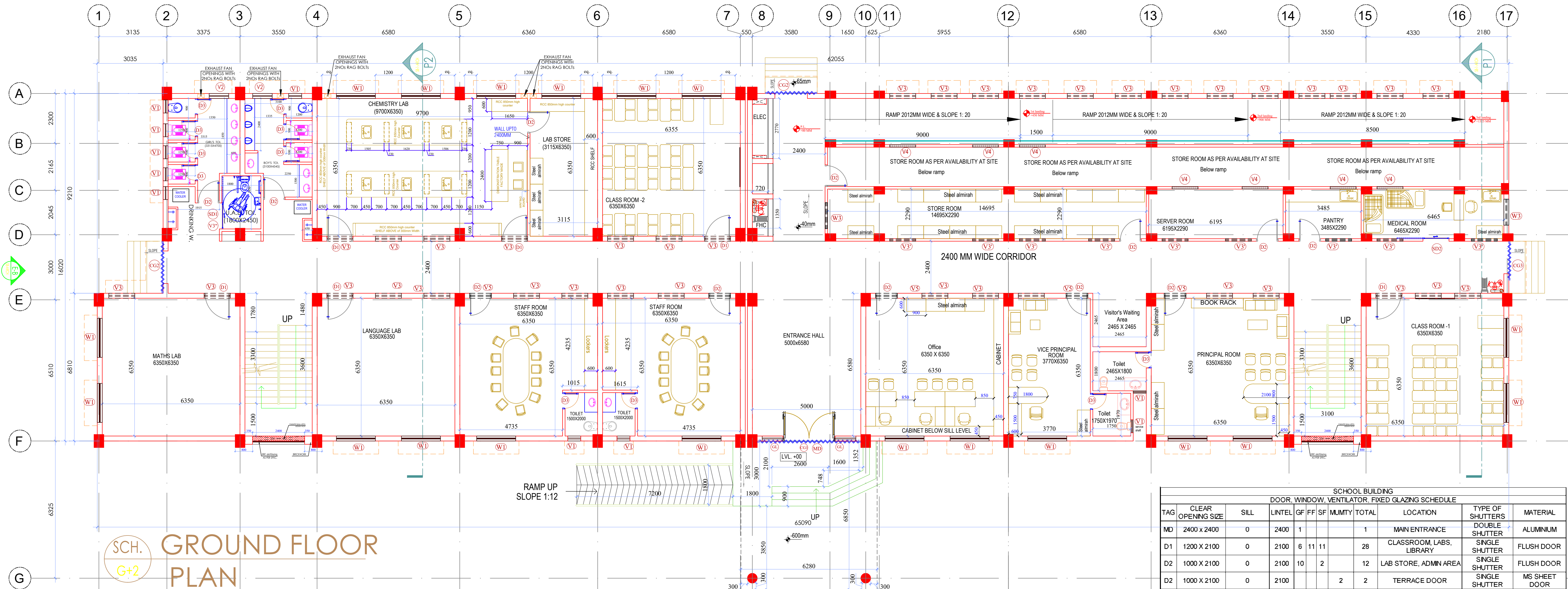
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/GH/AR_02

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

TITLE
HOSTEL-GIRLS



SCH. G+2
GROUND FLOOR PLAN



N.K.
(NARENDRA KUMAR)
pk Agrawal
(Prasad Agrawal)
locant 13/4/23
(R.K. Gang)
24/05/23
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

AREA STATEMENT	
SCHOOL BUILDING	
DETAILS	AREA (in Sqm)
MAIN BUILDING	
GROUND FLOOR PLINTH AREA	875.40
FIRST FLOOR PLINTH AREA	803.54
SECOND FLOOR PLINTH AREA	803.54
TOTAL AREA	2482.48
ENTRANCE PORCH AREA	
AREA OF PORCH / 2	21.51
Ramp AREA	
AREA AT GROUND FLOOR (AREA/2)	68.13
AREA AT FIRST FLOOR (AREA/2)	105.95
TOTAL COVERED AREA (RAMP AREA EXCLUDED)	2678.00

SCHOOL BUILDING											
DOOR, WINDOW, VENTILATOR, FIXED GLAZING SCHEDULE											
TAG	CLEAR OPENING SIZE	SILL	LINTEL	GF	FF	SF	MUMTY	TOTAL	LOCATION	TYPE OF SHUTTERS	MATERIAL
MD	2400 X 2400	0	2400	1				1	MAIN ENTRANCE	DOUBLE SHUTTER	ALUMINIUM
D1	1200 X 2100	0	2100	6	11	11		28	CLASSROOM, LABS, LIBRARY	SINGLE SHUTTER	FLUSH DOOR
D2	1000 X 2100	0	2100	10				12	LAB STORE, ADMIN AREA	SINGLE SHUTTER	FLUSH DOOR
D2	1000 X 2100	0	2100				2	2	TERRACE DOOR	SINGLE SHUTTER	MS SHEET DOOR
D2	1000 X 2100	0	2100	2	2	2		6	TOILET MAIN ENTRY	SINGLE SHUTTER	PRELAMINATED DOOR
D3	750 X 2100	0	2100	11	7	7		25	WC DOOR	SINGLE SHUTTER	PRELAMINATED DOOR
SD1	1200 X 2100	0	2100	1	1	1		3	H.TOILET	SLIDING DOOR	PRELAMINATED DOOR
SD1	1200 X 2100	0	2100	1				1	MEDICAL ROOM	SLIDING DOOR	FLUSH DOOR
CG1	4800 X 2400	0	2400	1				1	MAIN ENTRANCE		COLLAPSIBLE GATE
CG2	2400 X 2100	0	2100	2				2	CORRIDOR END		COLLAPSIBLE GATE
CG3	1800 X 2100	0	2100	1				1	CORRIDOR END		COLLAPSIBLE GATE
W1	1800 X 1500	900	2400	19	26	28		73	CLASSROOM, ADMIN AREA, LABS, CORRIDOR END		STEEL GLAZED WINDOW
W2	1800 X 900	900	1800	2				2	RECREATIONAL ROOM		STEEL GLAZED WINDOW
W3	1200 X 1200	900	2100	2				2	PANTRY, STORE		STEEL GLAZED WINDOW
GL	960 X 2100	300	2400	2				2	MAIN ENTRANCE		ALUMINIUM FIXED GLAZING
V1	600 X 600	1800	2400	10	6	6		22	TOILET		STEEL SECTION
V2	900 X 1200	1200	2400	2	2	2		6	TOILET		STEEL SECTION
V3	1200 X 600	AS PER SITE	B.O.B	36	48	44		128	CLASSROOM, ADMIN AREA, LABS, RAMP		STEEL SECTION
V3'	1200 X 600	AS PER SITE	2100	9				9	STORE, SERVER, MEDICAL, PANTRY		STEEL SECTION
V3*	1200 X 600	AS PER SITE	B.O.B	1	1	1		3	H.TOILET		STEEL SECTION
V4	1200 X 450	AS PER SITE	B.O.B	7				7	STORE, MEDICAL ROOM, PANTRY		STEEL SECTION
V5	1000 X 600	AS PER SITE	B.O.B	5				5	STAFFROOM, OFFICE, V.PRINCIPAL, PRINCIPAL		STEEL SECTION

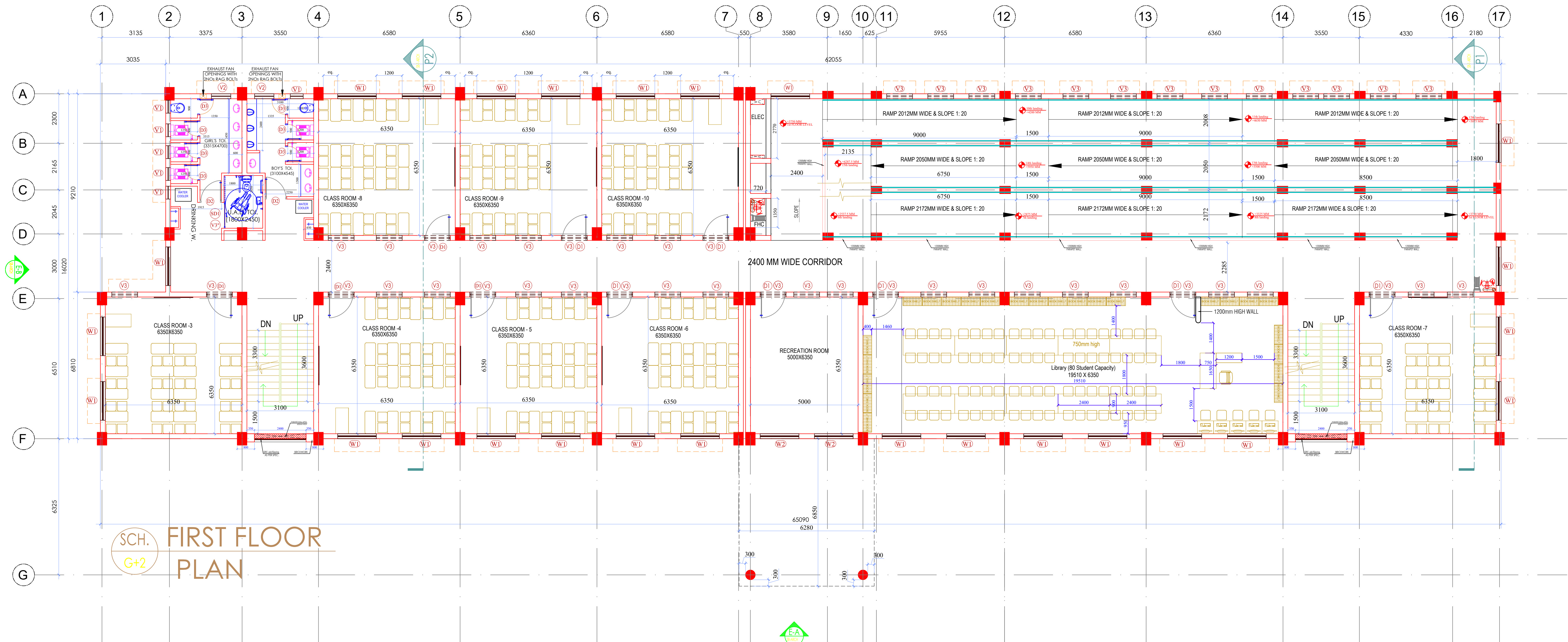
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_01

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

SCHOOL
GROUND FLOOR PLAN



NDI.
(NARENDRA KUMAR)
plk Approval 10.01.23
(Approved Approval)

Count 13/4/23
(Rk Gang)
Smt SS. 13/3/2023.
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

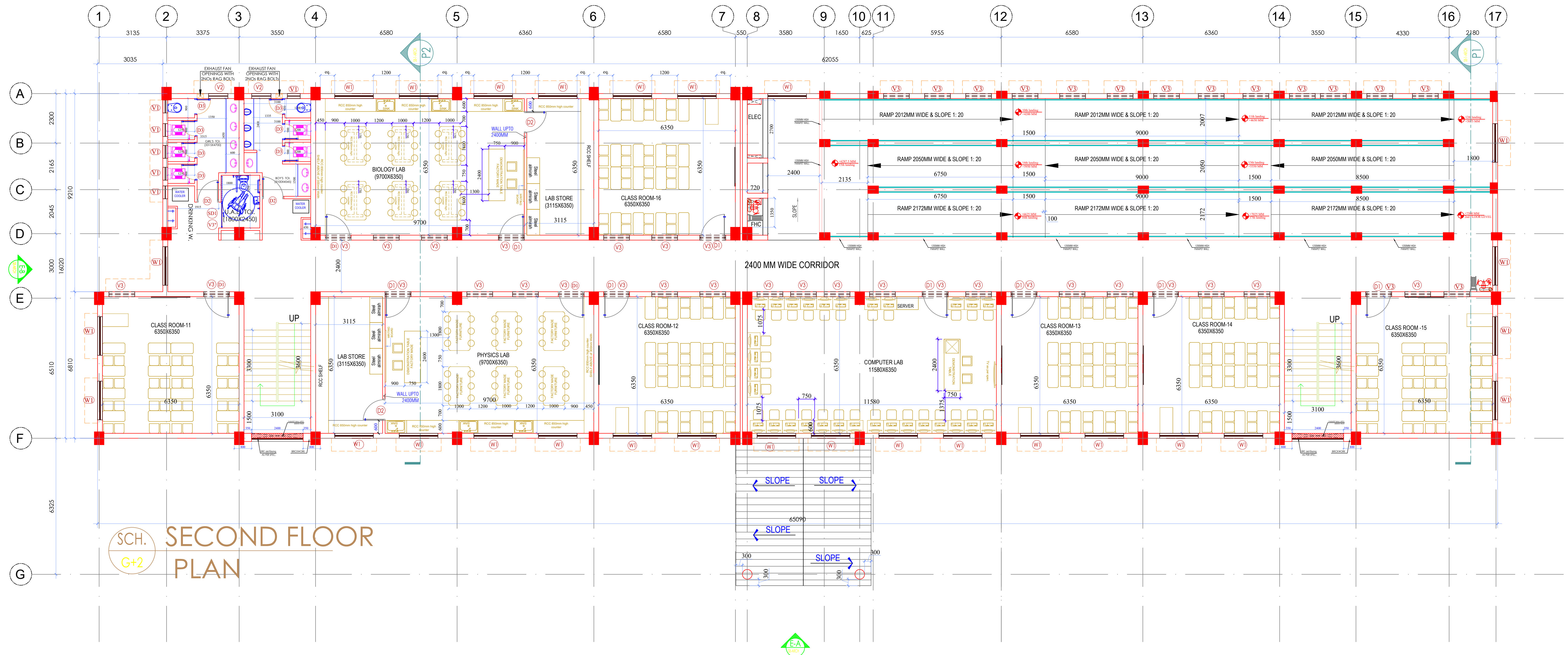
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_02

SCHOOL
FIRST FLOOR PLAN

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)



SCH. **SECOND FLOOR PLAN**
G+2

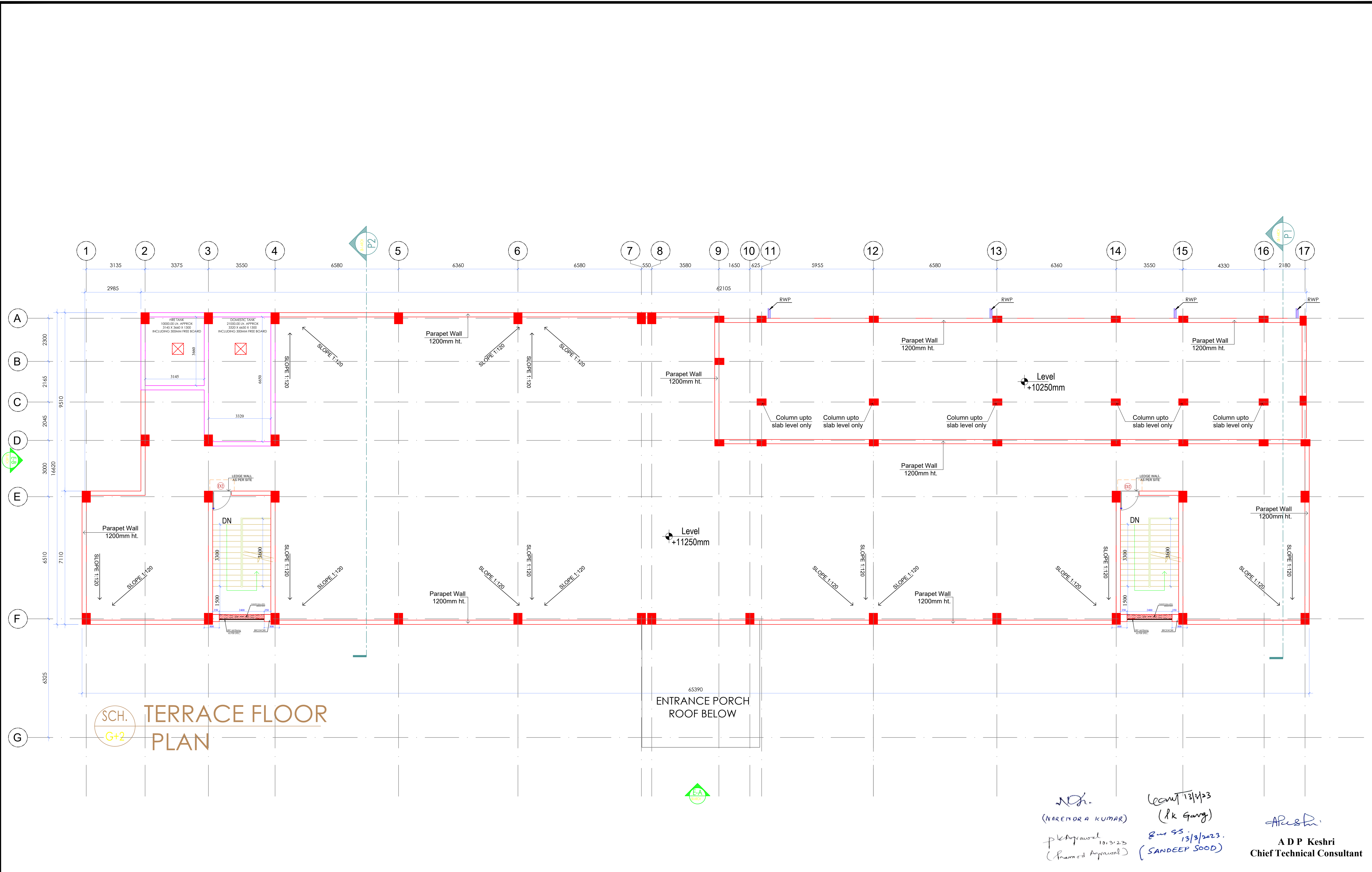
NDK. (NARENDRA KUMAR)
 (Count 13/4/23) (R.K. Gang.)
 p.k. Approval 10.5.23 (Prasad Approval)
 S.M.S. 13/3/2023. (SANDEEP SOOD)
 A D P Keshri
 Chief Technical Consultant

DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_03
 SCHOOL
SECOND FLOOR PLAN

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)



DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_04

SCHOOL
ROOF FLOOR PLAN

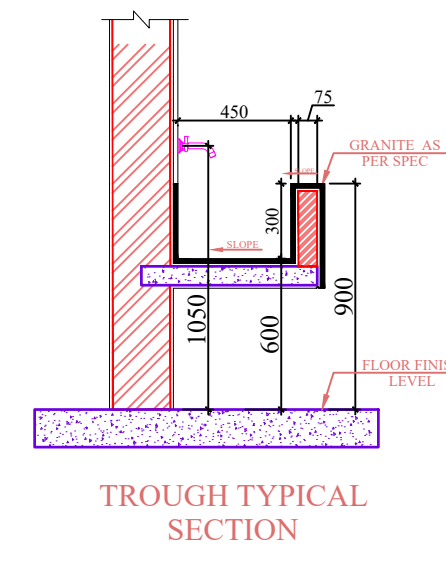
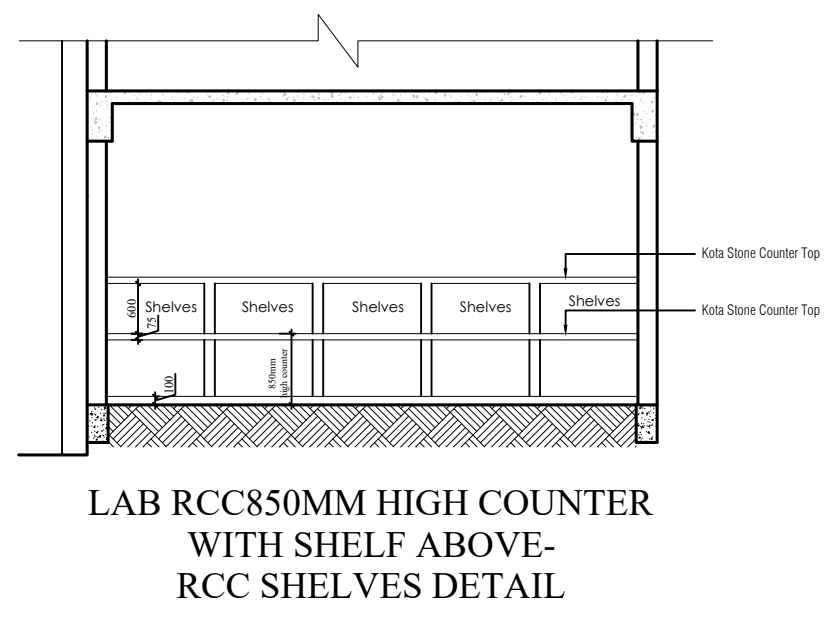
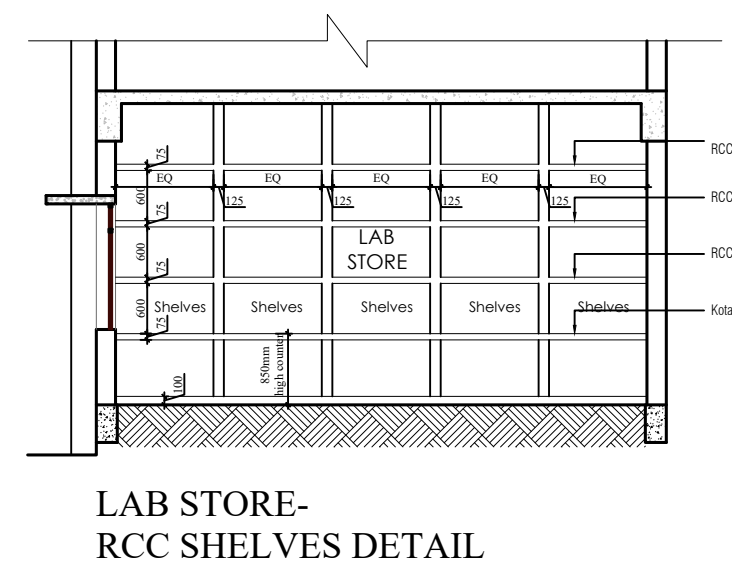
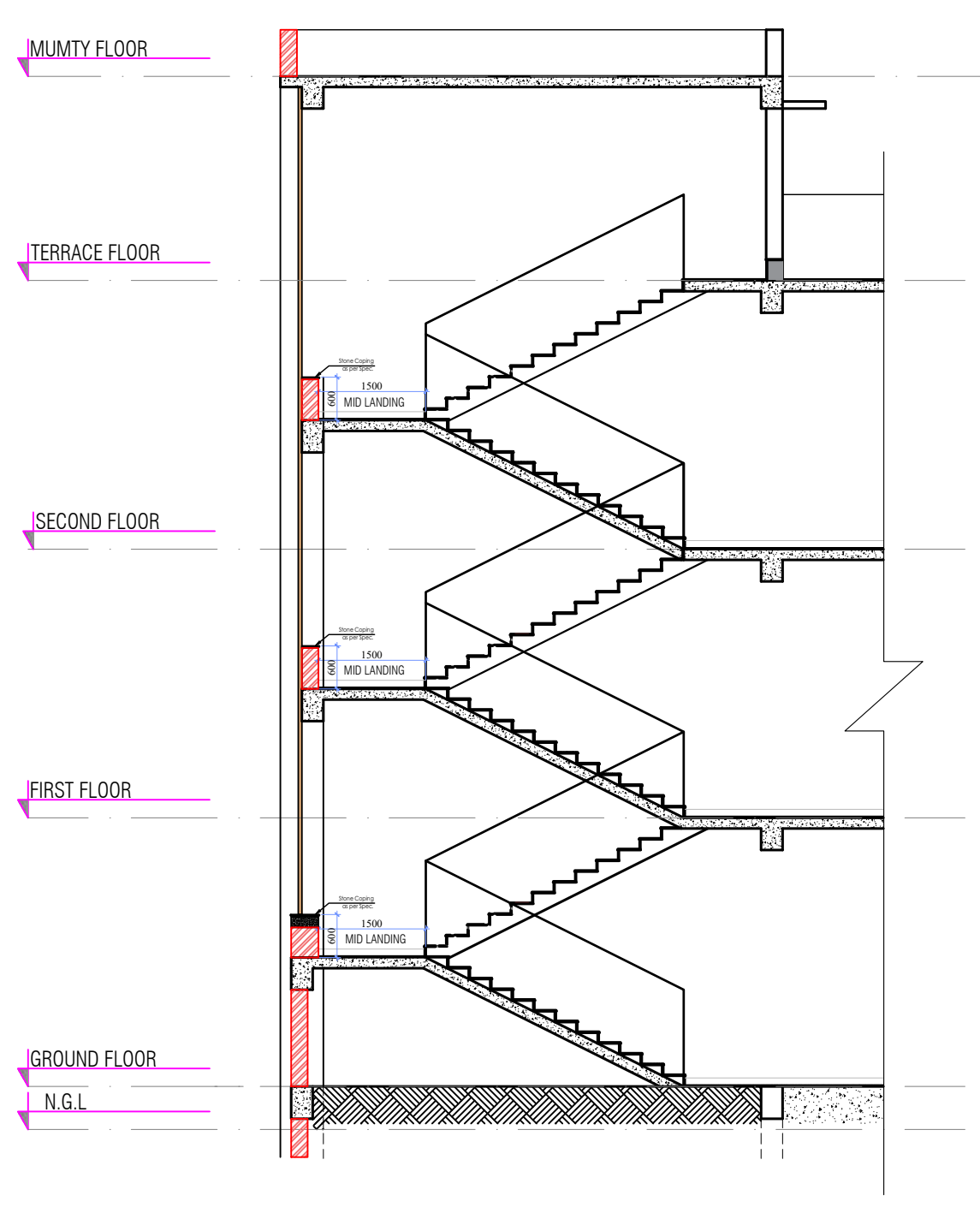
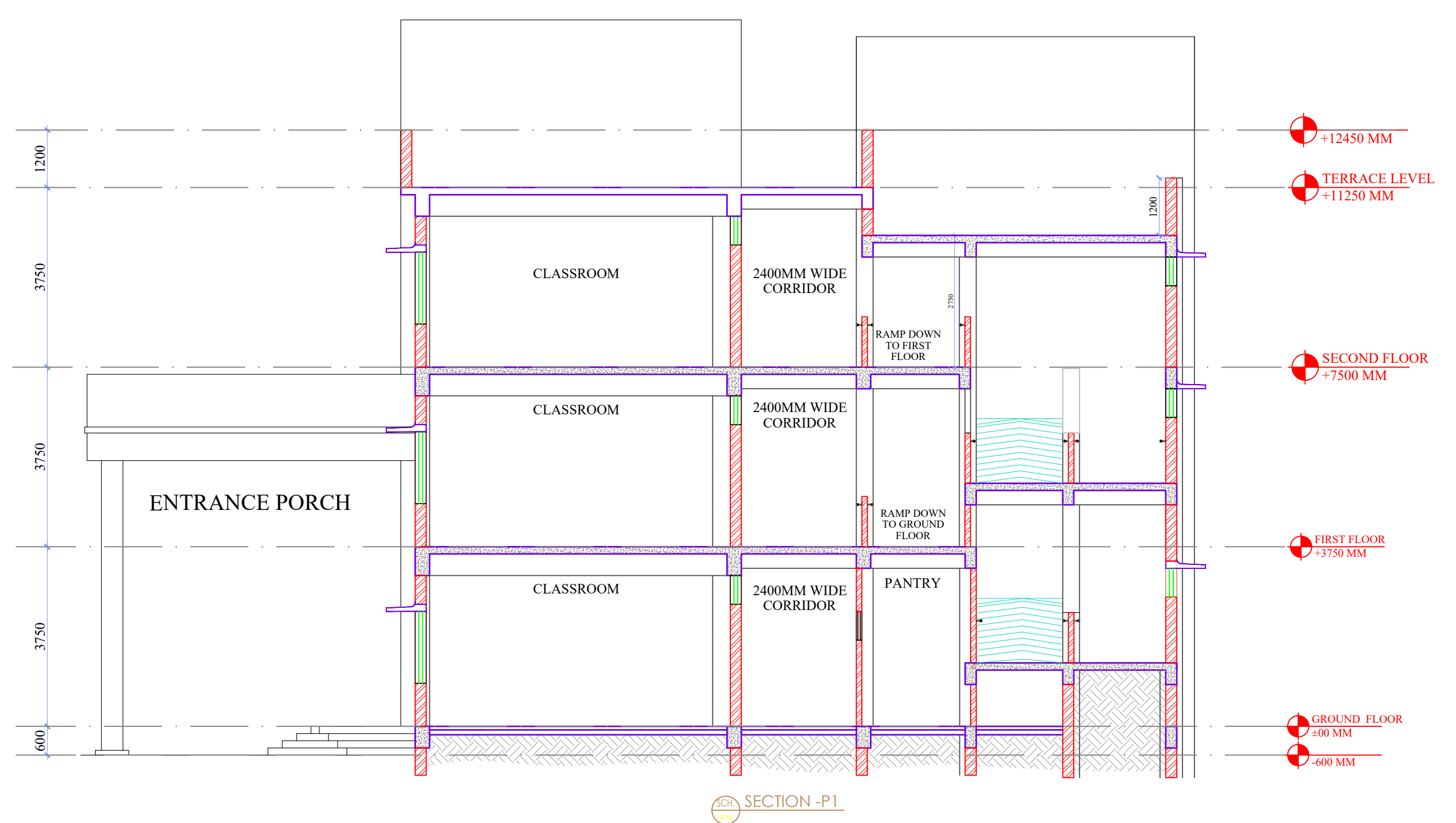
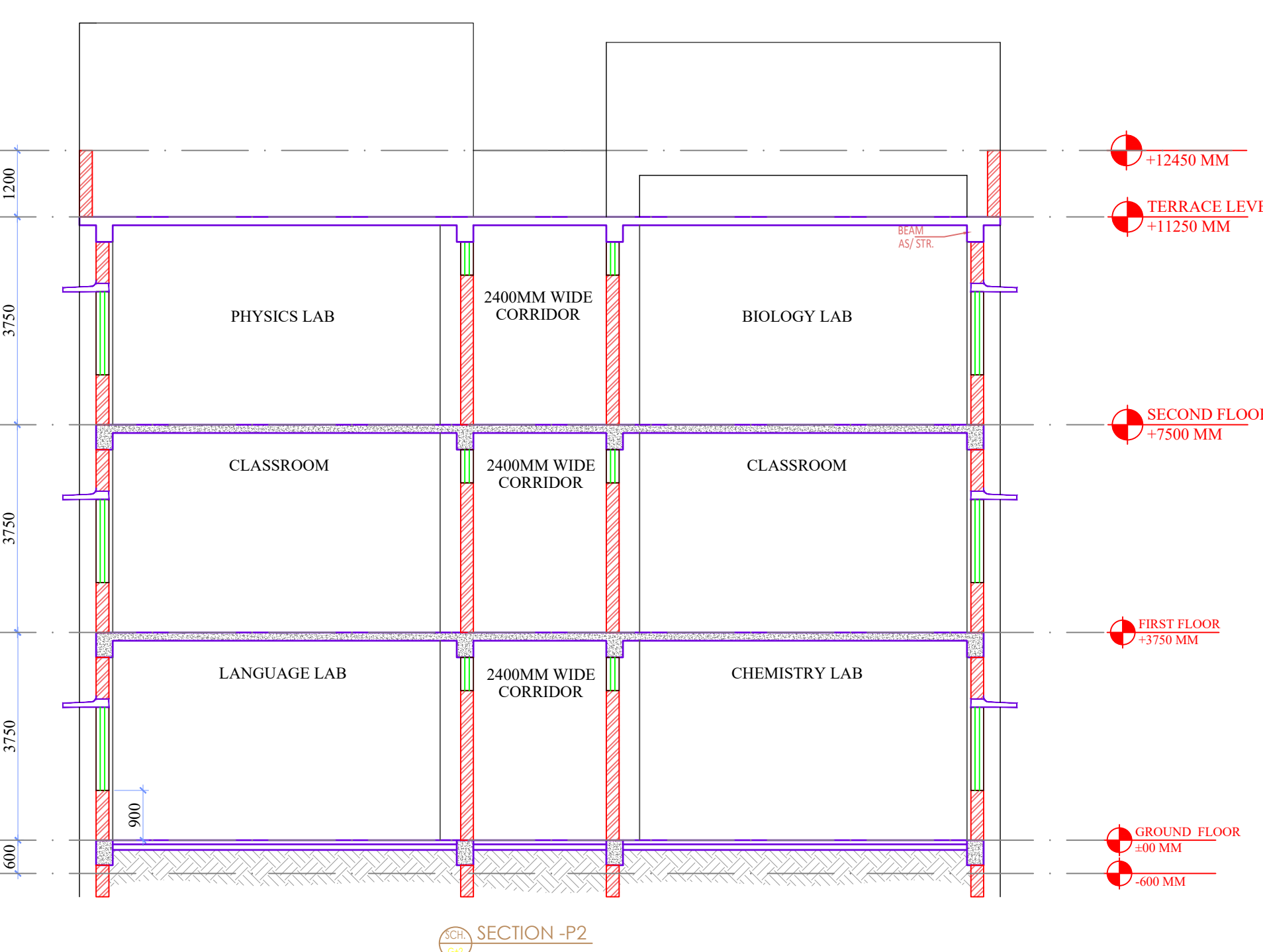
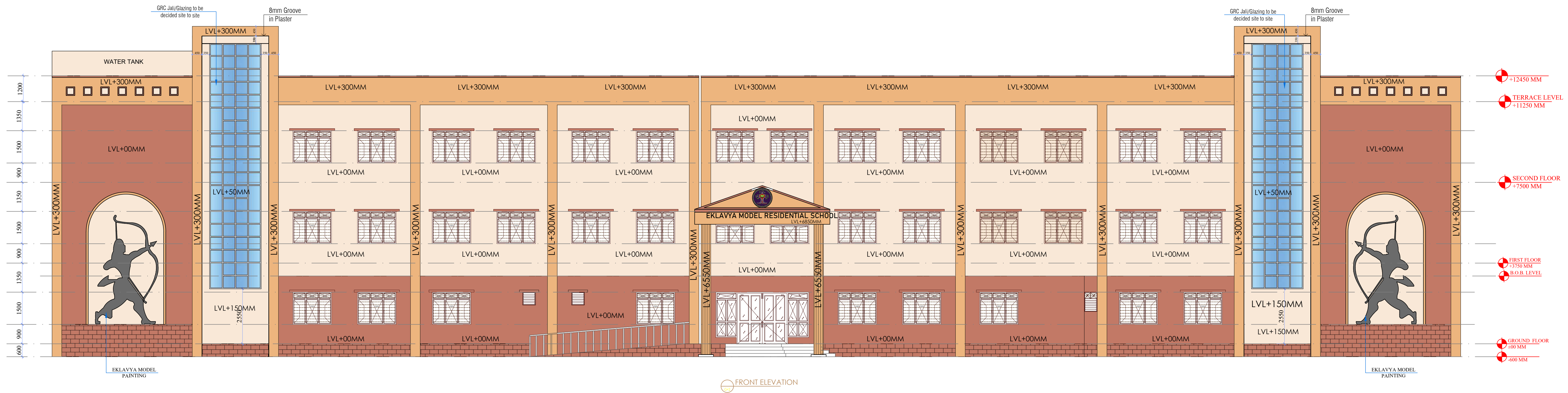
SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

N.K.
NARENDRA KUMAR
plk Approval 10.03.23
(Planned Approval)

(Count 13/4/23)
R.K. Gang
8m SS 13/3/2023.
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant



NDi.
(NARENDRA KUMAR)
pk Approved 10.01.23
(Pranod Approved)

Count 13/4/23
(Rk Gang)
8m SS.
13/3/2023.
(SANDEEP SOOD)

A D P Keshri
Chief Technical Consultant

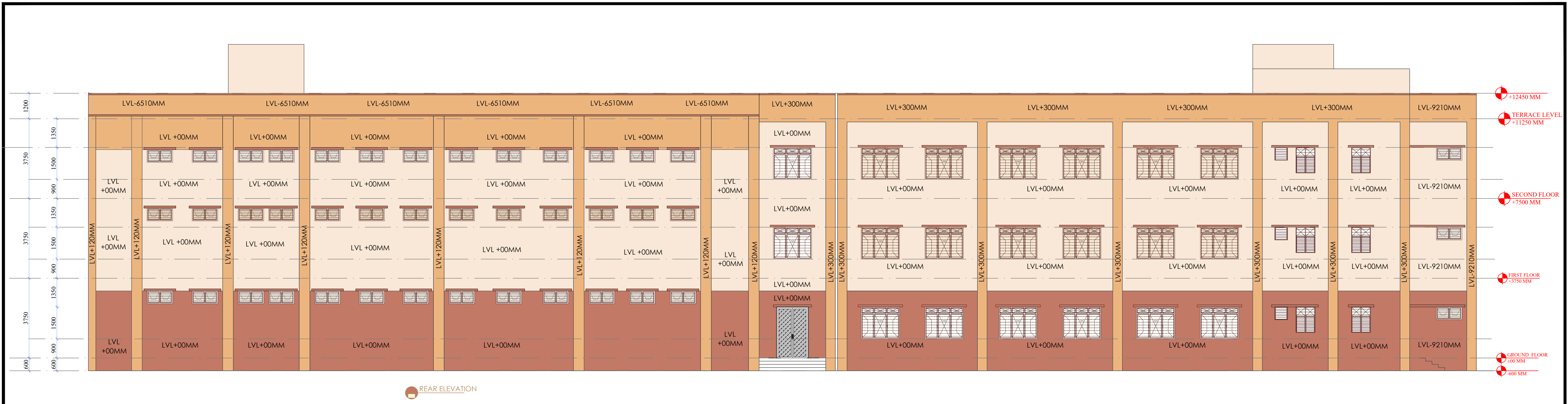
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_05

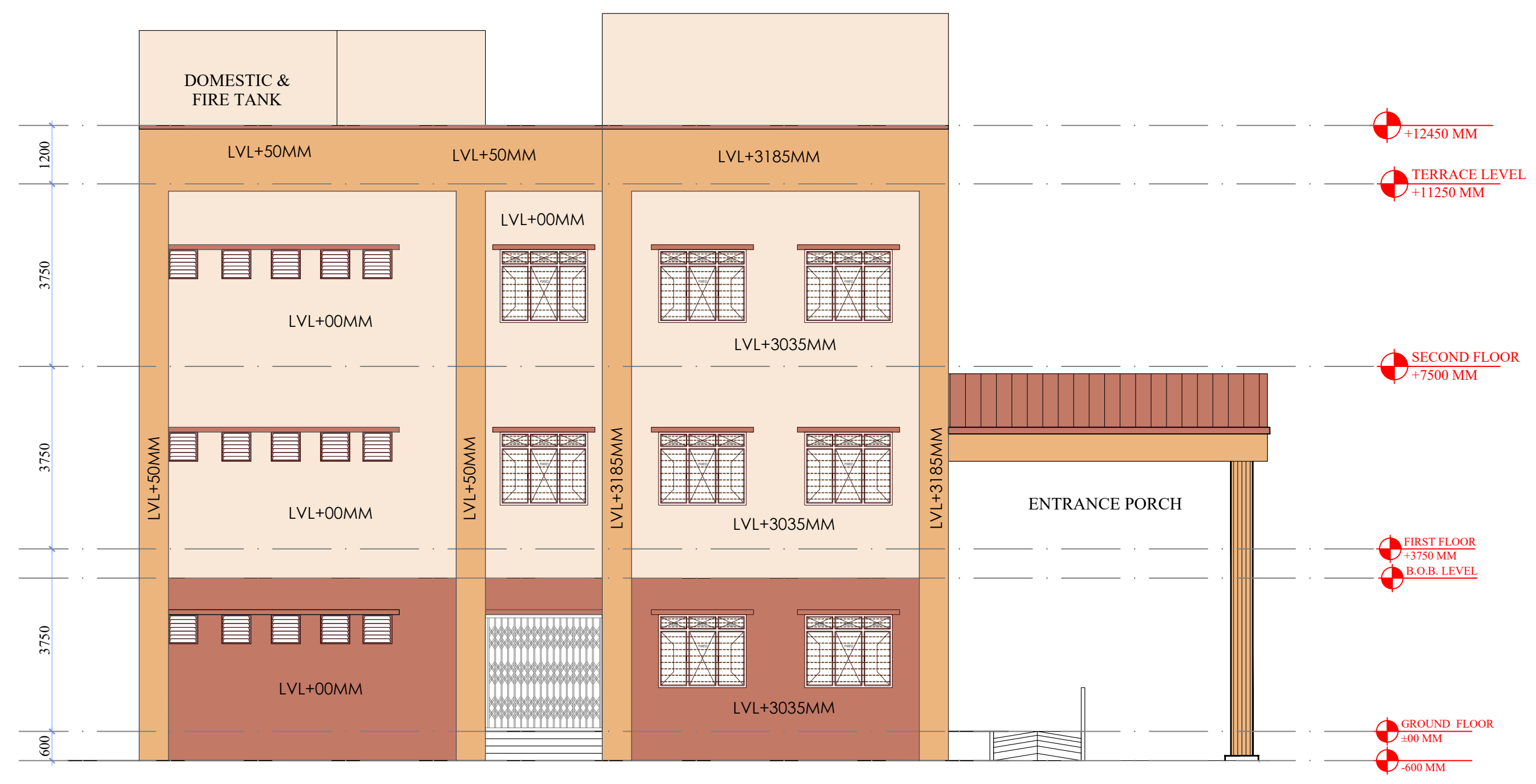
SCHOOL
ELEVATION, SECTION

SCALE:

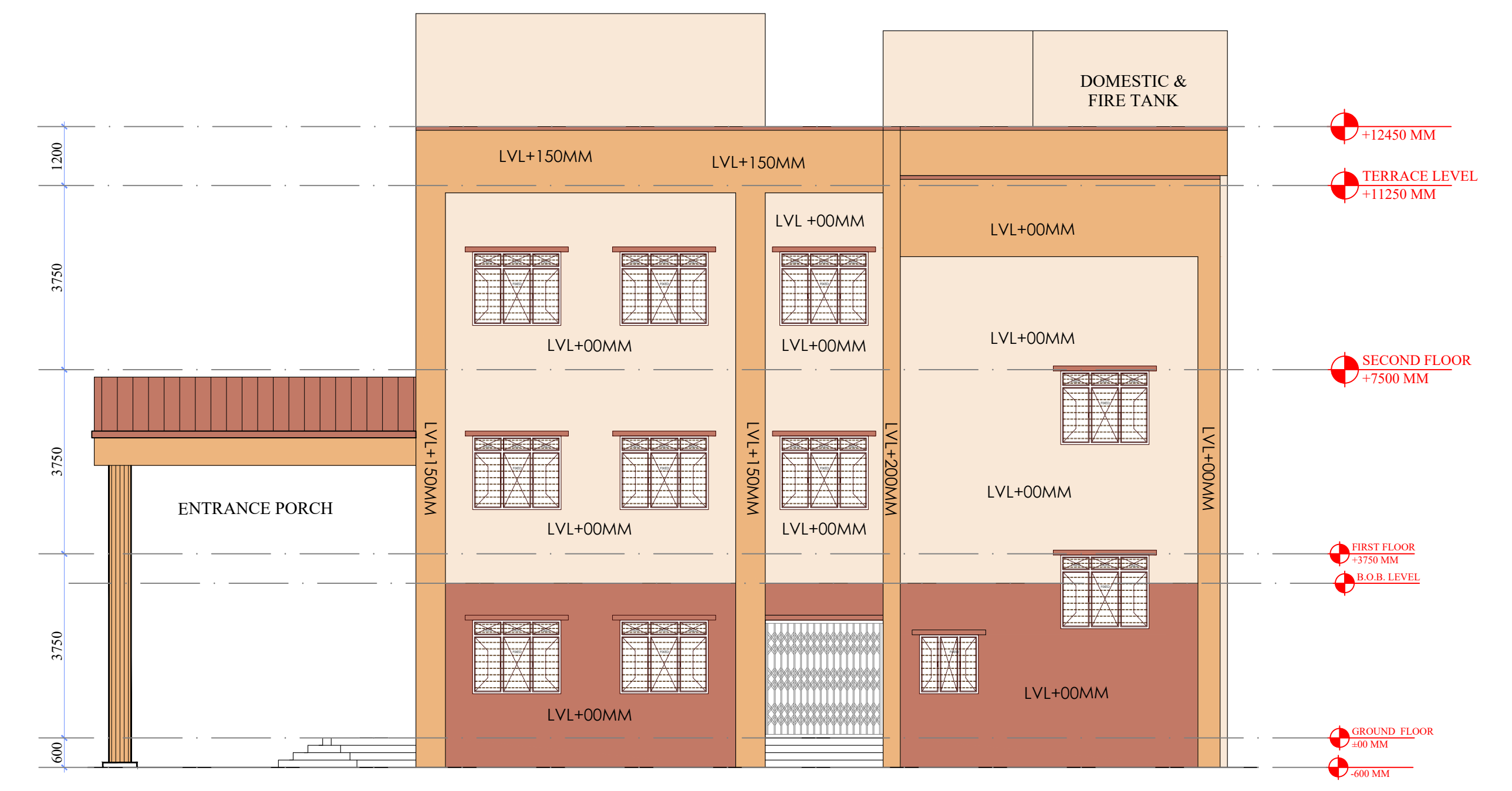
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)



REAR ELEVATION



SIDE ELEVATION



SIDE ELEVATION

N.K.
 (NARENDRA KUMAR)
 p.k. Approved 10.01.23
 (Approved Approval)

(Count 13/4/23)
 (R.K. Gang)
 8.11.23
 13/3/2023
 (SANDEEP SOOD)

A.P.K.
 A D P Keshri
 Chief Technical Consultant

DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_06

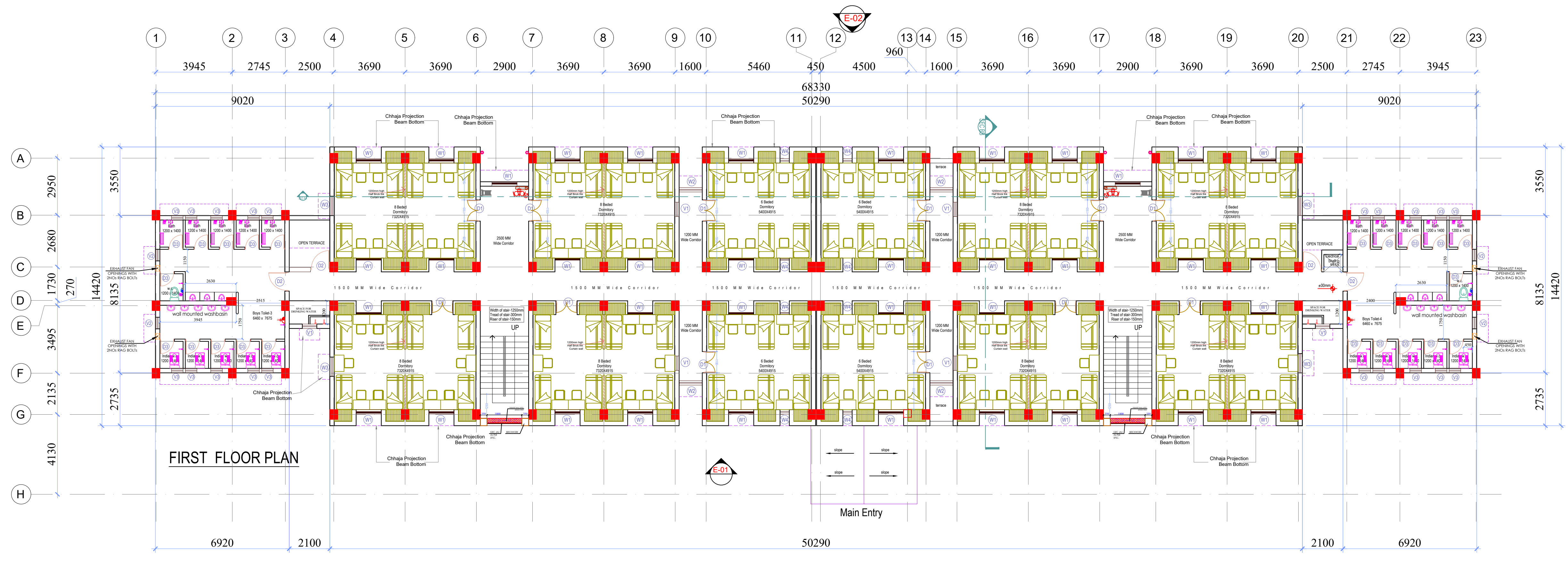
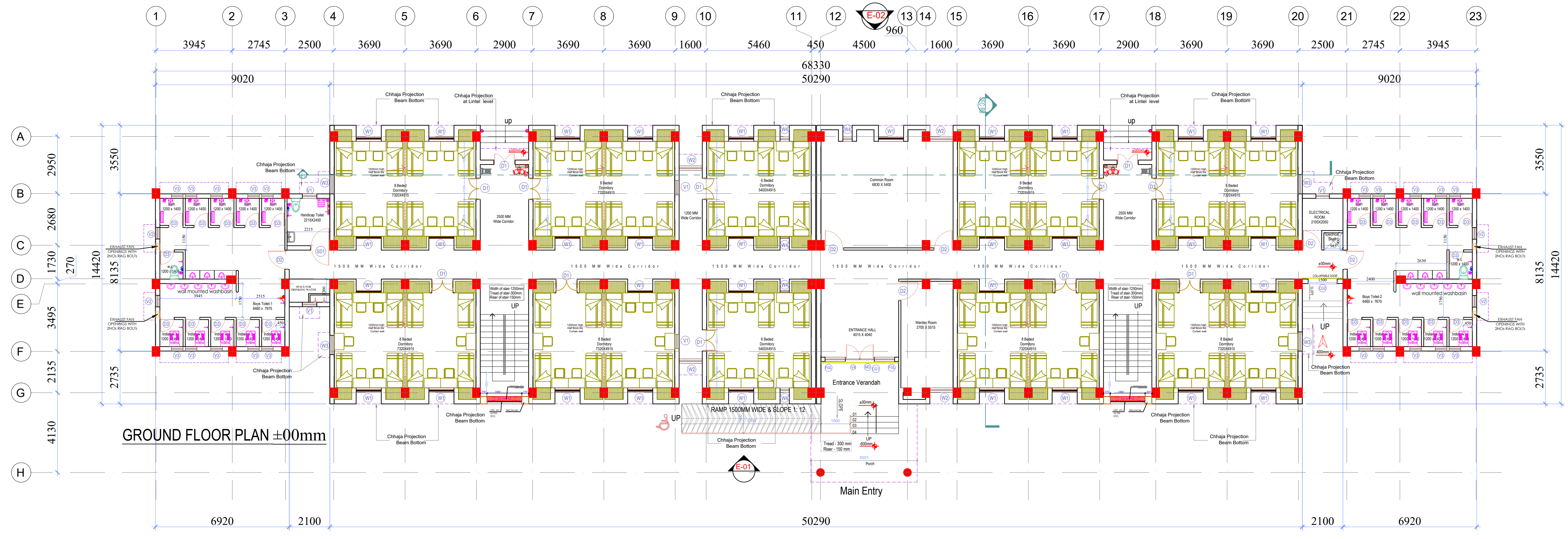
SCHOOL
ELEVATION, SECTION

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)



AREA STATEMENT	
HOSTEL BUILDING	
DETAILS	TOTAL FLOOR AREA
MAIN BUILDING	
GROUND FLOOR PLINTH AREA	789.83
FIRST FLOOR PLINTH AREA	778.36
SECOND FLOOR PLINTH AREA	778.36
TOTAL AREA	2346.55
ENTRANCE PORCH AREA	
AREA OF PORCH / 2	12.41
Total	2359.00



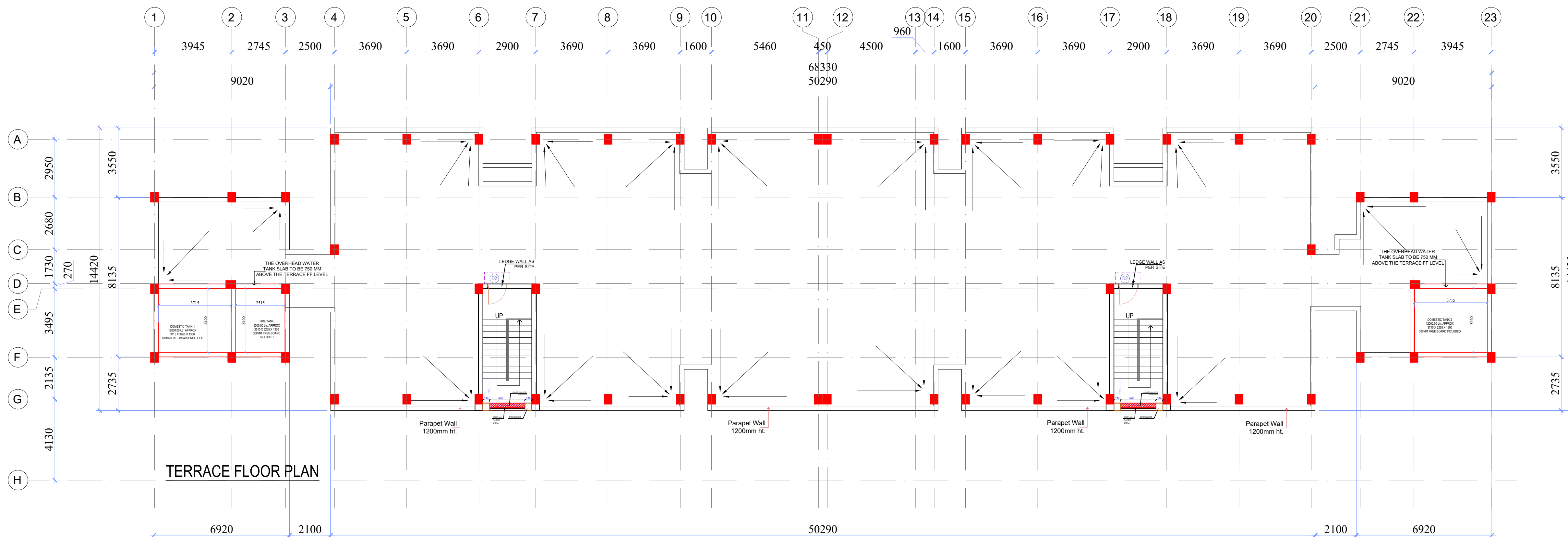
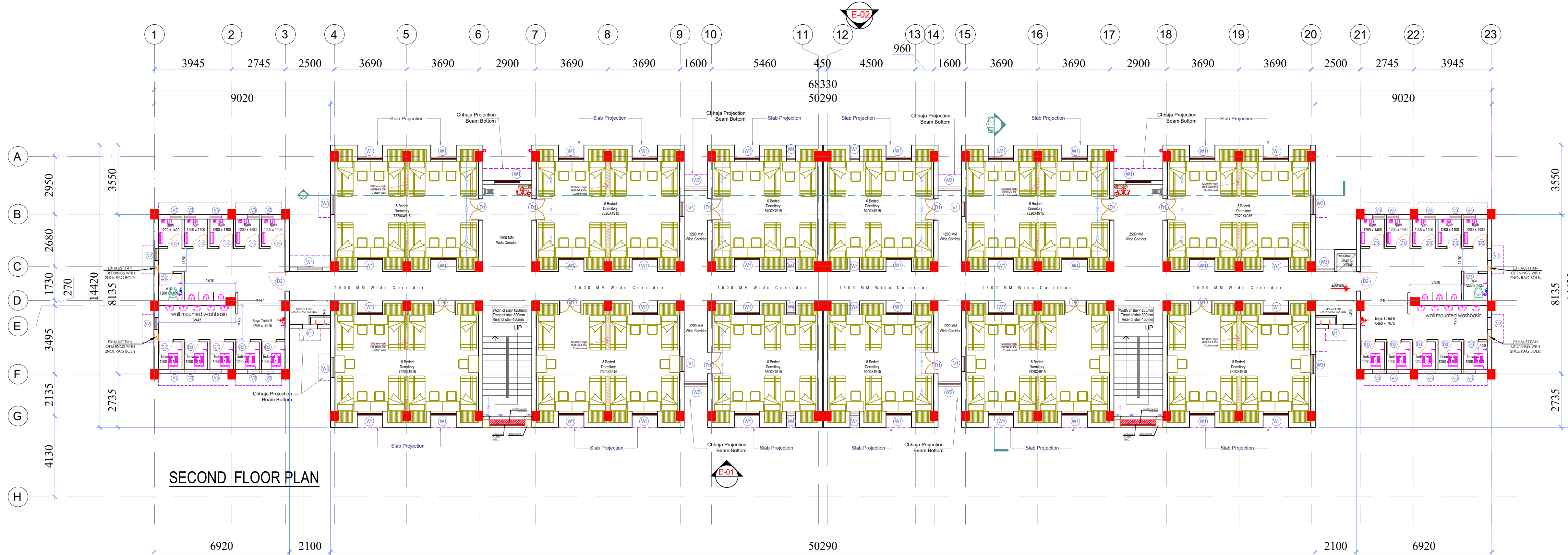
N.K.
(NARENDRA KUMAR)
planned 10/3/23
(Prasad Appraisal)
cont 13/4/23
(R.K. Gang)
Rev SS 13/3/2023
(SANDEEP SOOD)

A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : BOYS 'HOSTEL'
DRAWING TITLE : GROUND & FIRST FLOOR PLAN
G+2 BUILDING

DWG. NO.-
EMRS NAME/BH/AR_01

DATE - 09 MARCH 2023



N.K.
 (NARENDRA KUMAR)
 Pk Approved 10.3.23
 (Prasad Approved)
 Count 13/4/23
 (Pk Gang)
 Rev SS 13/3/2023
 (SANDEEP SOOD)

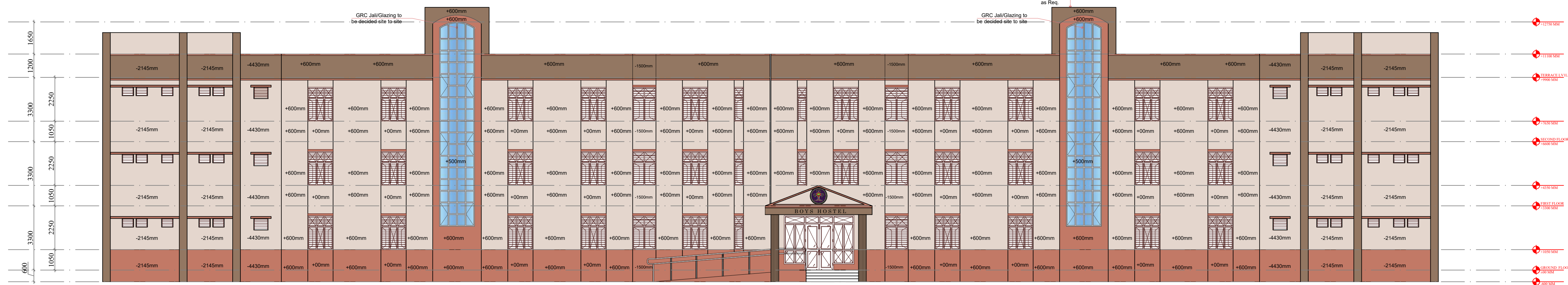
A.P.K.
 A D P Keshri
 Chief Technical Consultant

CATEGORY : BOYS 'HOSTEL

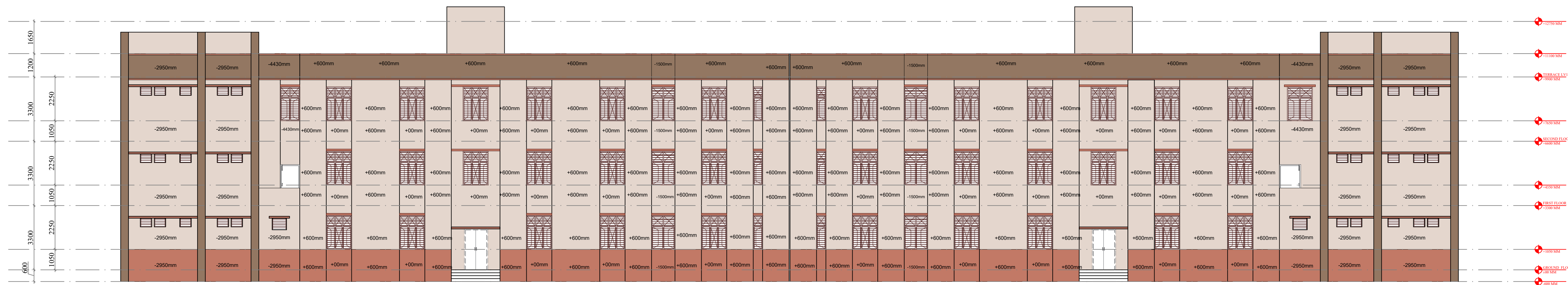
DRAWING TITLE : SECOND & TERRACE FLOOR PLAN G+2 BUILDING

DWG. NO.- EMRS NAME/BH/AR_02

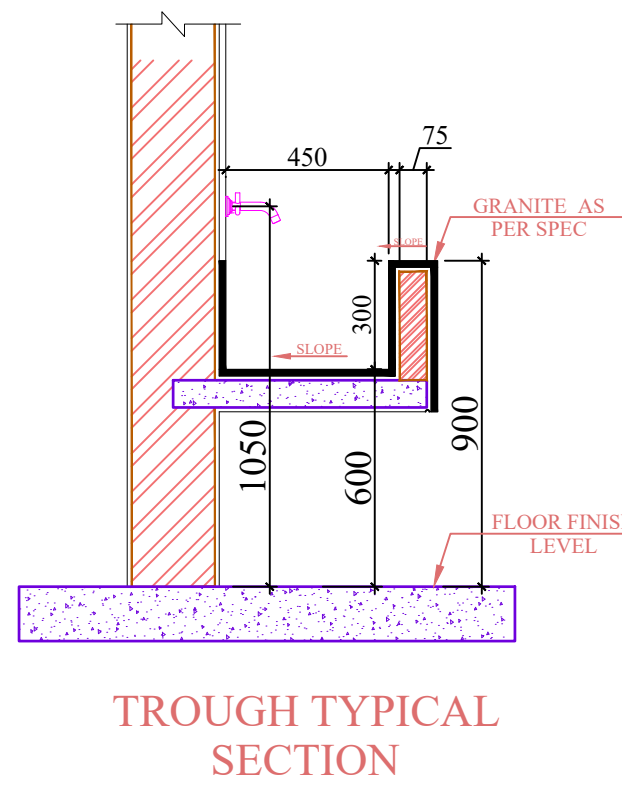
DATE - 09 MARCH 2023



FRONT ELEVATION E-01



BACKSIDE ELEVATION E-02



TROUGH TYPICAL SECTION



SIDE ELEVATION E-03

HOSTEL BUILDING DOOR, WINDOW, VENTILATOR, FIXED GLAZING SCHEDULE											
TAG	CLEAR OPENING SIZE	SILL	LINTEL	GF	FF	SF	MUMTY	TOTAL	LOCATION	TYPE OF SHUTTER	MATERIAL
MD	1500 X 2400	0	2400	1				1	Main Entrance	Double Shutter	Aluminium
D1	1100 X 2100	0	2100	12	12	12		36	Dormitory Room & 2500mm Wide Corridor	Double Shutter	Flush Door
D2	1000 X 2100	0	2100	3	2			5	Warden, Common Room	Single Shutter	Flush Door
D2	1000 X 2100	0	2100	3	2			7	Toilet Main Entry	Single Shutter	Factory Pressed laminated Door
D2	1000 X 2100	0	2100				2	2	TERRACE	Single Shutter	MS SHEET DOOR
D3	750 X 2100	0	2100	22	22	22		66	Bath and WC	Single Shutter	Factory Pressed laminated Door
SD1	1000 X 2100	0	2100	1				1	Handicap Toilet	Double Swing	Factory Pressed laminated Door
CG1	4800 X 2400	0	2400	1				1	Main Entrance		Collapsible Gate
CG2	2100 X 2100	0	2100	1				1	Warden Entry Side		Collapsible Gate
W1	1300 X 1750	1050	BOB	33	38	39		110	Dormitory Room, Corridor	Fixed & Openable	Steel Glazed Window
W2	1200 X 1750	1050	BOB	4	4	4		12	1200mm Corridor, Warden Room & Common Room	Fixed & Openable	Steel Glazed Window
W3	1000 X 1750	1050	BOB	4	4	5		13	Dormitory Room	Fixed & Openable	Steel Glazed Window
W4	480 X 1750	1050	BOB	5	8	8		21	Dormitory Room	Fixed & Openable	Steel Glazed Window
FGL	1050 X 2500	300	BOB	2				2	Main Entrance	Fixed	Aluminium
V1	750 X 600		BOB	5	6	6		17	Drinking Water, H.toilet		Steel Glazed Window
V2	600X1200		BOB	4	4	4		12	Toilet		Steel Glazed Window
V3	600 x 450		BOB	20	20	20		60	Toilet		Steel Glazed Window
V4	1500 X 400	2400	2800	1				1	Main Entrance		Aluminium

N.K.
(NARENDRA KUMAR)
pl Approved 10.3.23
(Pranod Appraisal)
Count 13/3/23
(R.K. Gang)
Rev SS 13/3/23
(SANDEEP SOOD)

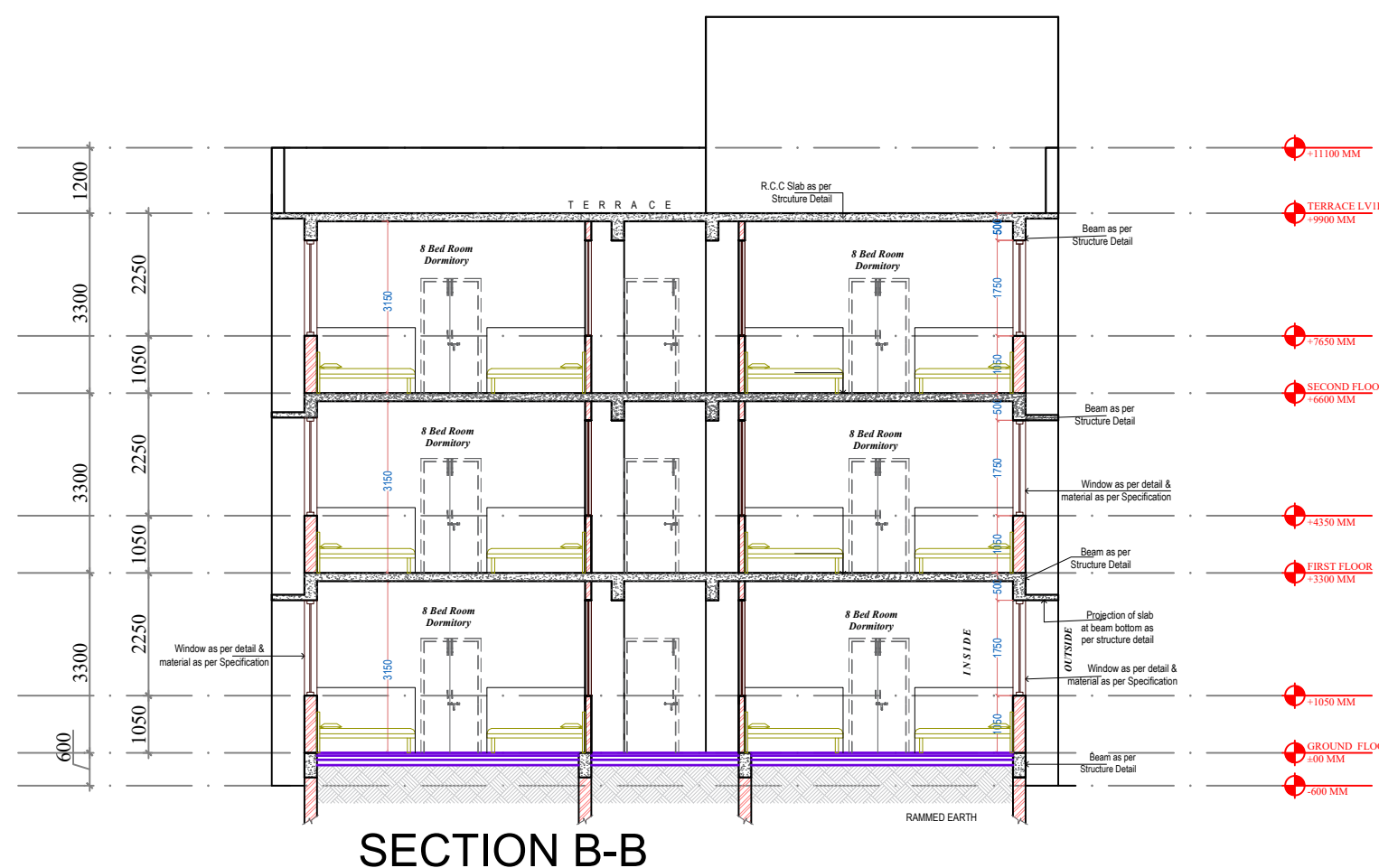
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : BOYS 'HOSTEL

DRAWING TITLE : ELEVATION & SECTION
G+2

DWG. NO.-
EMRS NAME/BH/AR_03

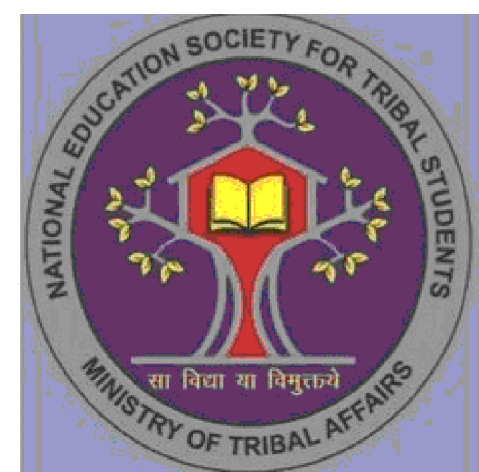
DATE - 09 MARCH 2023



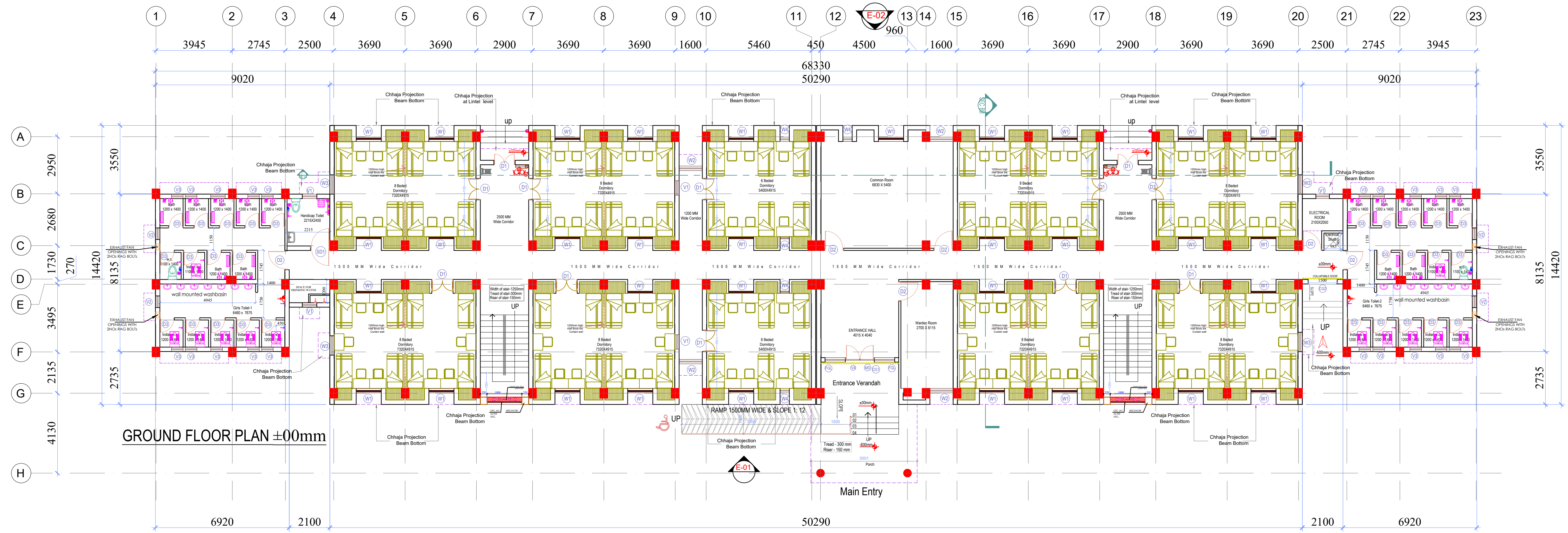
SECTION B-B



SECTION A-A



AREA STATEMENT	
HOSTEL BUILDING	
DETAILS	TOTAL FLOOR AREA
MAIN BUILDING	
GROUND FLOOR PLINTH AREA	789.83
FIRST FLOOR PLINTH AREA	778.36
SECOND FLOOR PLINTH AREA	778.36
TOTAL AREA	2346.55
ENTRANCE PORCH AREA	
AREA OF PORCH / 2	12.41
Total	2359.00



N.K.
(NARENDRA KUMAR)

pk
Approved 10/3/23
(Prasad Appraisal)

Sanu 13/3/23
(R.K. Gang)

SS 13/3/23
(SANDEEP SOOD)

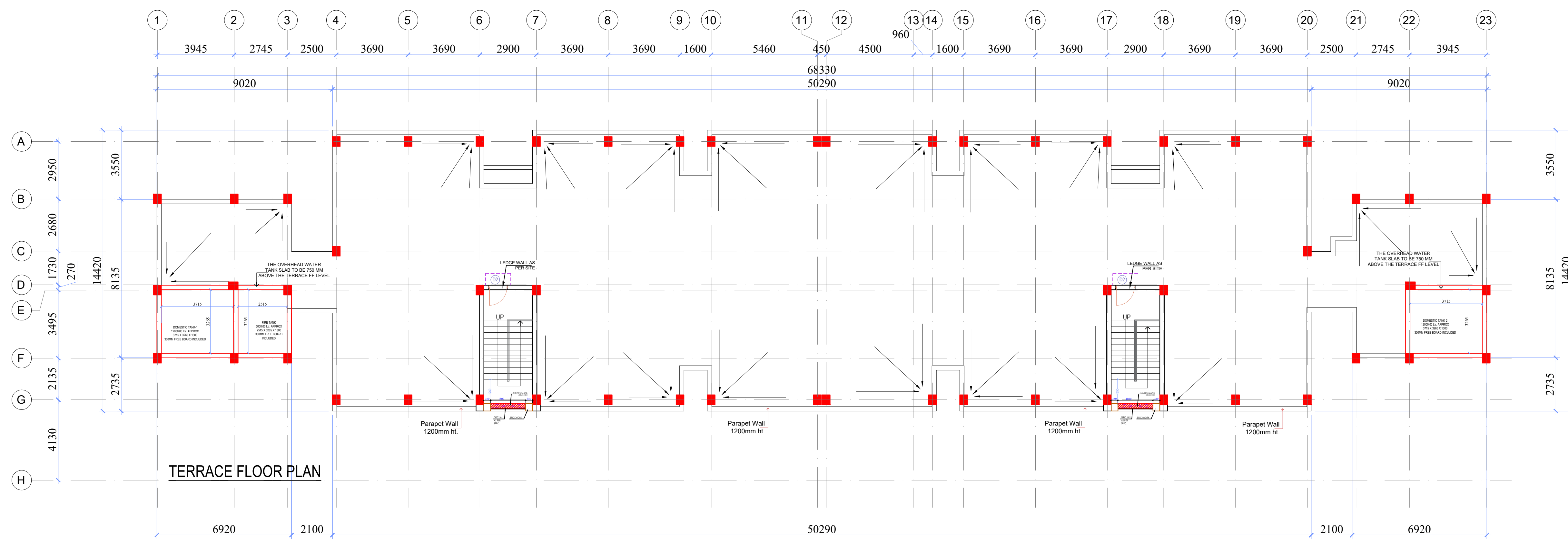
A.P.K.
A D P Keshri
Chief Technical Consultant

CATEGORY : GIRLS 'HOSTEL

DRAWING TITLE : GROUND & FIRST, SECOND FLOOR
G+2

DWG. NO.-
EMRS NAME/GH/AR_01

DATE - 09 MARCH 2023



N.K.
 (NARENDRA KUMAR)
 p/c Approved 10.3.23
 (Prasad Approved)
 (Count 13/4/23
 (R.K. Gang)
 Rev SS 13/3/2023
 (SANDEEP SOOD)

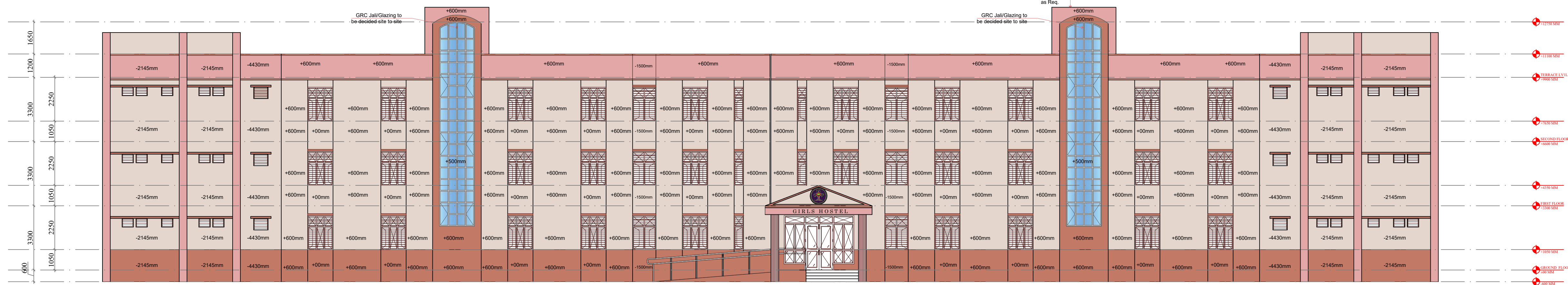
A.P.K.
 A D P Keshri
 Chief Technical Consultant

CATEGORY : GIRLS 'HOSTEL

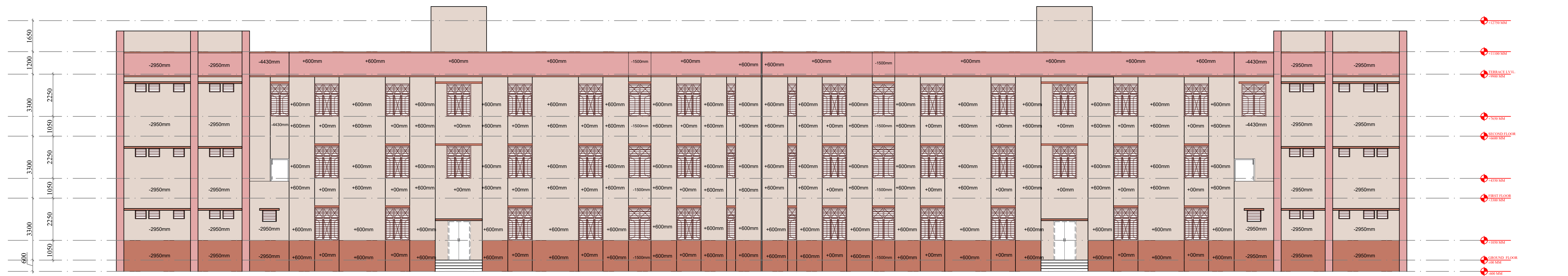
DRAWING TITLE : TERRACE FRONT, REAR ELEVATION G+2

DWG. NO.- EMRS NAME/GH/AR_02

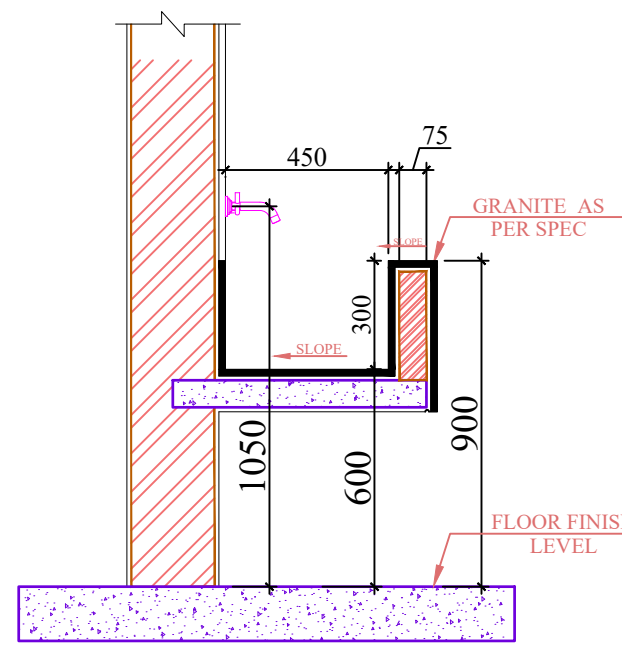
DATE - 09 MARCH 2023



FRONT ELEVATION E-01



BACKSIDE ELEVATION E-02



TROUGH TYPICAL SECTION



SIDE ELEVATION E-03

HOSTEL BUILDING											
DOOR, WINDOW, VENTILATOR, FIXED GLAZING SCHEDULE											
TAG	CLEAR OPENING SIZE	SILL	LINTEL	GF	FF	SF	MUMTY	TOTAL	LOCATION	TYPE OF SHUTTER	MATERIAL
MD	1500 X 2400	0	2400	1				1	Main Entrance	Double Shutter	Aluminium
D1	1100 X 2100	0	2100	12	12	12		36	Dormitory Room & 2500mm Wide Corridor	Double Shutter	Flush Door
D2	1000 X 2100	0	2100	3	2			5	Warden & Common Room	Single Shutter	Flush Door
D2	1000 X 2100	0	2100	3	2	2		7	Toilet Main Entry	Single Shutter	Factory Pressed laminated Door
D2	1000 X 2100	0	2100				2	2	TERRACE	Single Shutter	MS SHEET DOOR
D3	750 X 2100	0	2100	28	28	28		84	Bath and WC	Single Shutter	Factory Pressed laminated Door
SD1	1000 X 2100	0	2100	1				1	Handicap Toilet	Double Swing	Factory Pressed laminated Door
CG1	4800 X 2400	0	2400	1				1	Main Entrance		Collapsible Gate
CG2	2100 X 2100	0	2100	1				1	Warden Entry Side		Collapsible Gate
W1	1300 X 1750	1050	BOB	33	38	39		110	Dormitory Room, Corridor	Fixed & Openable	Steel Glazed Window
W2	1200 X 1750	1050	BOB	4	4	4		12	Corridor	Fixed & Openable	Steel Glazed Window
W3	1000 X 1750	1050	BOB	4	4	5		13	Dormitory Room	Fixed & Openable	Steel Glazed Window
W4	480 X 1750	1050	BOB	5	8	8		21	Dormitory Room	Fixed & Openable	Steel Glazed Window
FGL	1050 X 2500	300	BOB	2				2	Main Entrance	Fixed	Aluminium
V1	750 X 600		BOB	5	6	6		17	Drinking Water, H.toilet		Steel Glazed Window
V2	600X1200		BOB	4	4	4		12	Toilet		Steel Glazed Window
V3	600 x 450		BOB	20	20	20		60	Toilet		Steel Glazed Window
V4	1500 X 400	2400	2800	1				1	Main Entrance		Aluminium

N.K.

(NARENDRA KUMAR)

pl Approved 10.3.23
(Pranod Approval)

Count 13/4/23
(R.K. Gang)

Rev SS 13/3/2023
(SANDEEP SOOD)

A.P.K.

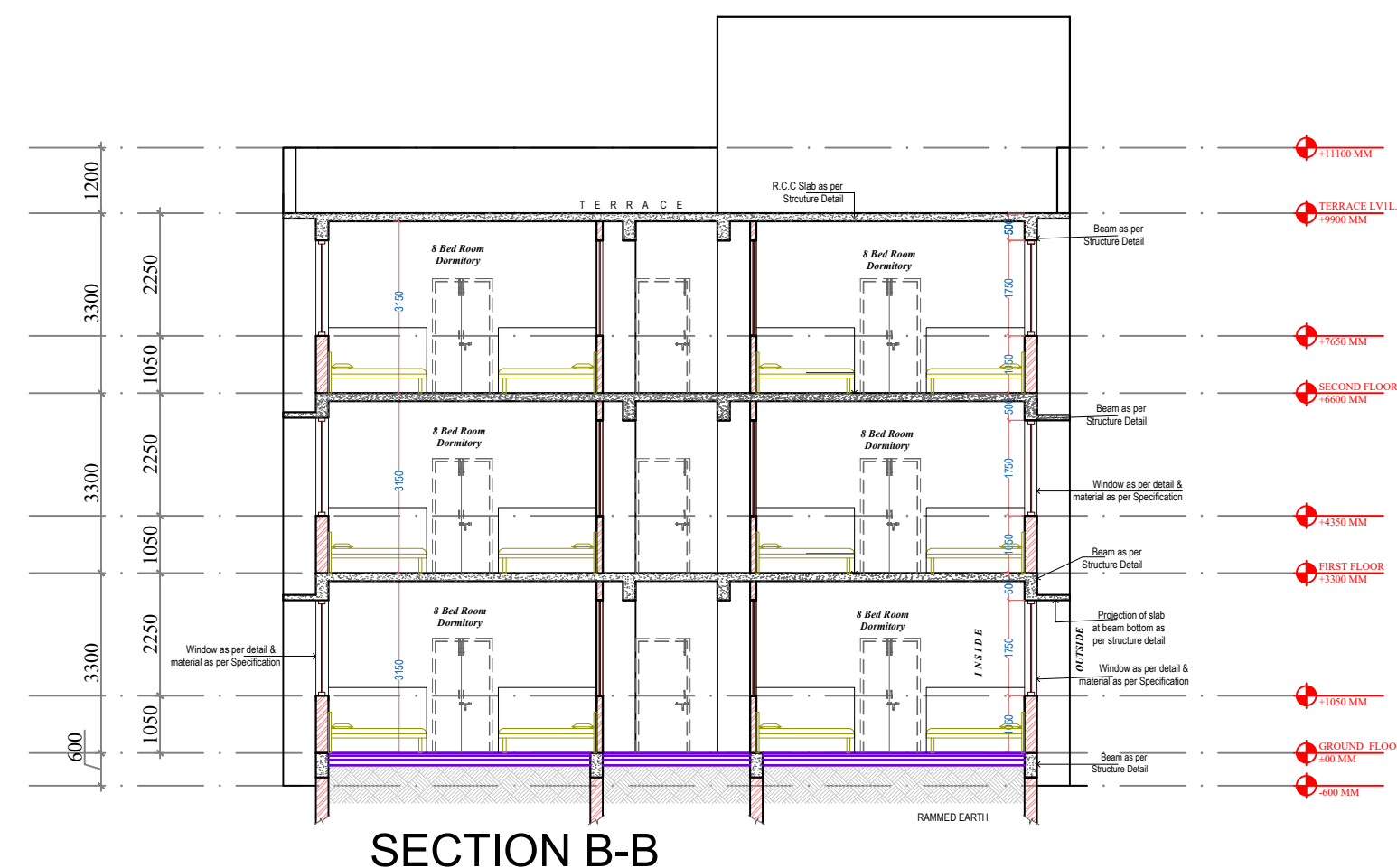
A D P Keshri
Chief Technical Consultant

CATEGORY : GIRLS 'HOSTEL

DRAWING TITLE : ELEVATION & SECTION
G+2

DWG. NO.-
EMRS NAME/GH/AR_03

DATE - 09 MARCH 2023



SECTION B-B



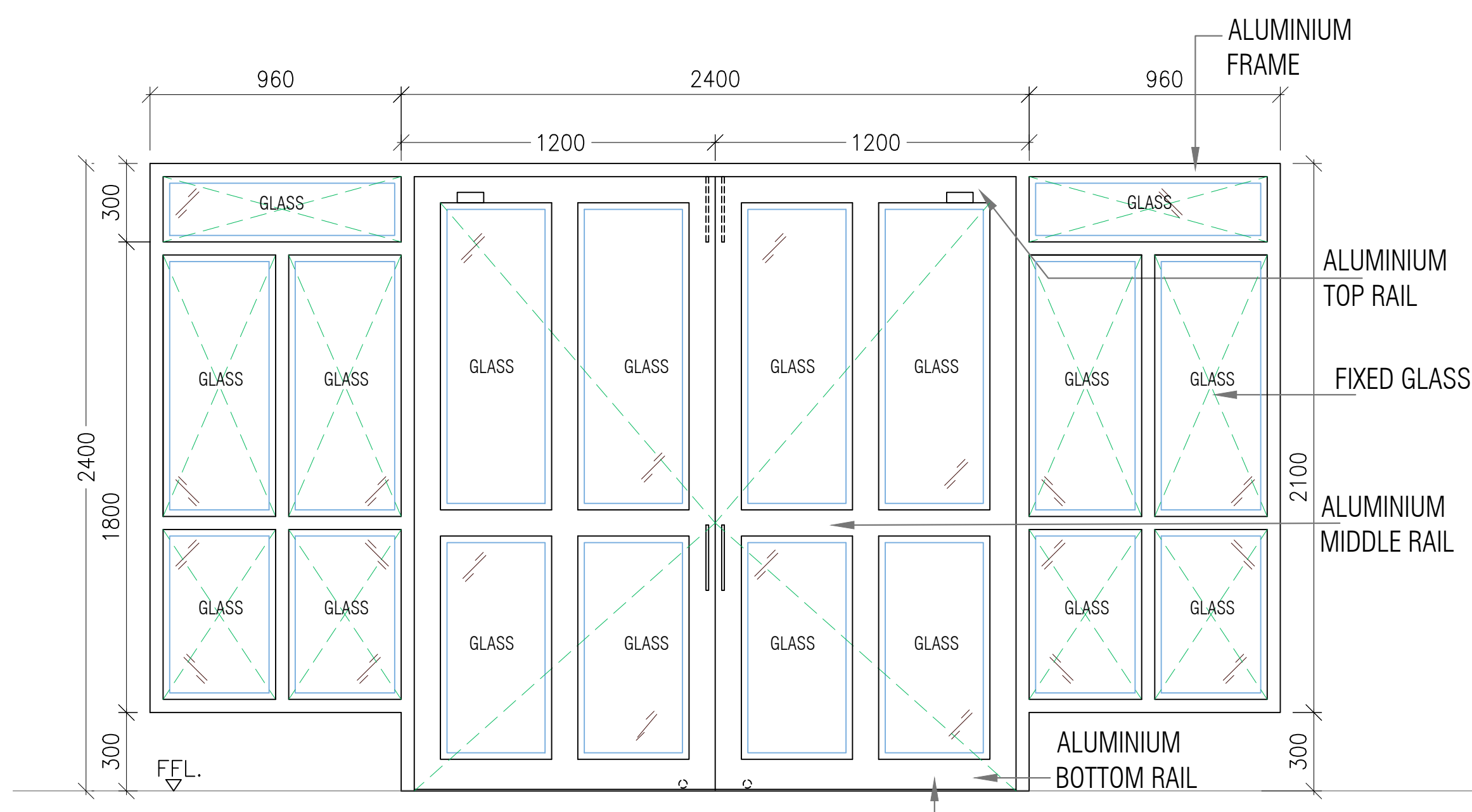
SECTION A-A

SCHOOL BLOCK - DOOR WINDOW VENTILATOR DETAIL

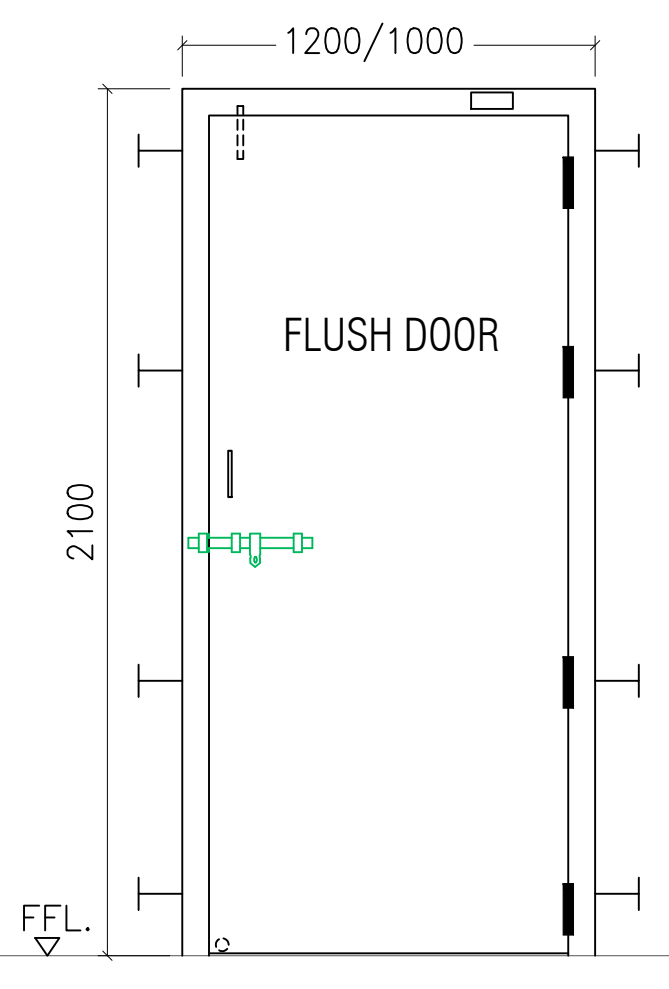
PROJECT - EMRS
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -
**GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS**

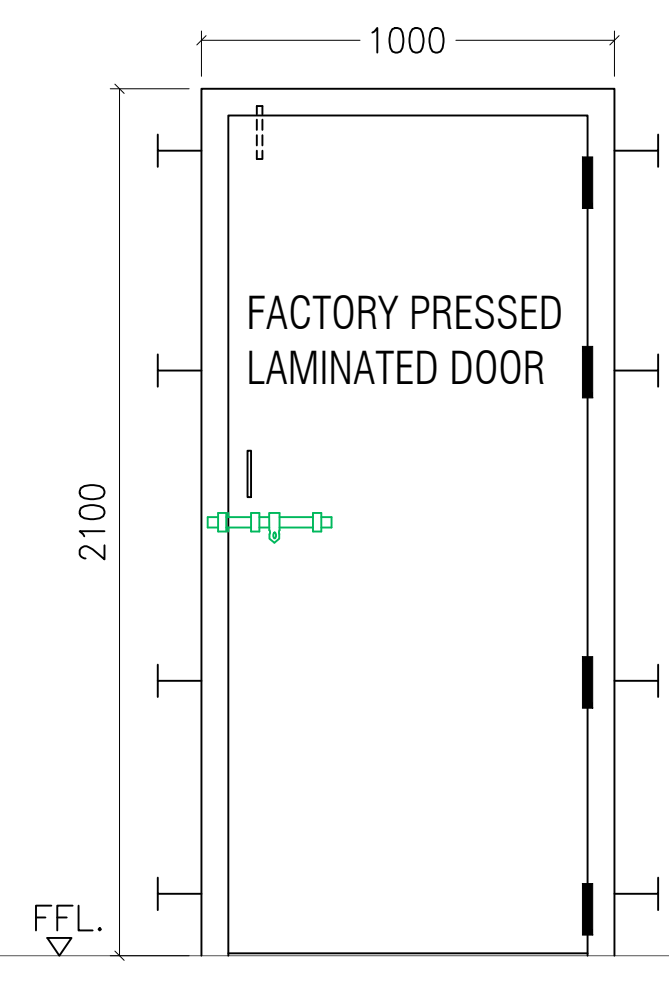
- NOTES -
- FIXTURES SHALL BE AS PER CPWD SPECIFICATION**
 - GLAZED SHUTTERS WILL OPEN OUTSIDE**
 - WINDOW SHOULD BE FACTORY MADE TYPE WITH FLASH WELDING**
 - NESTS/ CPWD APPROVED MAKE SHALL ONLY BE PROVIDED**



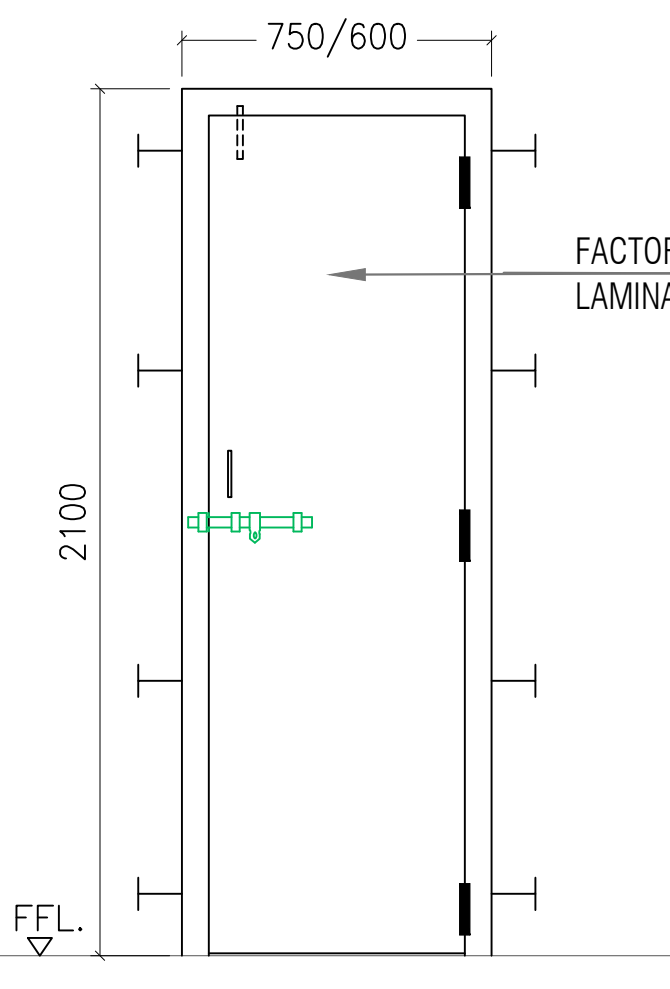
MAIN ENTRANCE DOOR
MD - 2400 x 2400
GL - 960X 2100 FIXED GLAZING ON SIDE



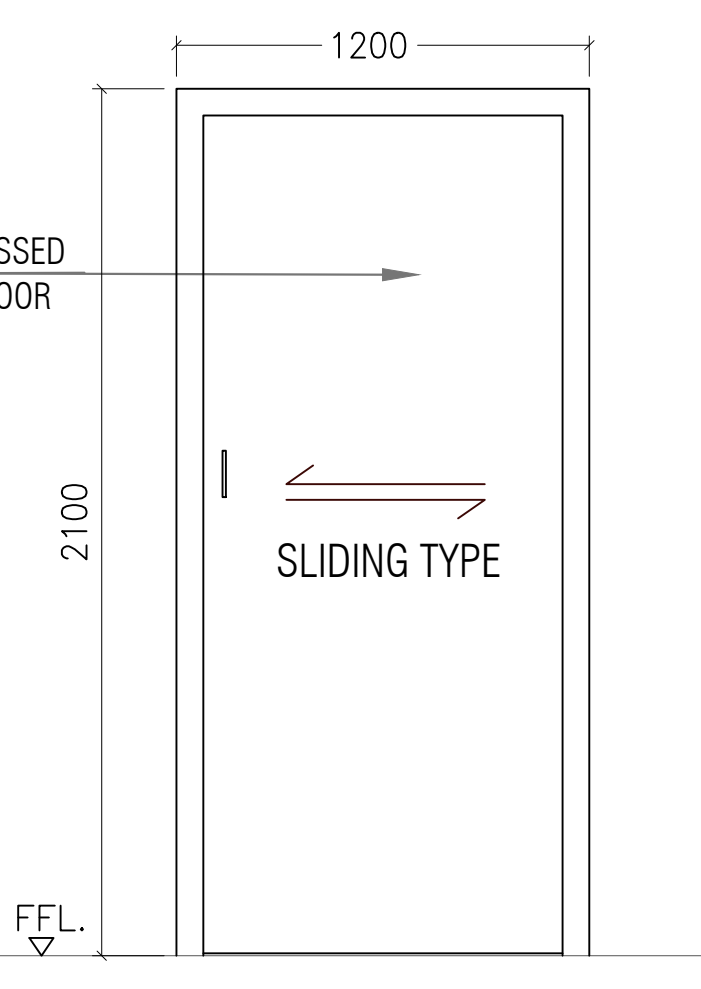
CLASSROOM, LABS, LIBRARY
D1 - 1200 X 2100
ADMIN AREA, LAB STORE
D2 - 1000 X 2100



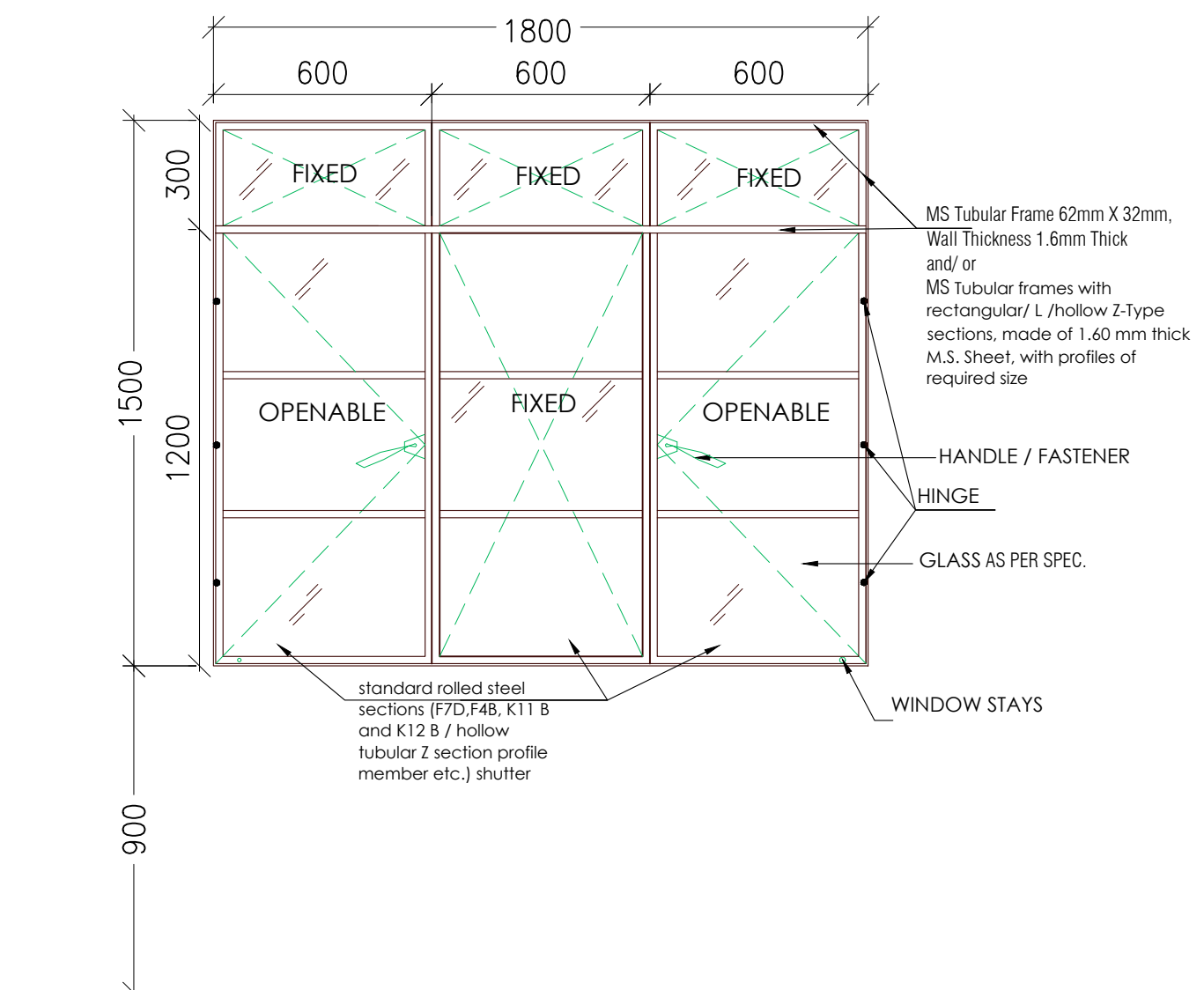
TOILET MAIN DOOR
D2 - 1000 X 2100



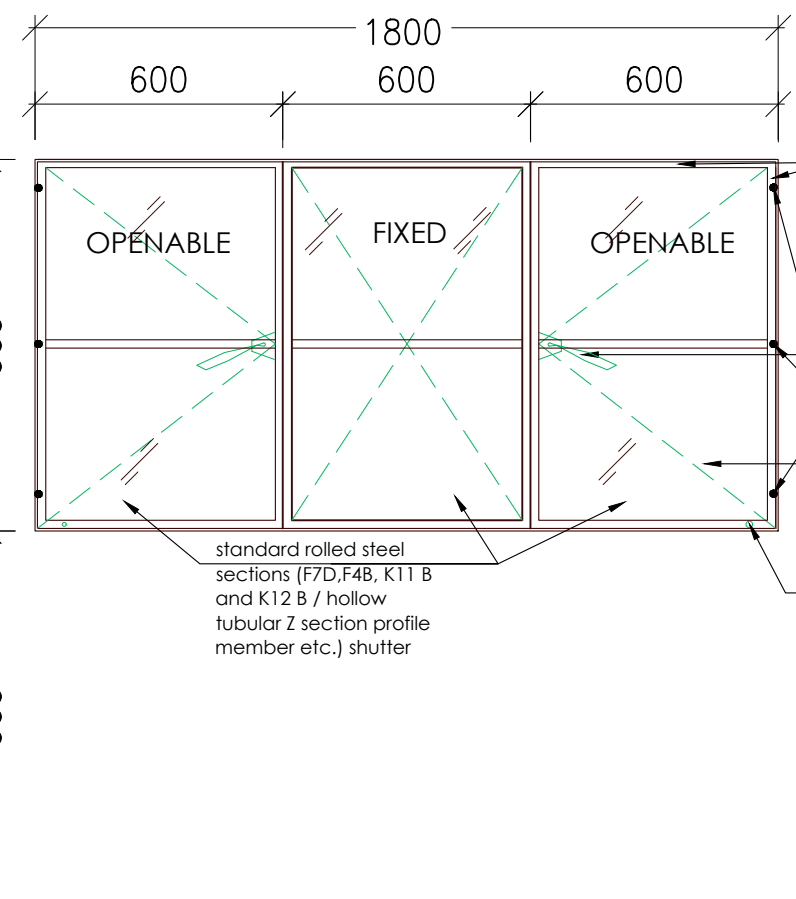
TOILET INTERNAL DOOR
D3 - 750 X 2100
JANITOR DOOR
D4 - 600 X 2100



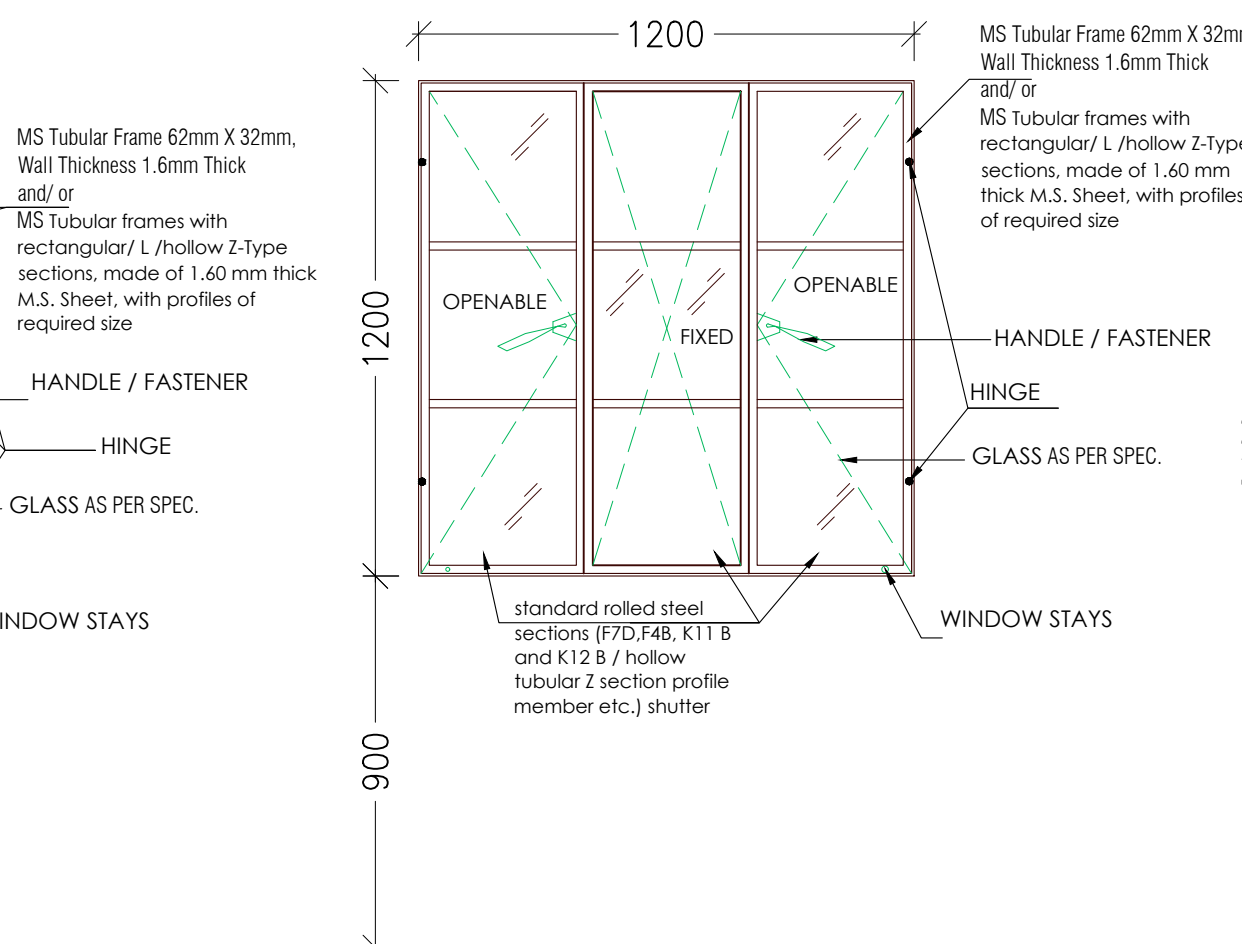
H. TOILET MAIN DOOR
SD1 - 1200 X 2100



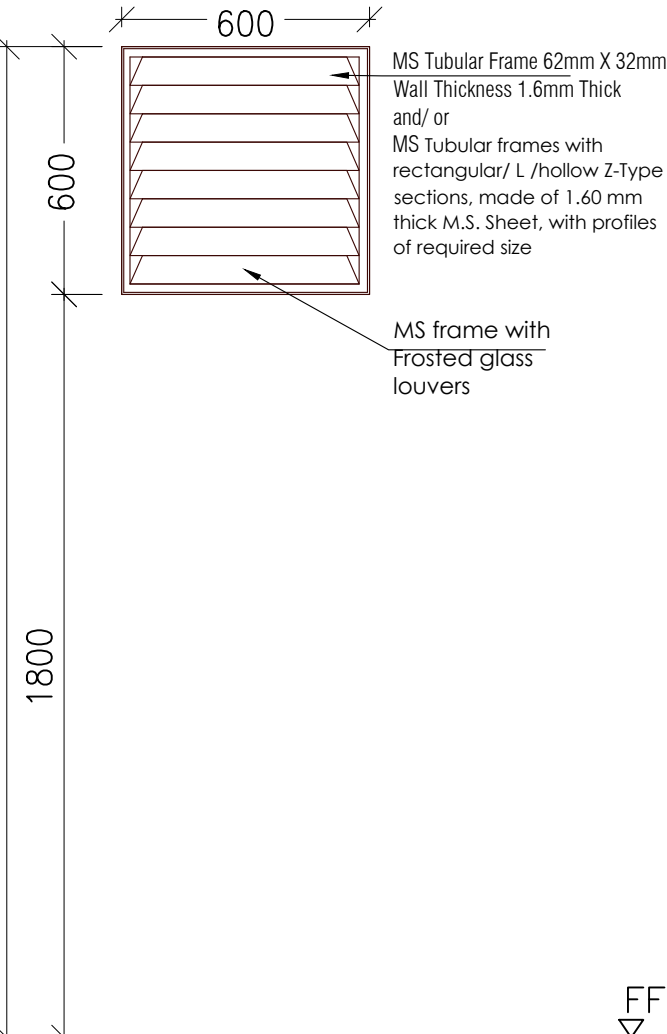
CLASSROOM, ADMIN AREA, LABS, LIBRARY, RAMP
W1 (1800X1500)



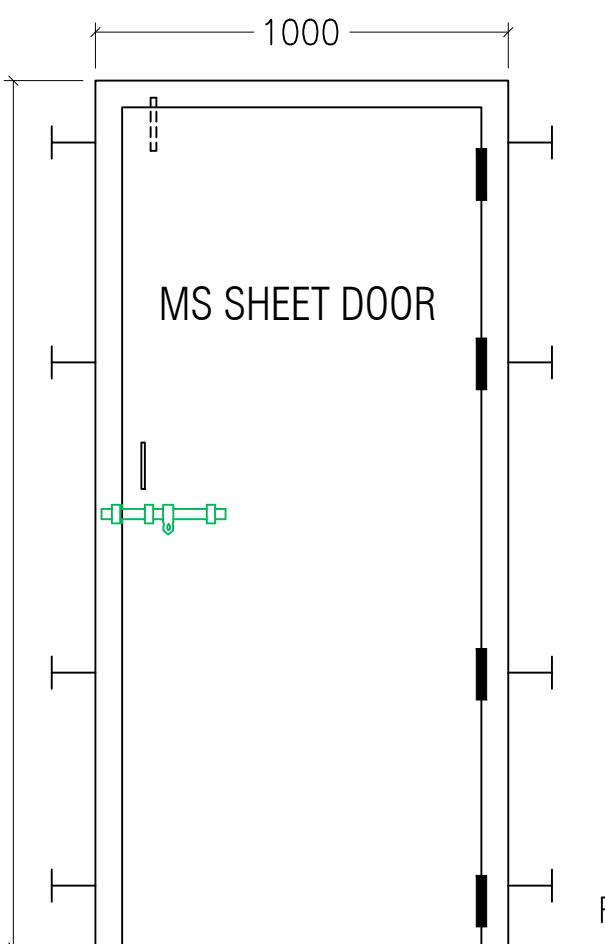
RECREATIONAL ROOM
W2 (1800X900)



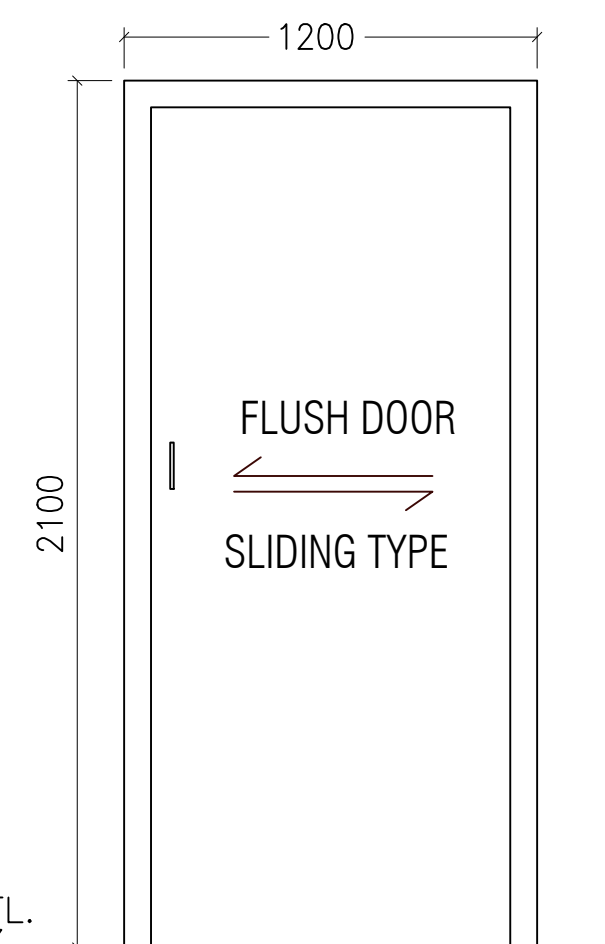
PANTRY, STORE
W3 (1200X1200)



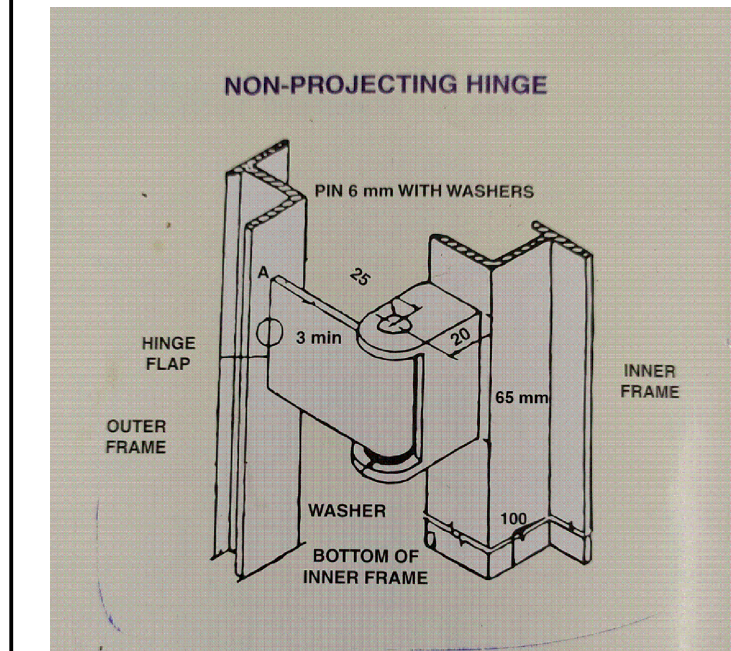
TOILET
V1 (600X600)



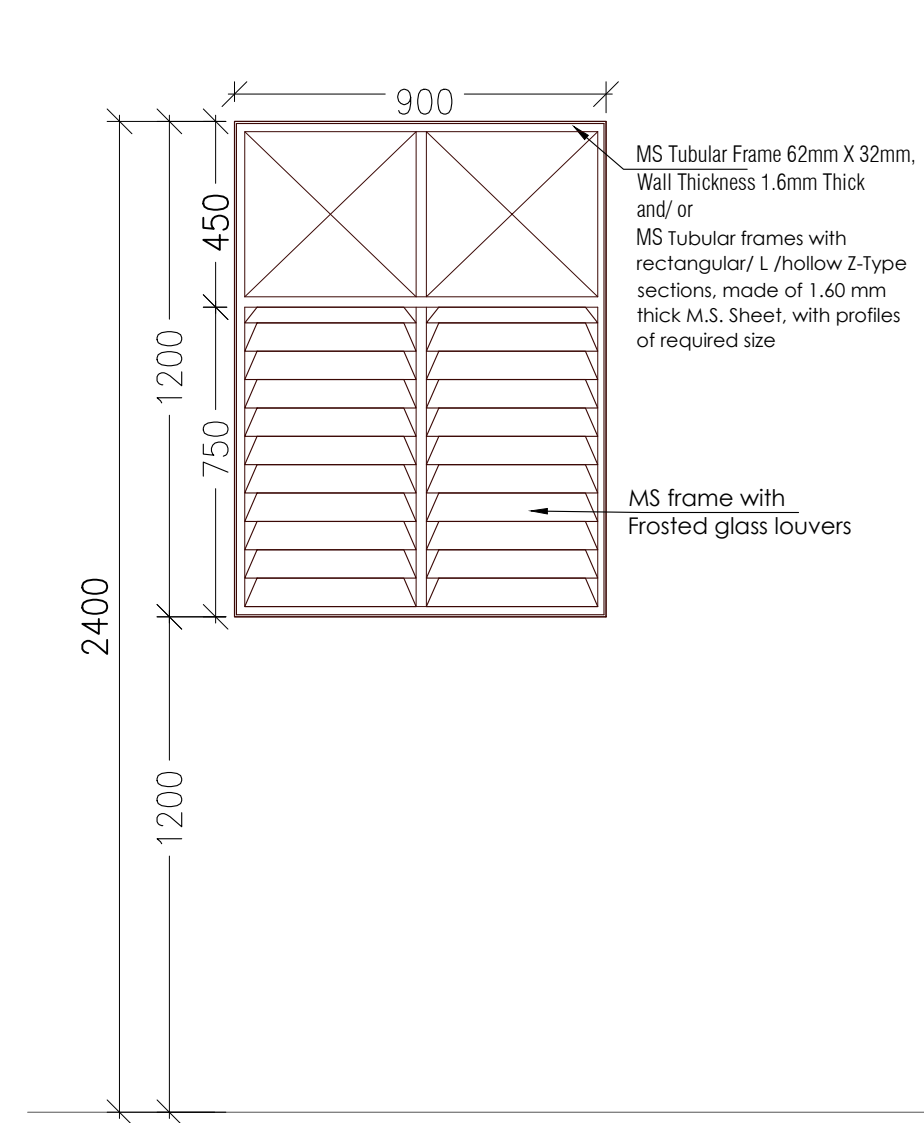
TERRACE DOOR
D2 - 1000 X 2100



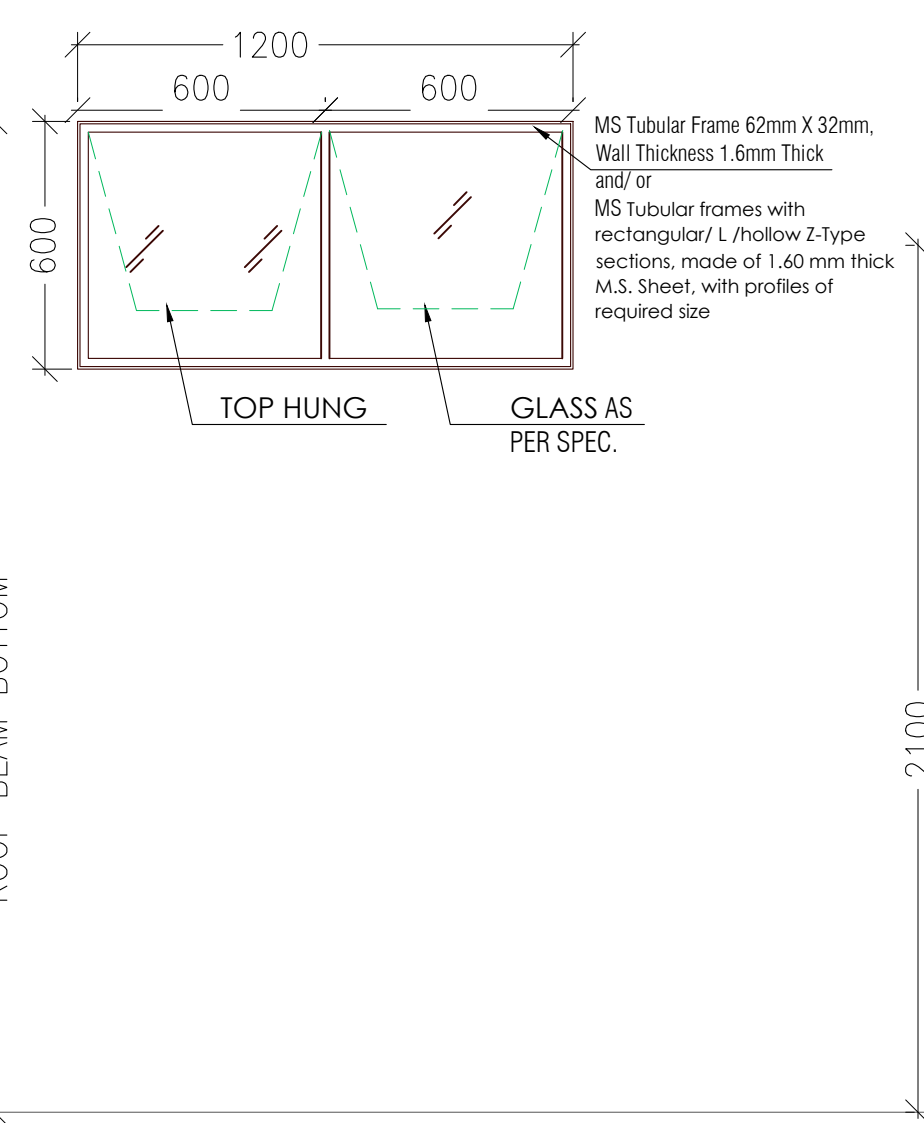
MEDICAL ROOM
SD1 - 1200 X 2100



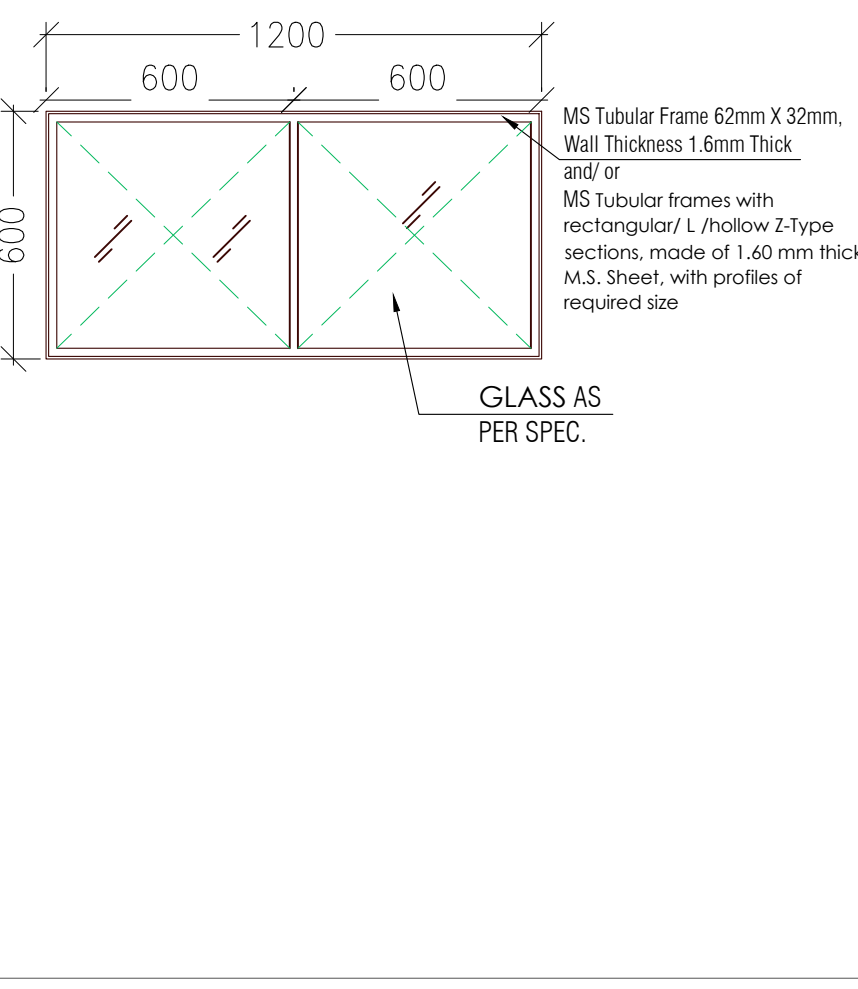
TYPICAL HINGE DETAIL



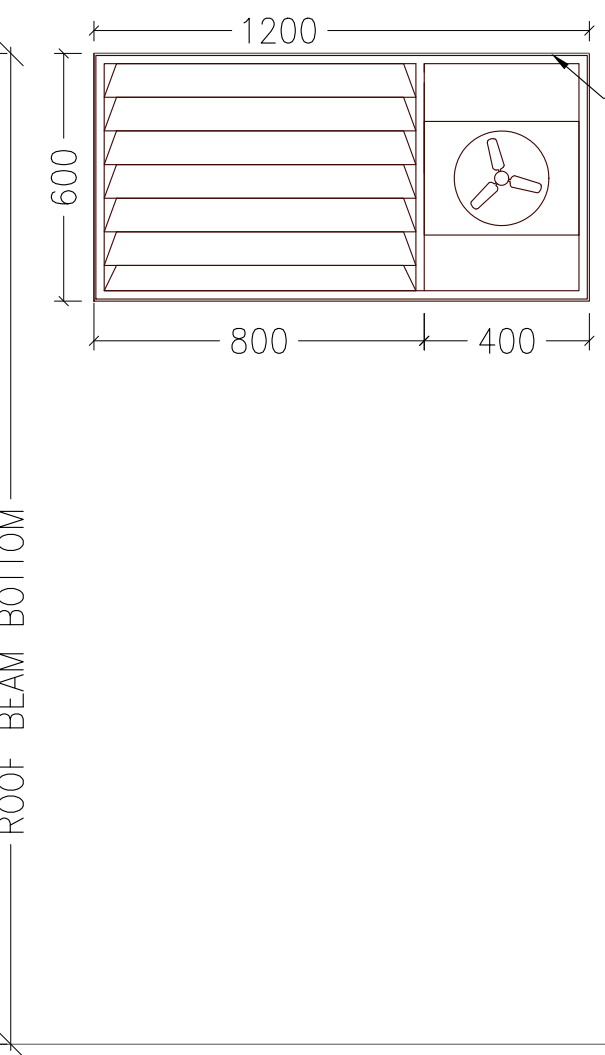
TOILET
V2 (900X1200)



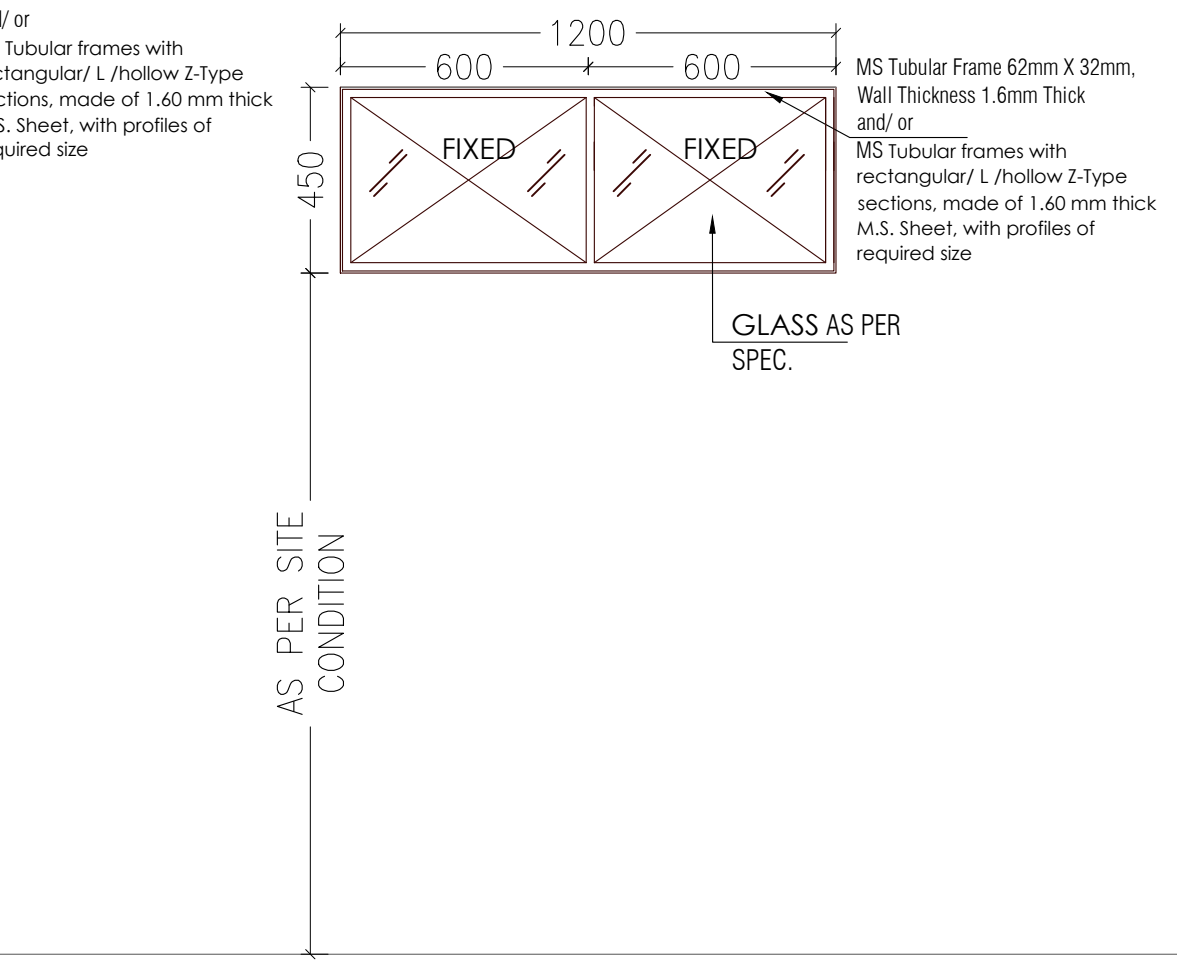
CLASSROOM, ADMIN AREA, LABS, RAMP
V3 (1200X600)



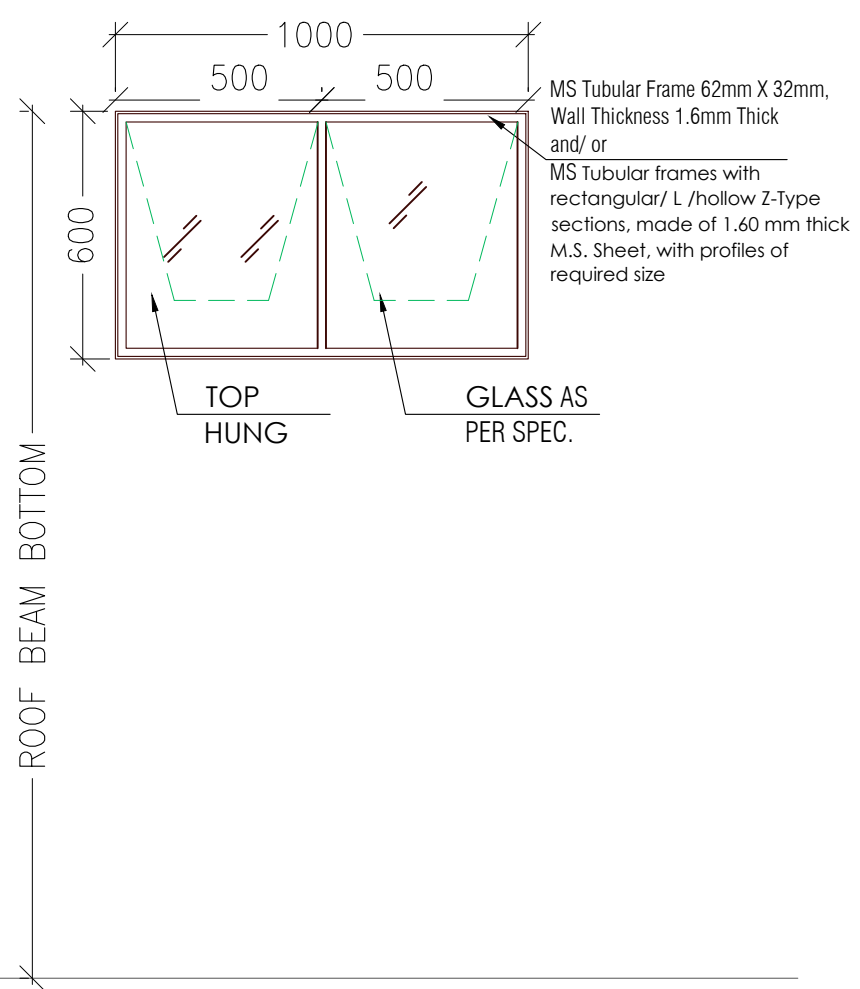
STORE, SERVER, MEDICAL
V3' (1200X600)



H. TOILET
V3'' (1200X600)



STORE, MEDICAL ROOM, SERVER
V4 (1200X450)



STAFFROOM, OFFICE, V. PRINCIPAL, PRINCIPAL
V5 (1000X600)

N.K.
(NARENDRA KUMAR)
pk Approved 10.3.23
(Prasad Approved)
leant 13/4/23
(R. Gang)
Rw SS 13/3/2023.
(SANDEEP SOOD)
A.P.K.
A D P Keshri
Chief Technical Consultant

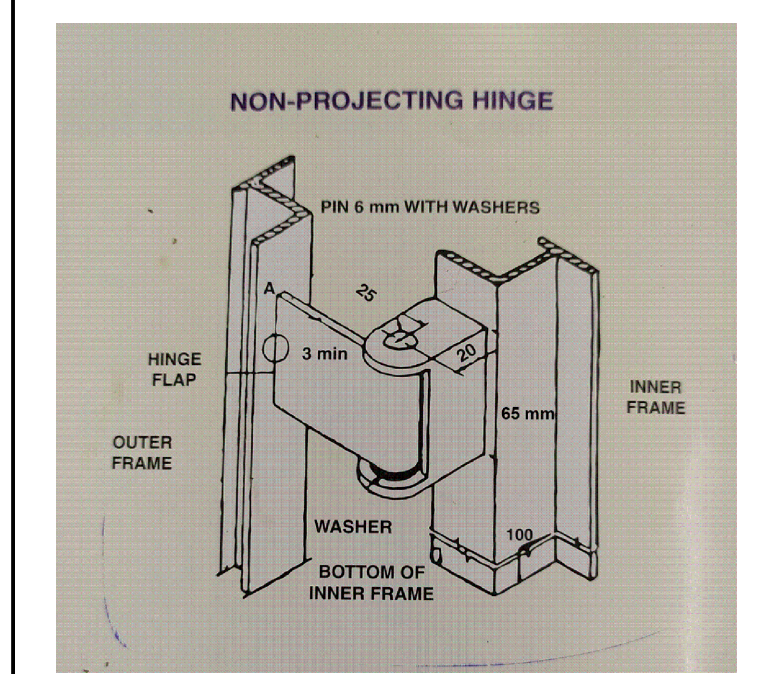
CATEGORY :
DOOR WINDOW DETAIL
DRAWING TITLE :
SCHOOL DOOR WINDOW DETAIL
DWG. NO.-
EMRS NAME/SCH/DWD/AR_01

SCHOOL BLOCK - WINDOW & GRILL DETAIL

PROJECT - EMRS
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -
**GOVERNMENT OF INDIA
 MINISTRY OF TRIBAL AFFAIRS
 NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS**

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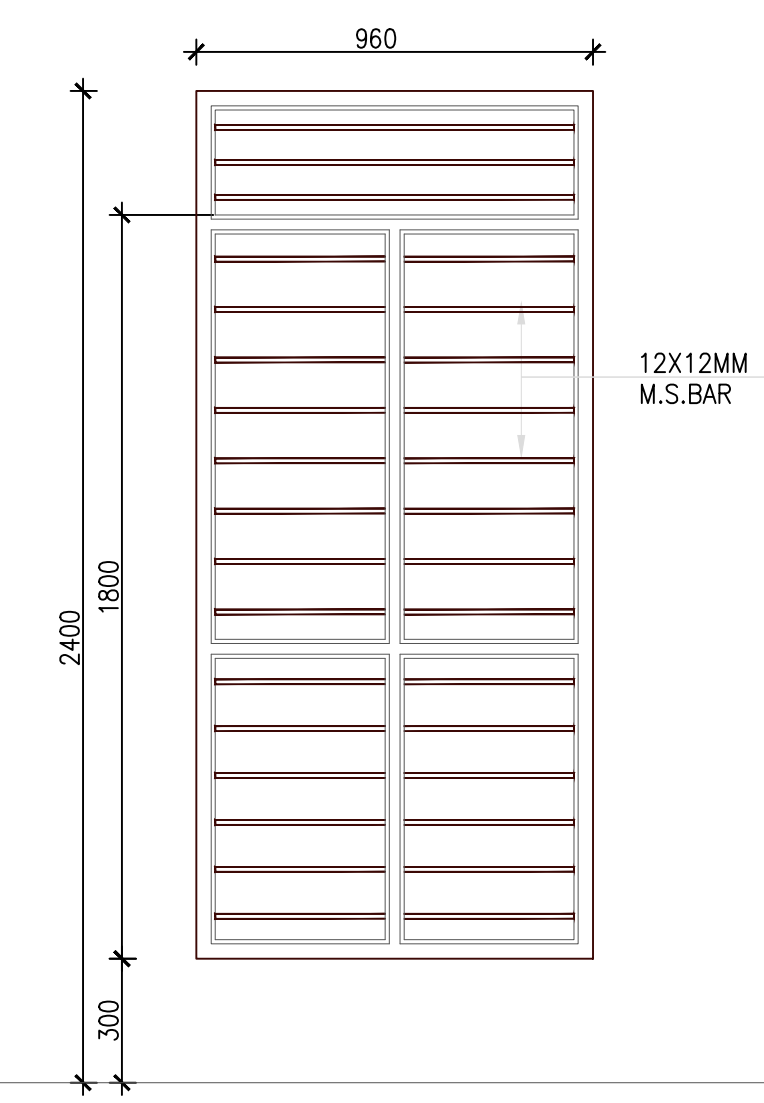
TYPICAL HINGE DETAIL

N.K.
 (NARENDRA KUMAR)
 p.k. Approved 10.3.23
 (Prasad Approved)
 leant 13/4/23
 (R. Gang)
 8th SS 13/3/2023.
 (SANDEEP SOOD)
A.P.K.
A D P Keshri
 Chief Technical Consultant

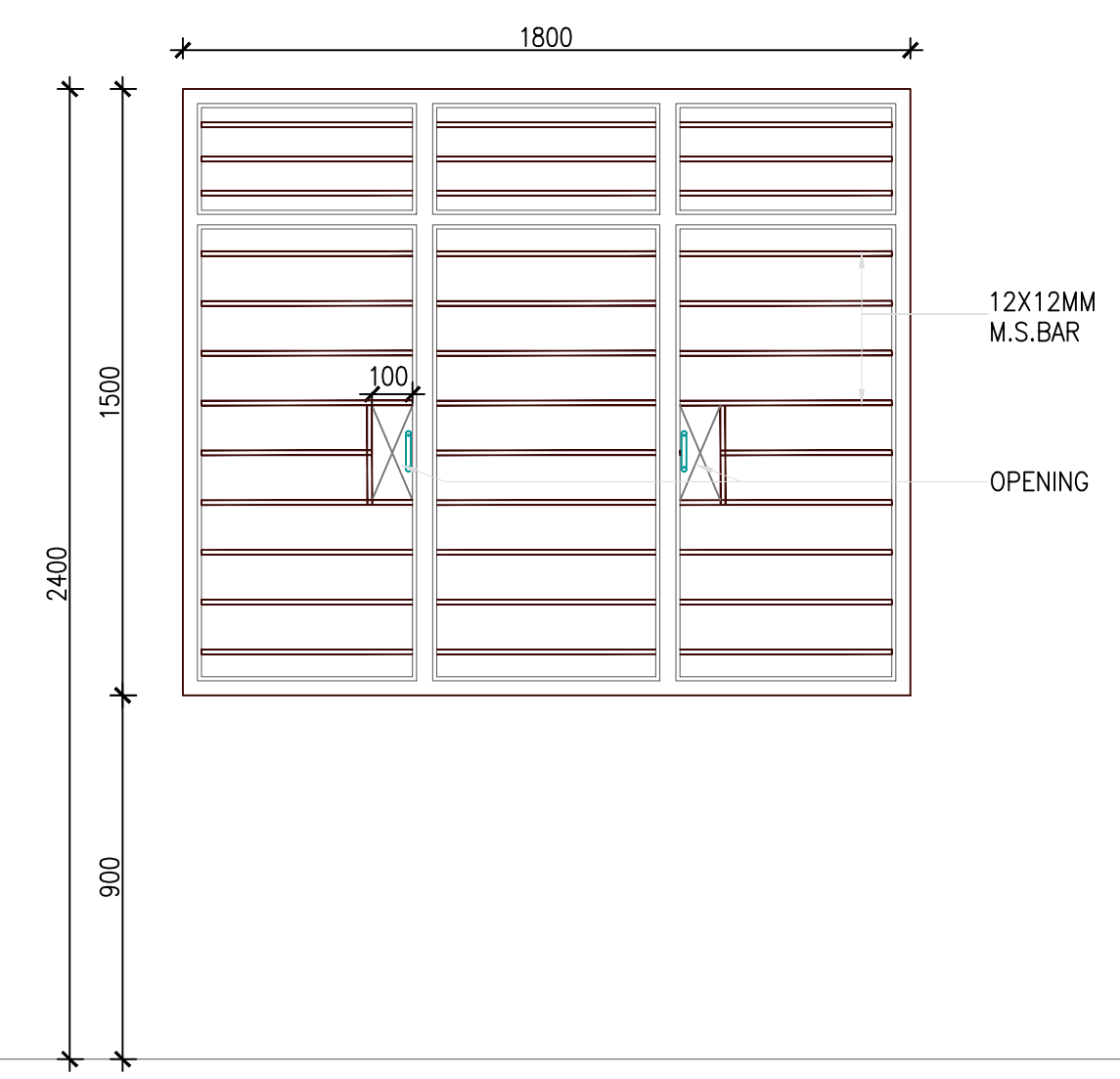
CATEGORY :
 DOOR WINDOW DETAIL

DRAWING TITLE :
 SCHOOL GRILL AND COLLAPSIBLE DETAIL

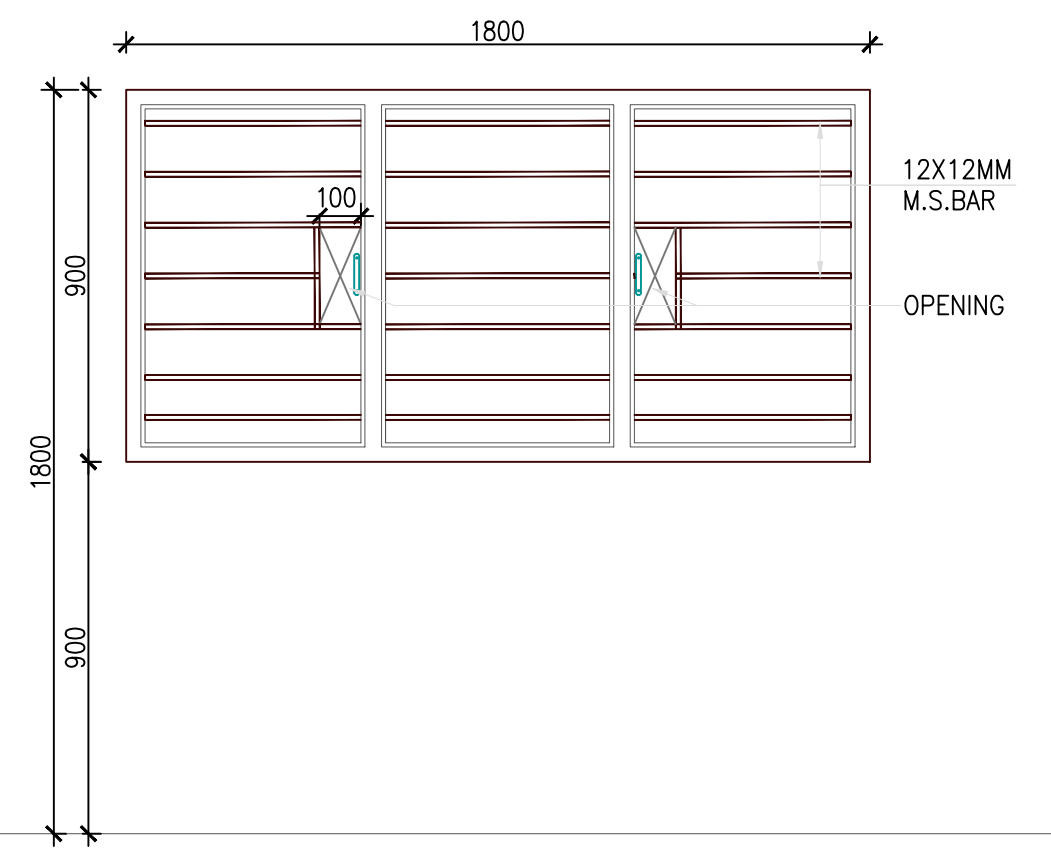
DWG. NO.-
 EMRS NAME/SCH/DWD/AR_02



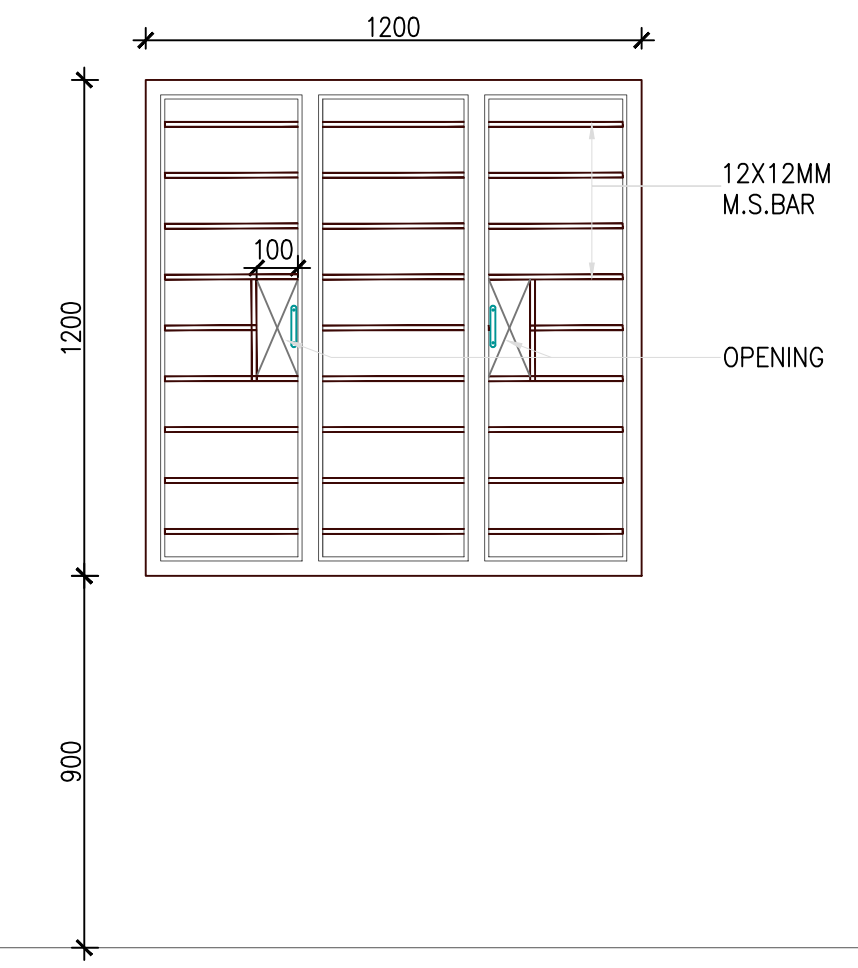
GRILL ELEVATION
 GL - 960 x 2100



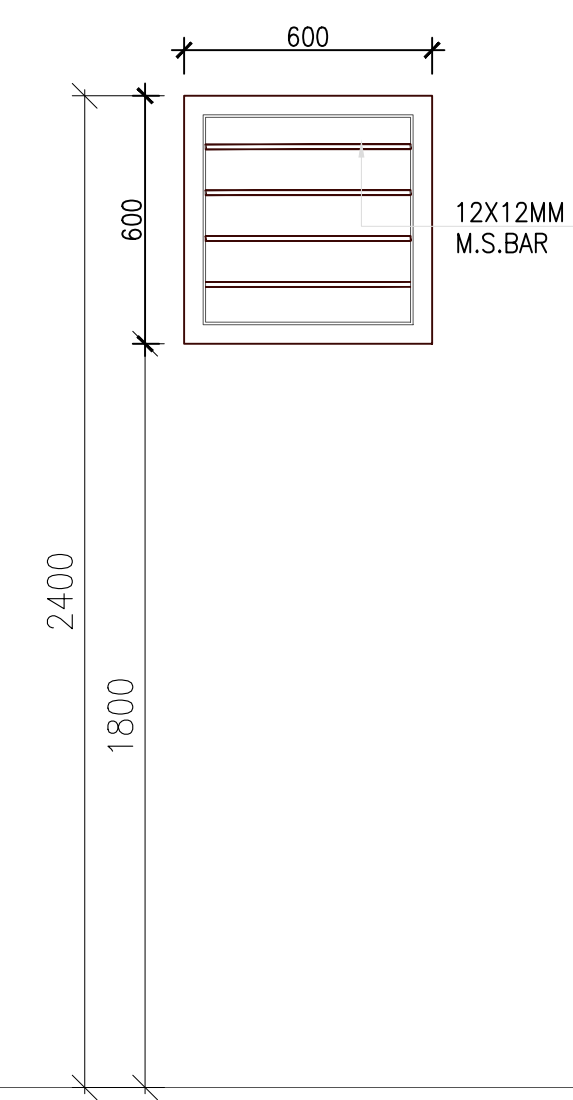
GRILL ELEVATION
 CLASSROOM, ADMIN AREA,
 LABS, LIBRARY, RAMP
 W1 (1800X1500)



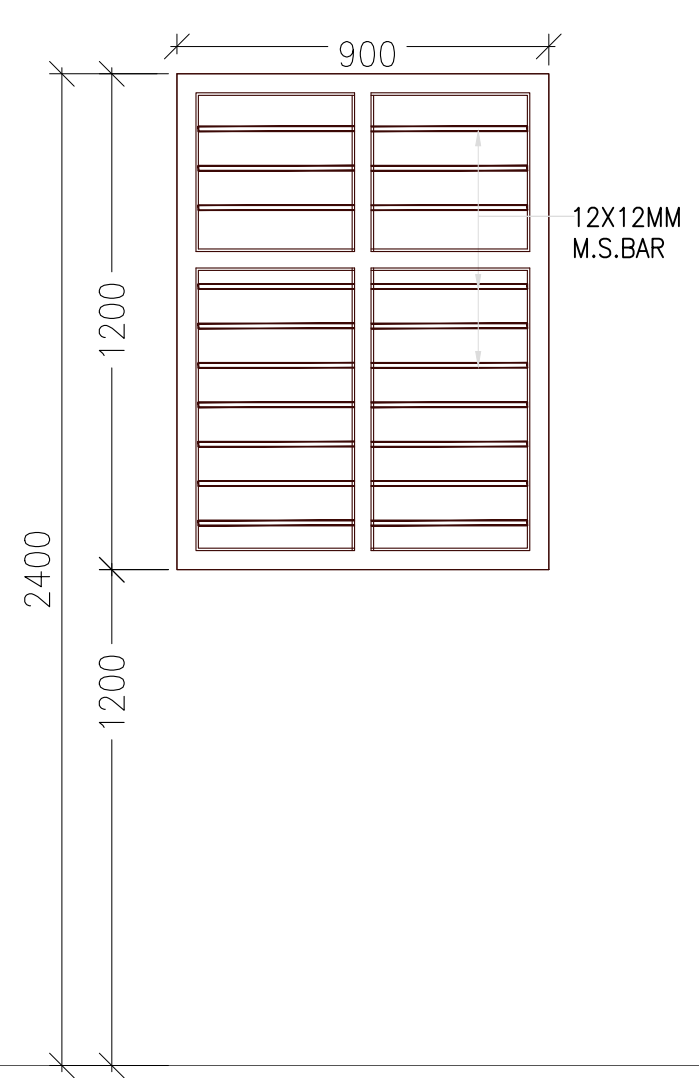
GRILL ELEVATION
 RECREATIONAL ROOM
 W2 (1800X900)



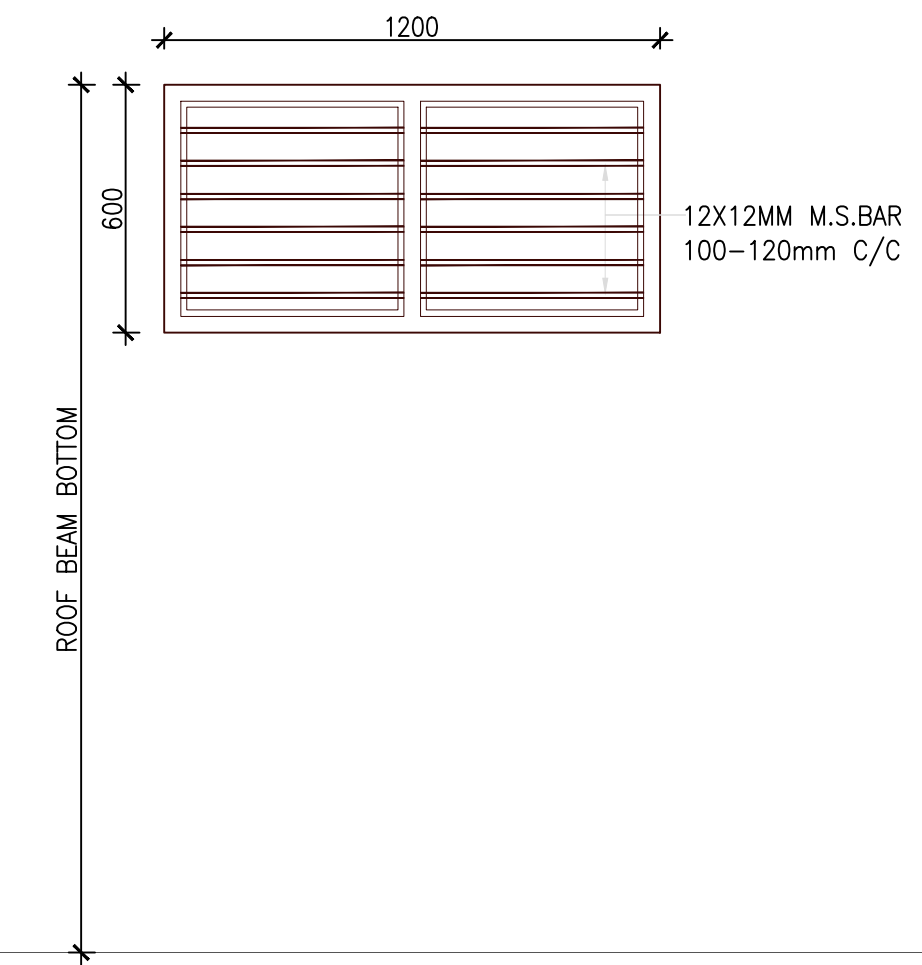
GRILL ELEVATION
 STORE, PANTRY
 W3 (1200X1200)



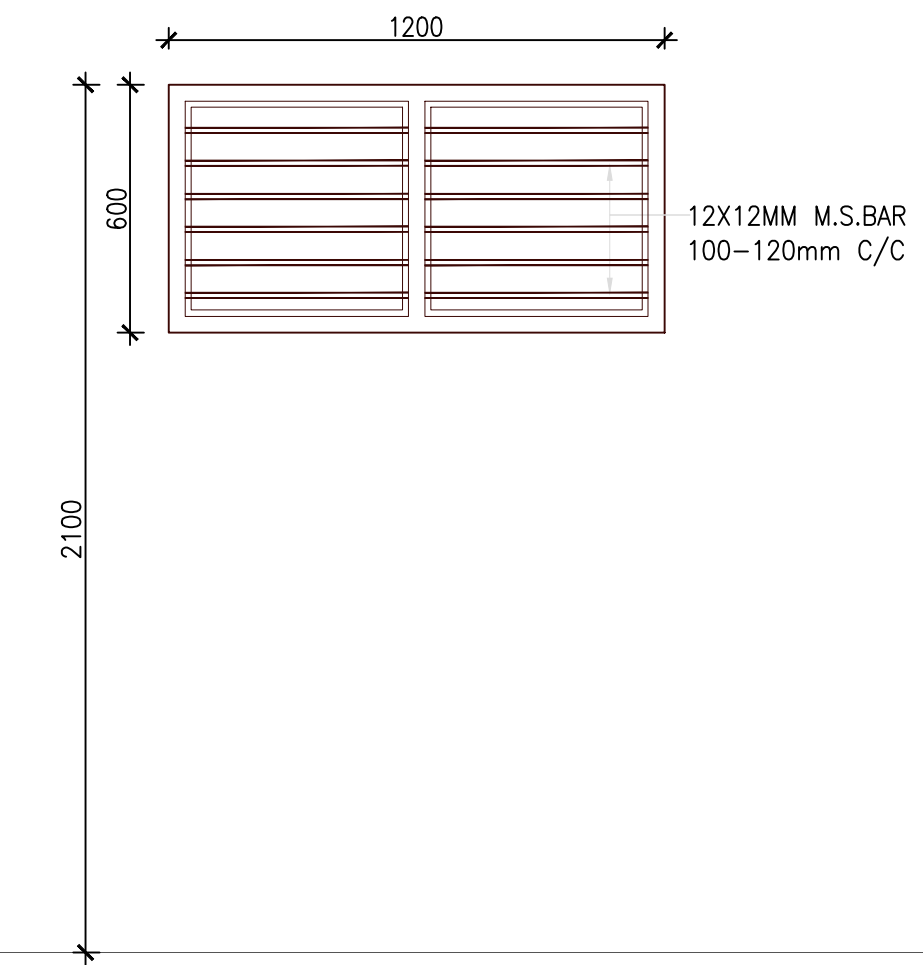
GRILL ELEVATION
 TOILET
 V1 - VENTILATOR 1
 600 x 600



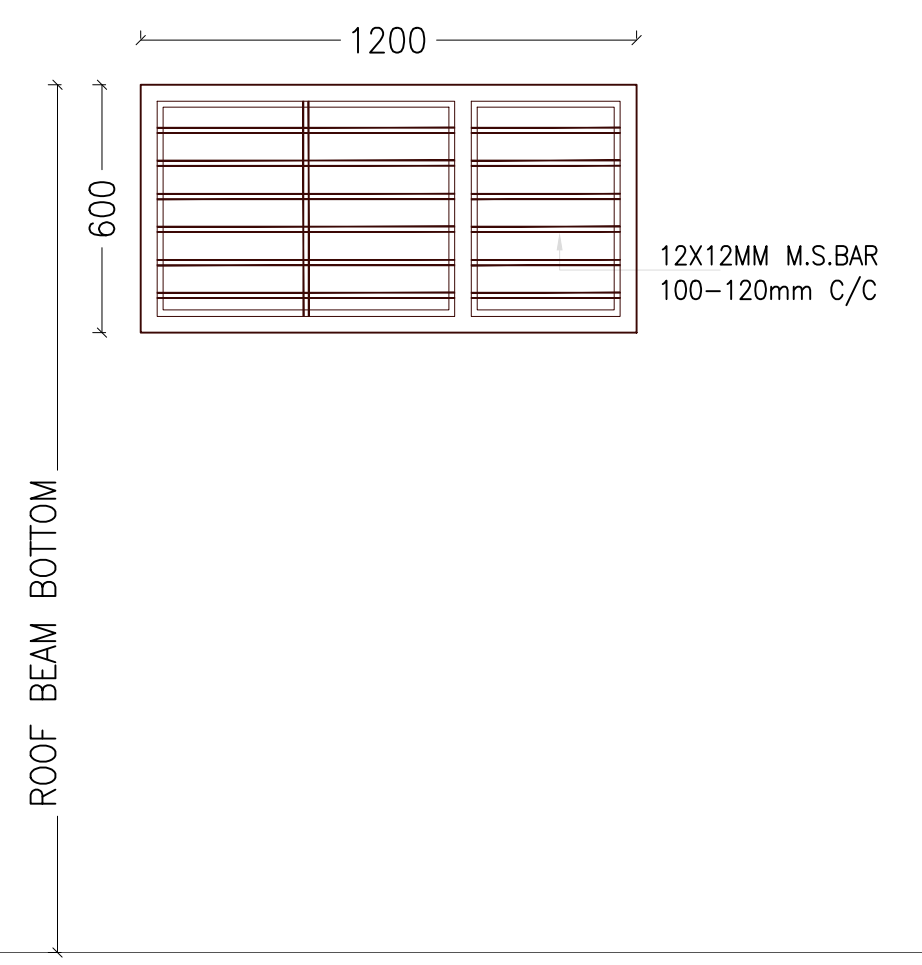
GRILL ELEVATION
 TOILET
 V2 - VENTILATOR 2
 900 x 1200



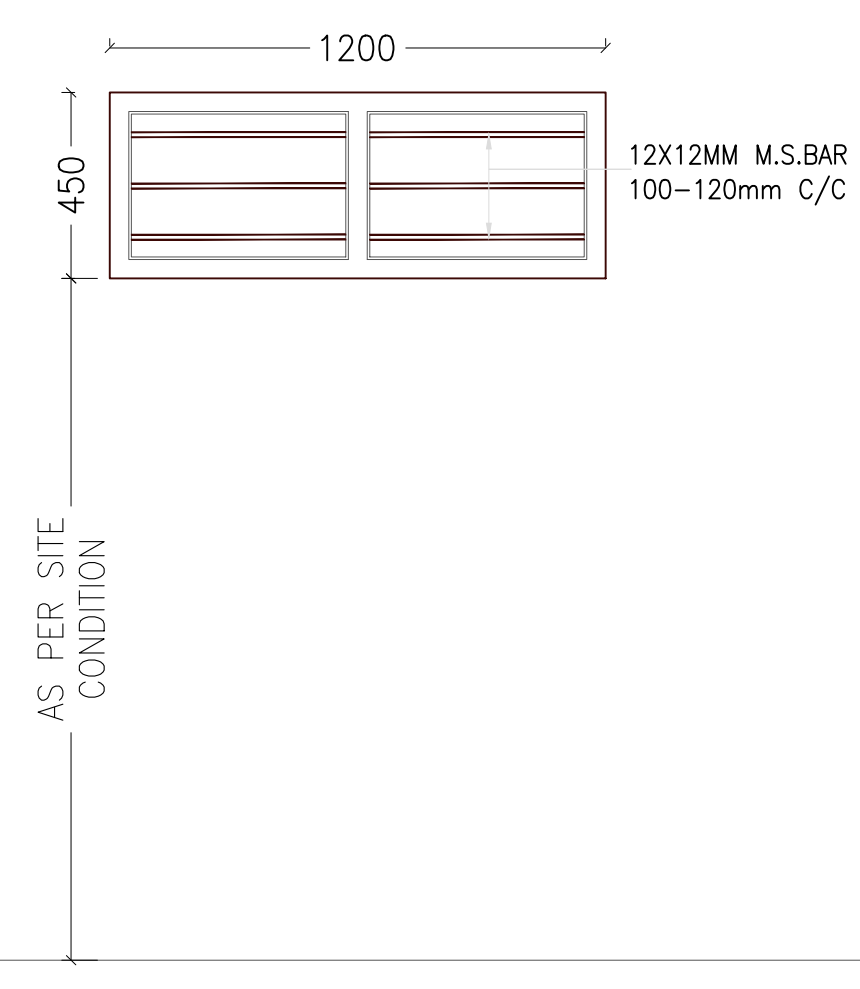
GRILL ELEVATION
 CLASSROOM, ADMIN AREA, LABS, RAMP
 V3 - VENTILATOR 3
 1800 x 600



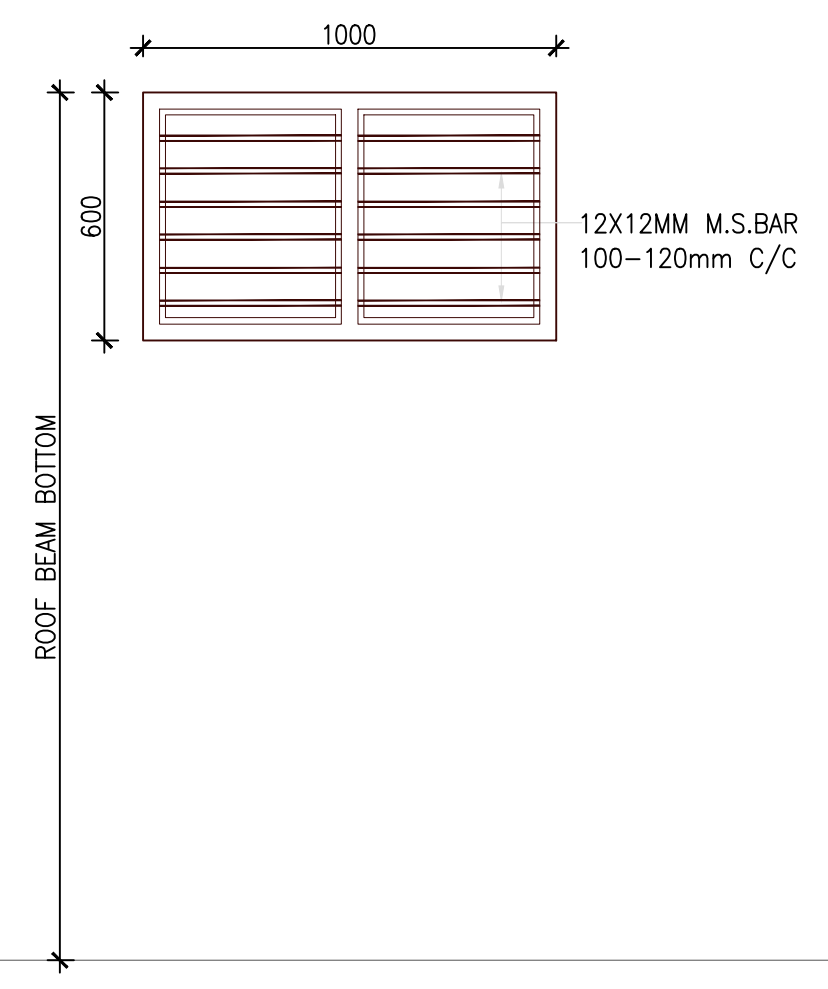
GRILL ELEVATION
 STORE, SERVER, MEDICAL
 V3' - VENTILATOR 3'
 1800 x 600



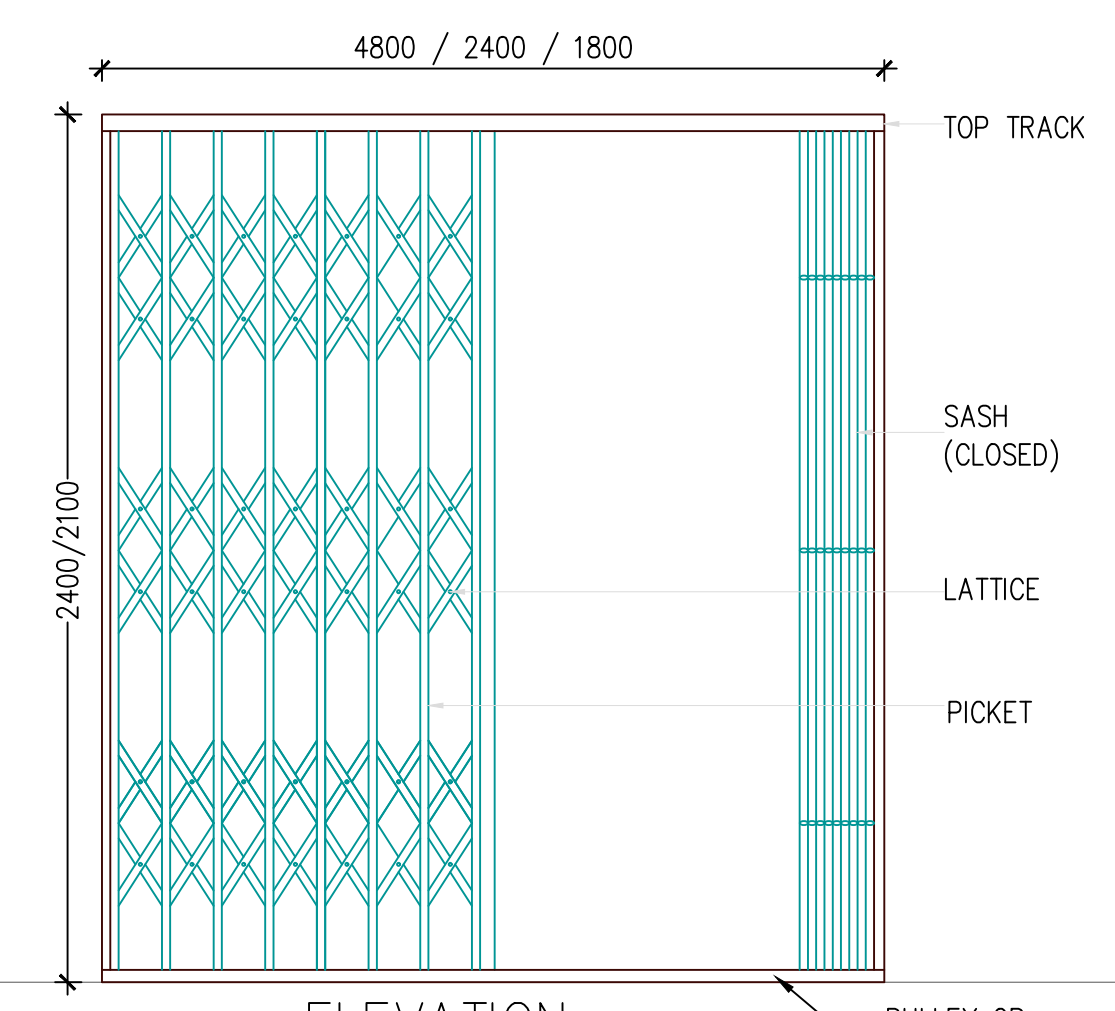
GRILL ELEVATION
 H.TOILET
 V3'' - VENTILATOR 3''
 1200 x 600



ELEVATION
 STORE, MEDICAL ROOM, SERVER
 V4 (1200x450)



GRILL ELEVATION
 STAFFROOM, OFFICE,
 V.PRINCIPAL, PRINCIPAL
 V5 (1000X600)



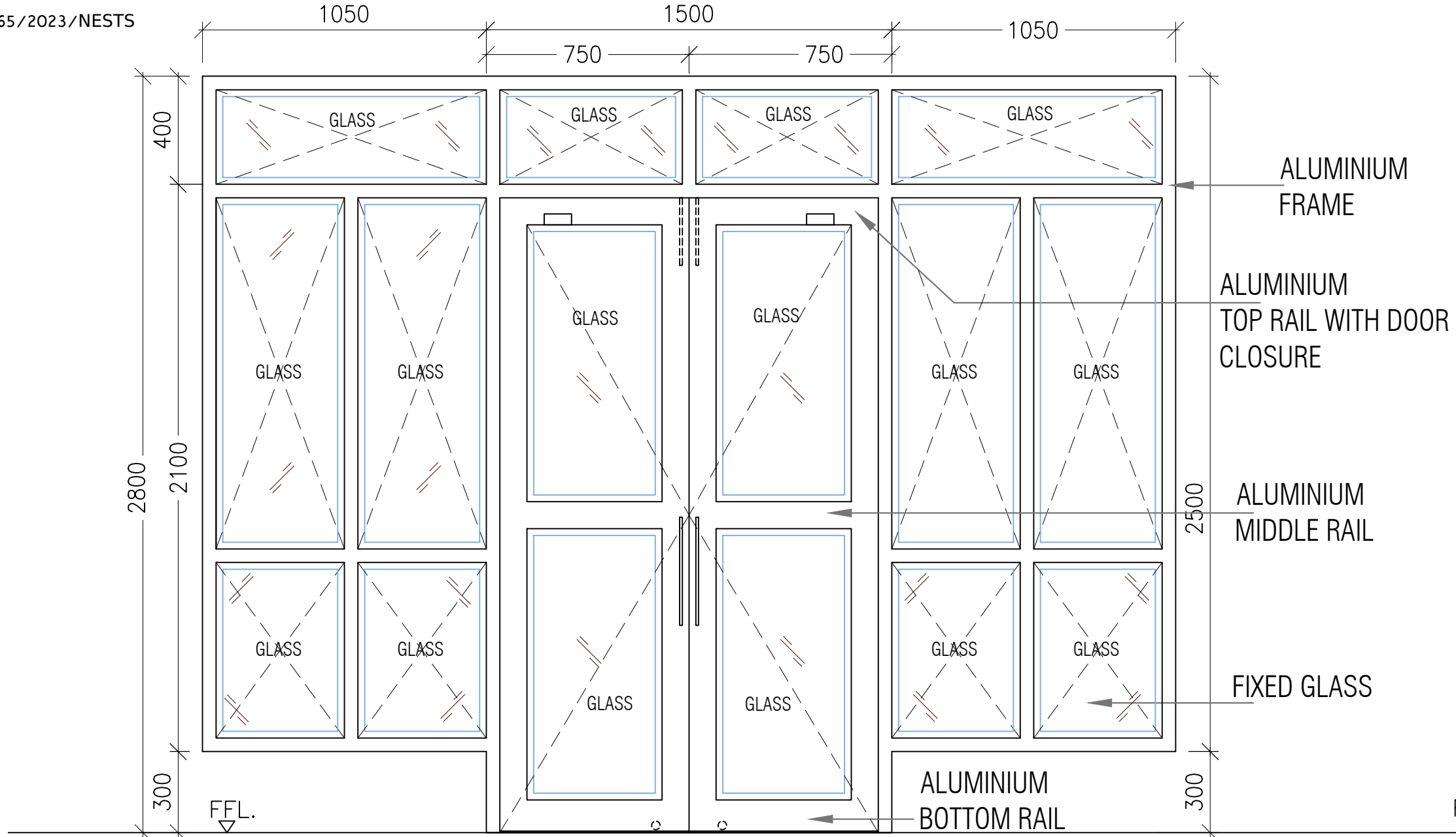
ELEVATION
 COLLAPSIBLE GATE
 CG1 - 4800 x 2400 (MAIN ENTRANCE GATE)
 CG2 - 2400 x 2100 (CORRIDOR EXITS)
 CG3 - 1800 x 2100 (CORRIDOR EXITS)

HOSTEL BLOCK - DOOR WINDOW VENTILATOR DETAIL

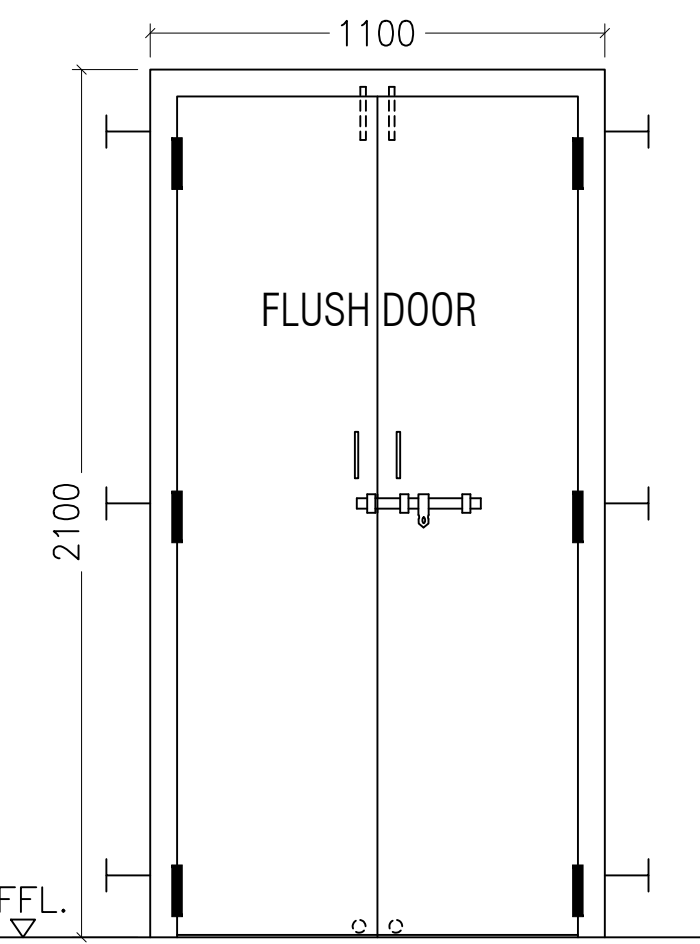
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CLIENT -
**GOVERNMENT OF INDIA
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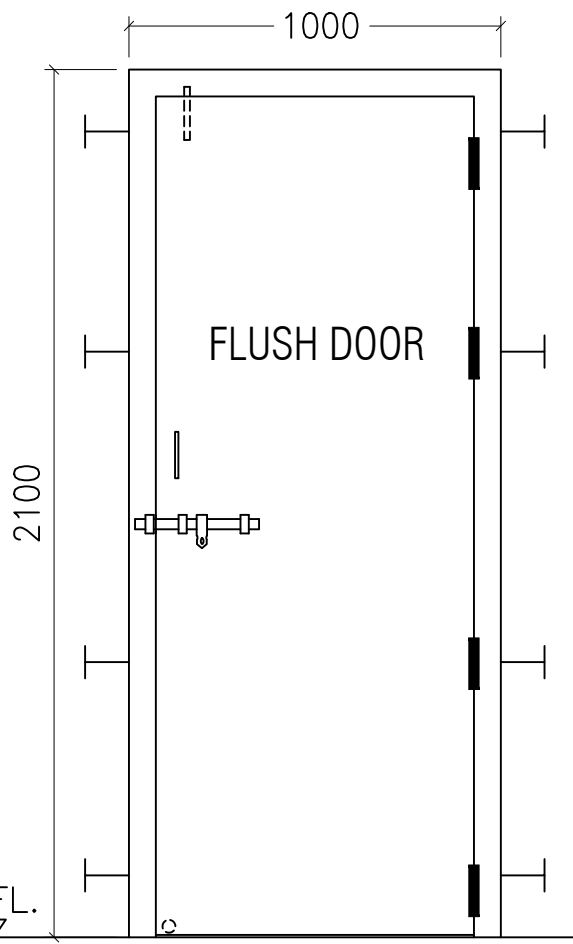
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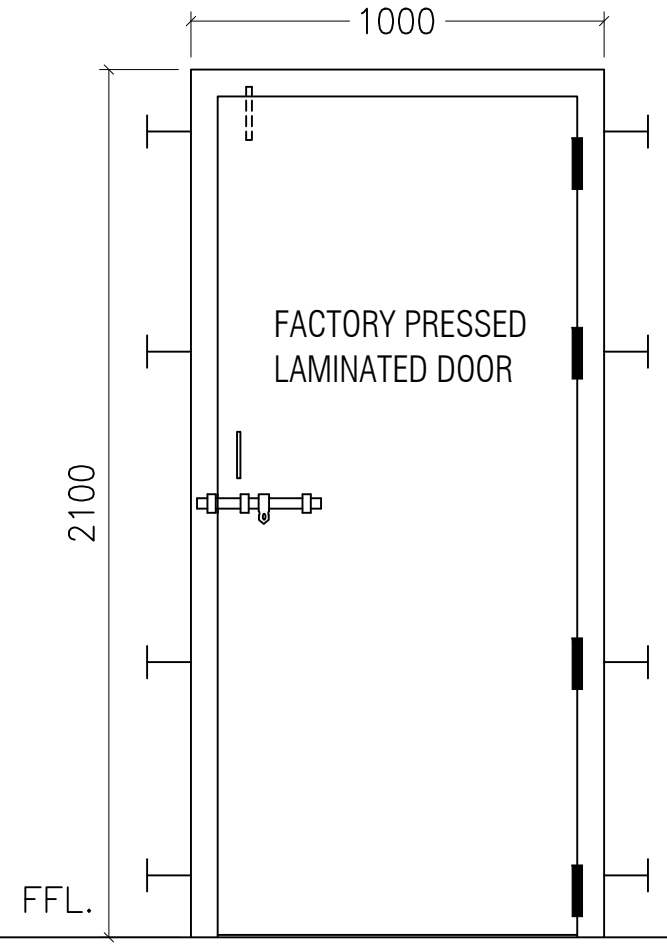
MAIN ENTRANCE DOOR
 MD - 1500 x 2400
 V4- 1500 X 400 FIXED GLAZING ABOVE DOOR
 FGL - 1050X 2500 FIXED GLAZING ON SIDE



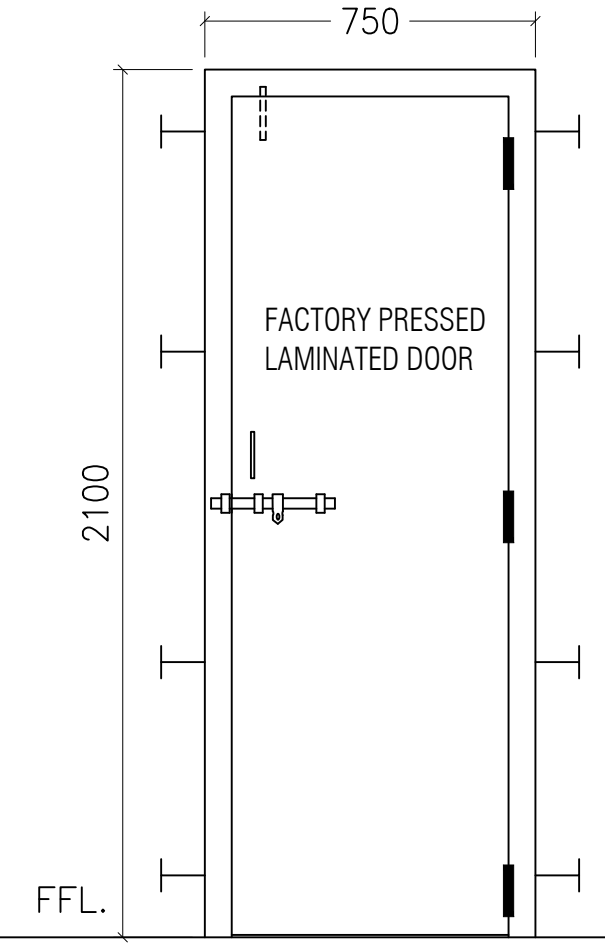
DORMITORY ROOM & 2500MM WIDE CORRIDOR
 D1 - 1100 X 2100



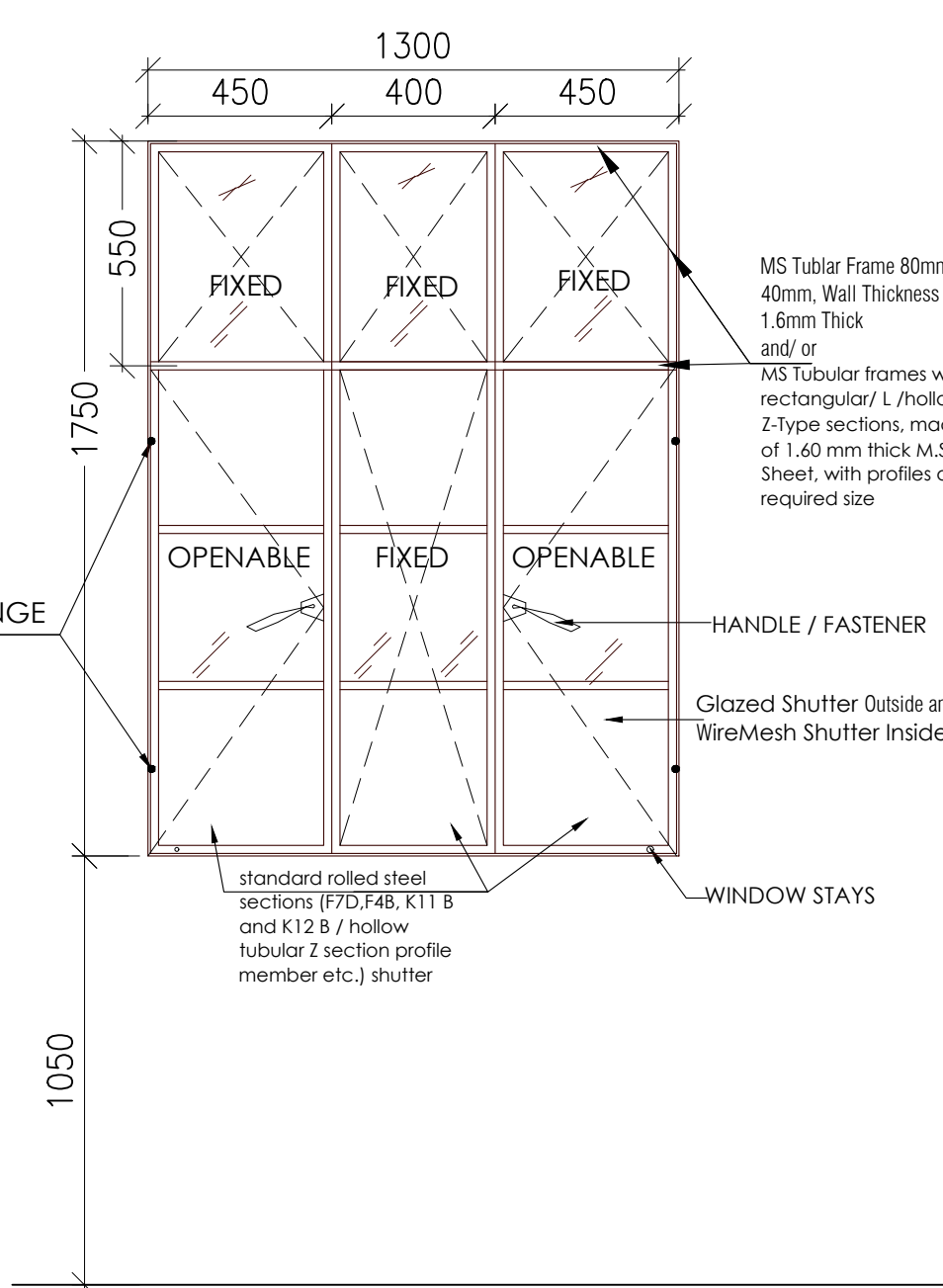
COMMON ROOM AND WARDEN ROOM
 D2 - 1000 X 2100



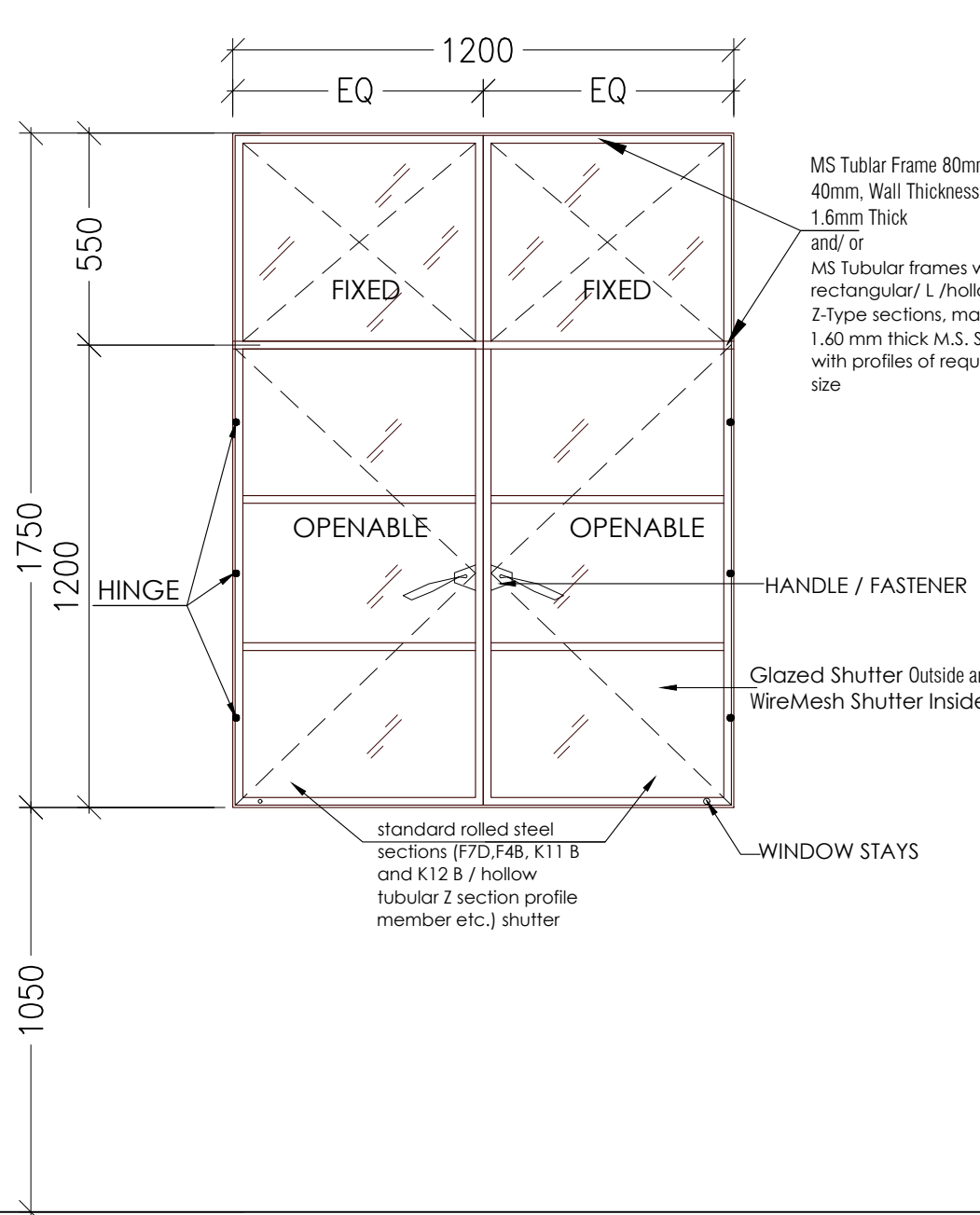
TOILET MAIN DOOR
 D2 - 1000 X 2100



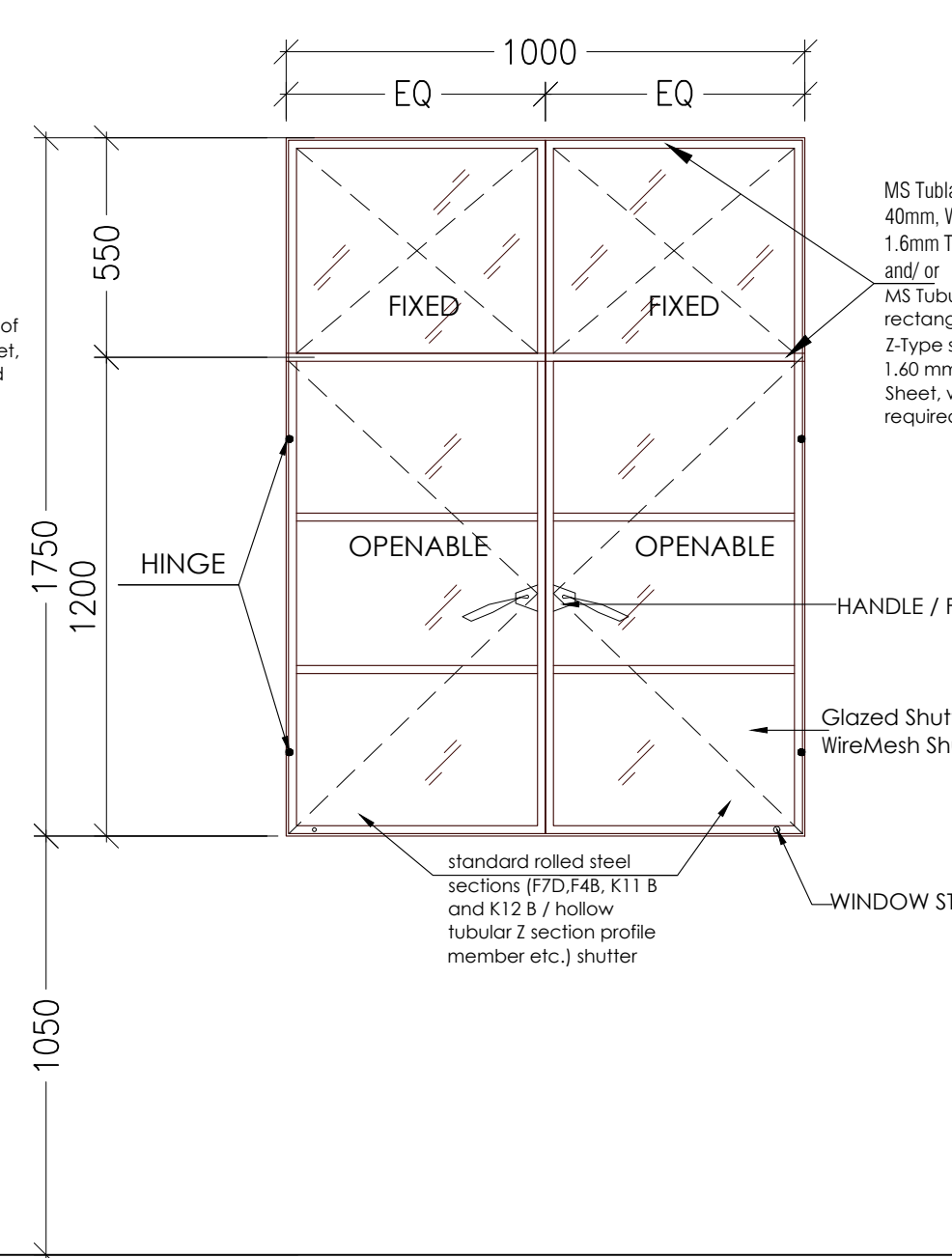
TOILET MAIN DOOR
 D3 - 750 X 2100



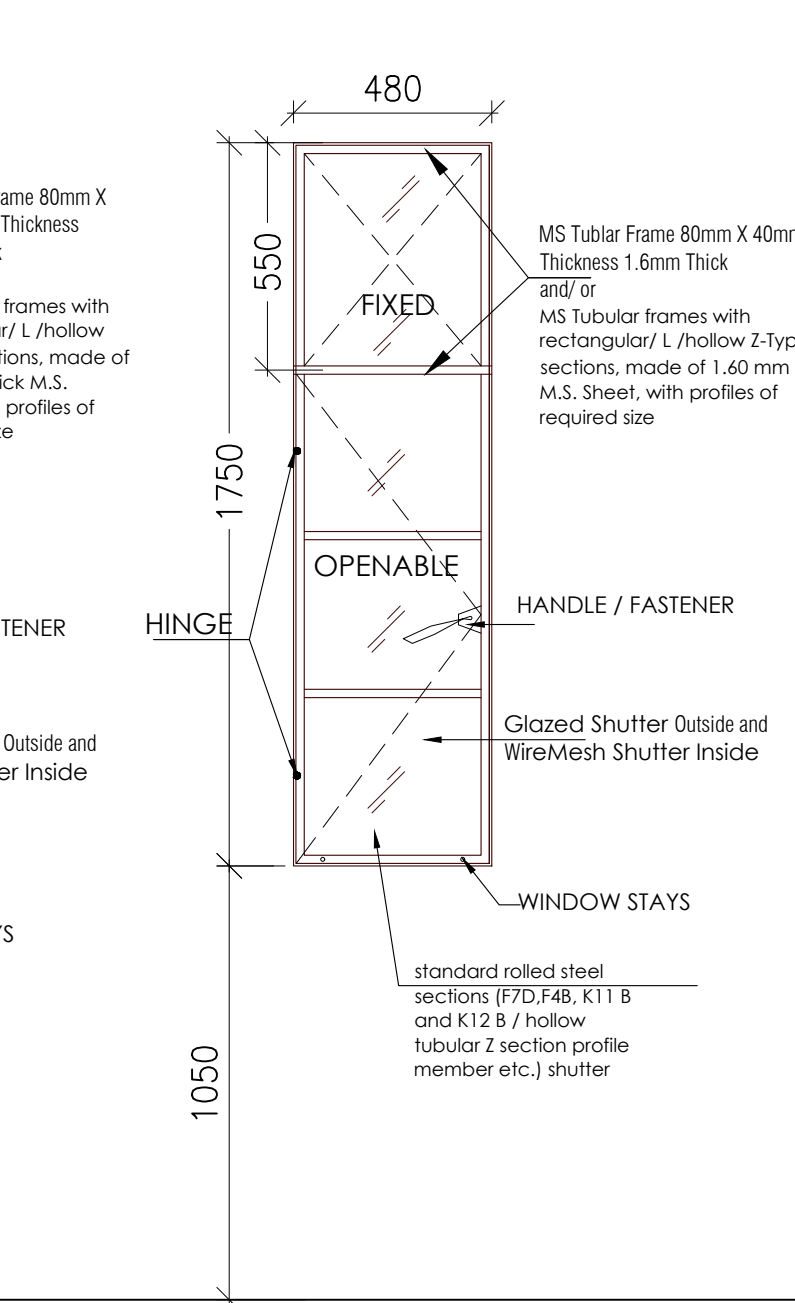
Dormitory Room, Corridor
 W1 - 1300 x 1750



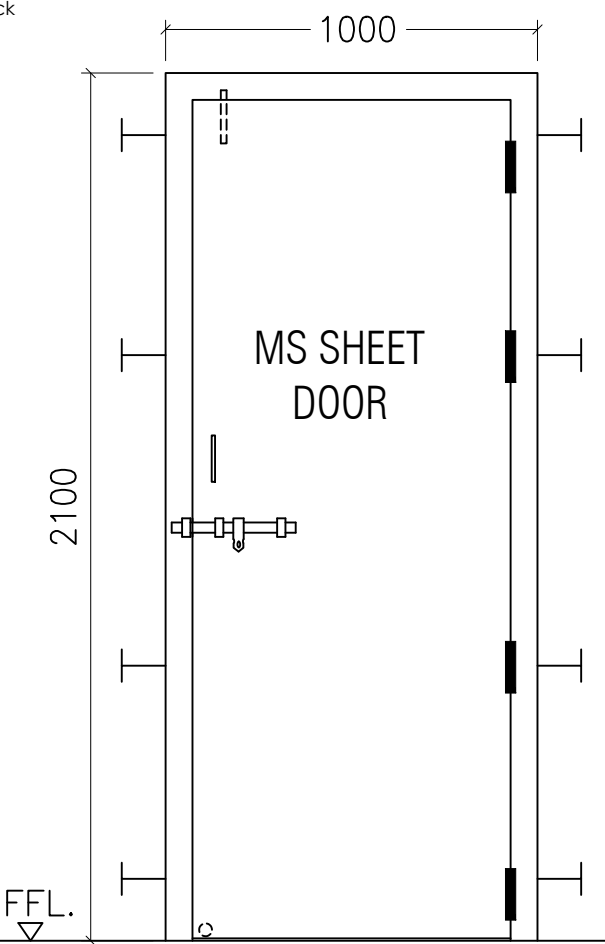
1200mm Corridor, Warden Room & Common Room
 W2 - 1200 x 1750



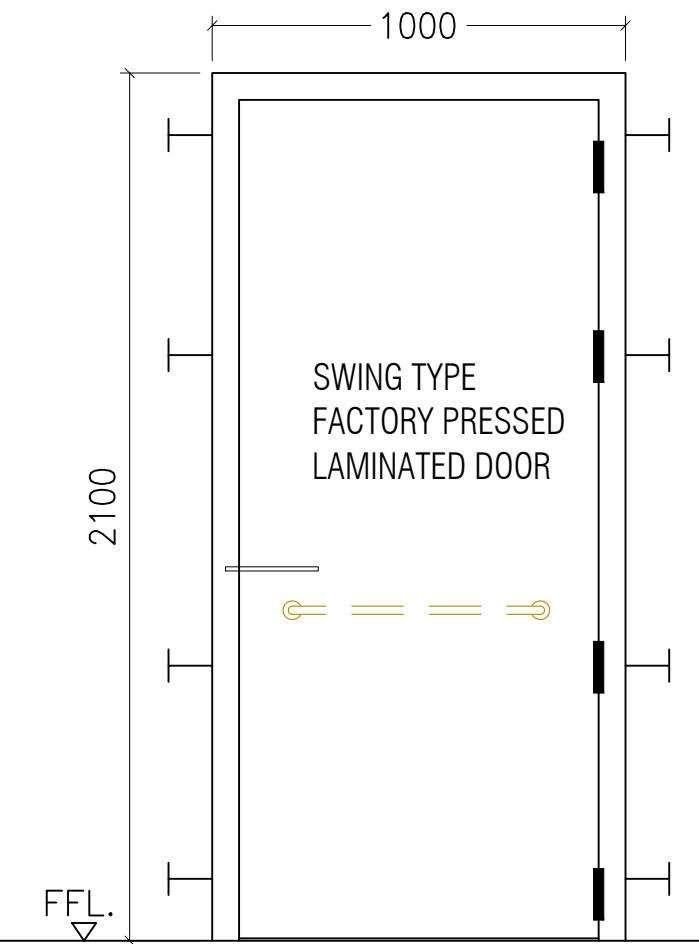
Dormitory Room
 W3 - 1000 x 1750



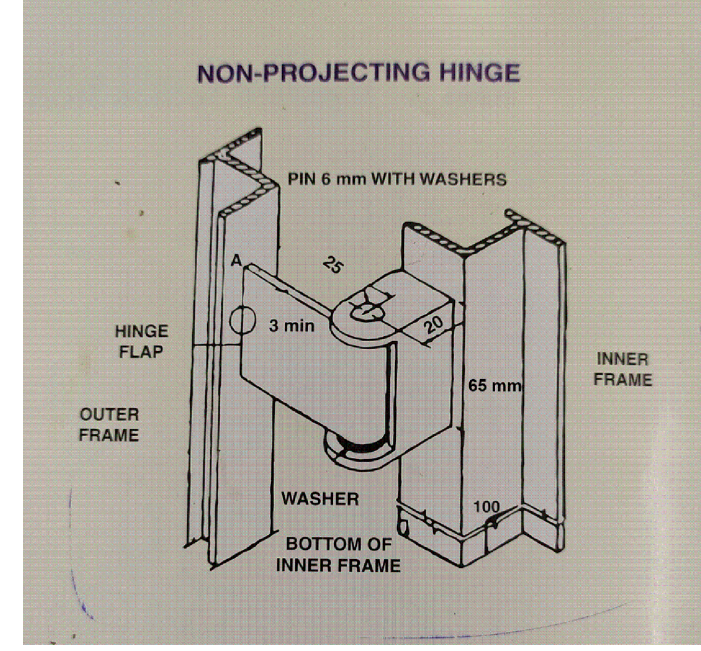
Dormitory Room
 W4 - 480 x 1750



TERRACE
 D2 - 1000 X 2100



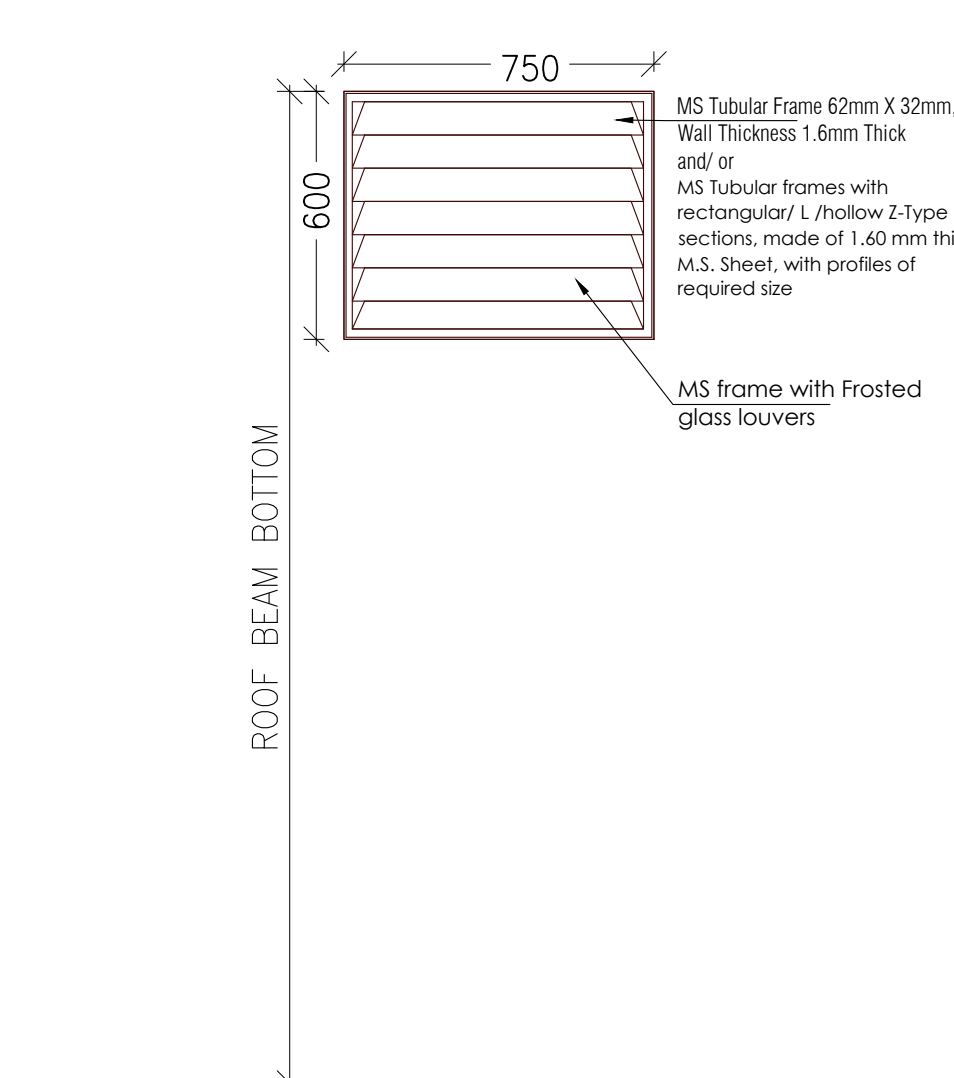
H.TOILET MAIN DOOR
 SD1- 1000 X 2100



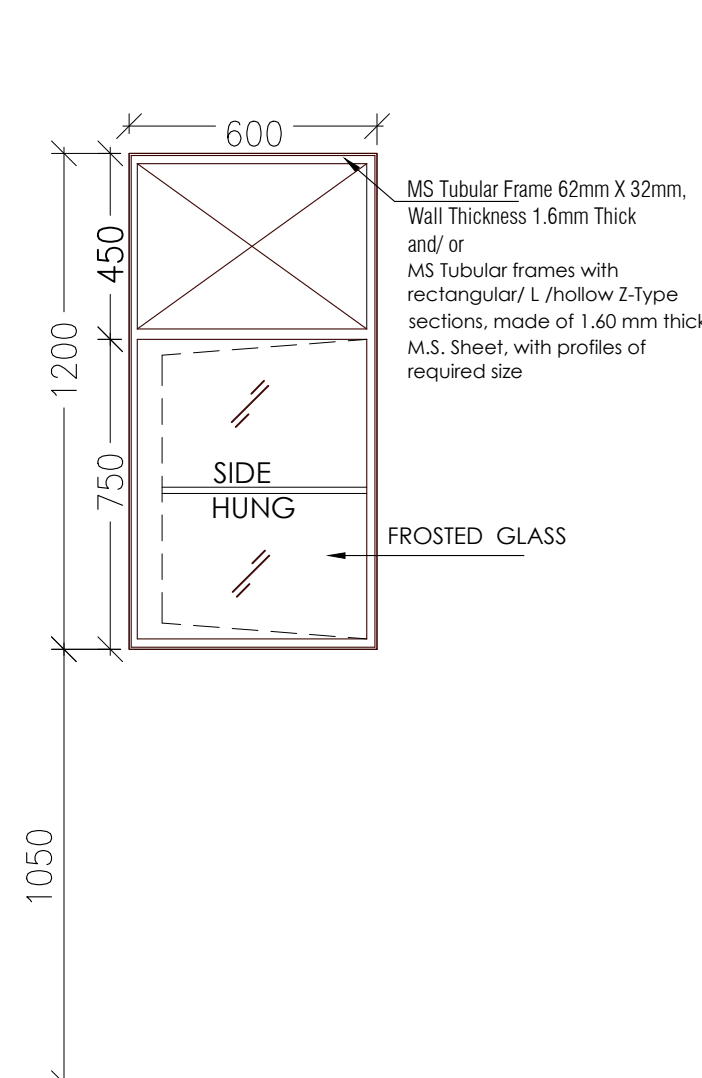
TYPICAL HINGE DETAIL

N.K.
 (NARENDRA KUMAR)
 pl Approved 10.3.23
 (Prasad Approved)
 LEANT 13/1/23
 (R. K. Gang)
 Rur SS 13/3/2023.
 (SANDEEP SOOD)

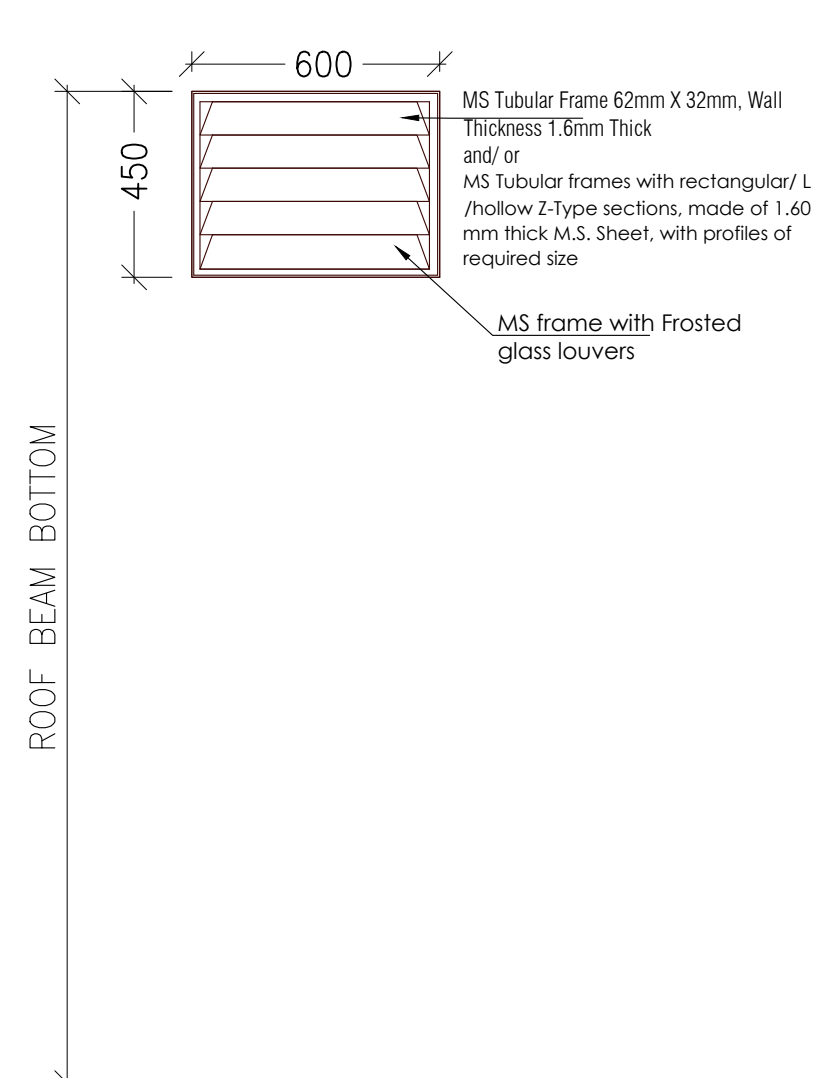
A.P.K.
A D P Keshri
 Chief Technical Consultant



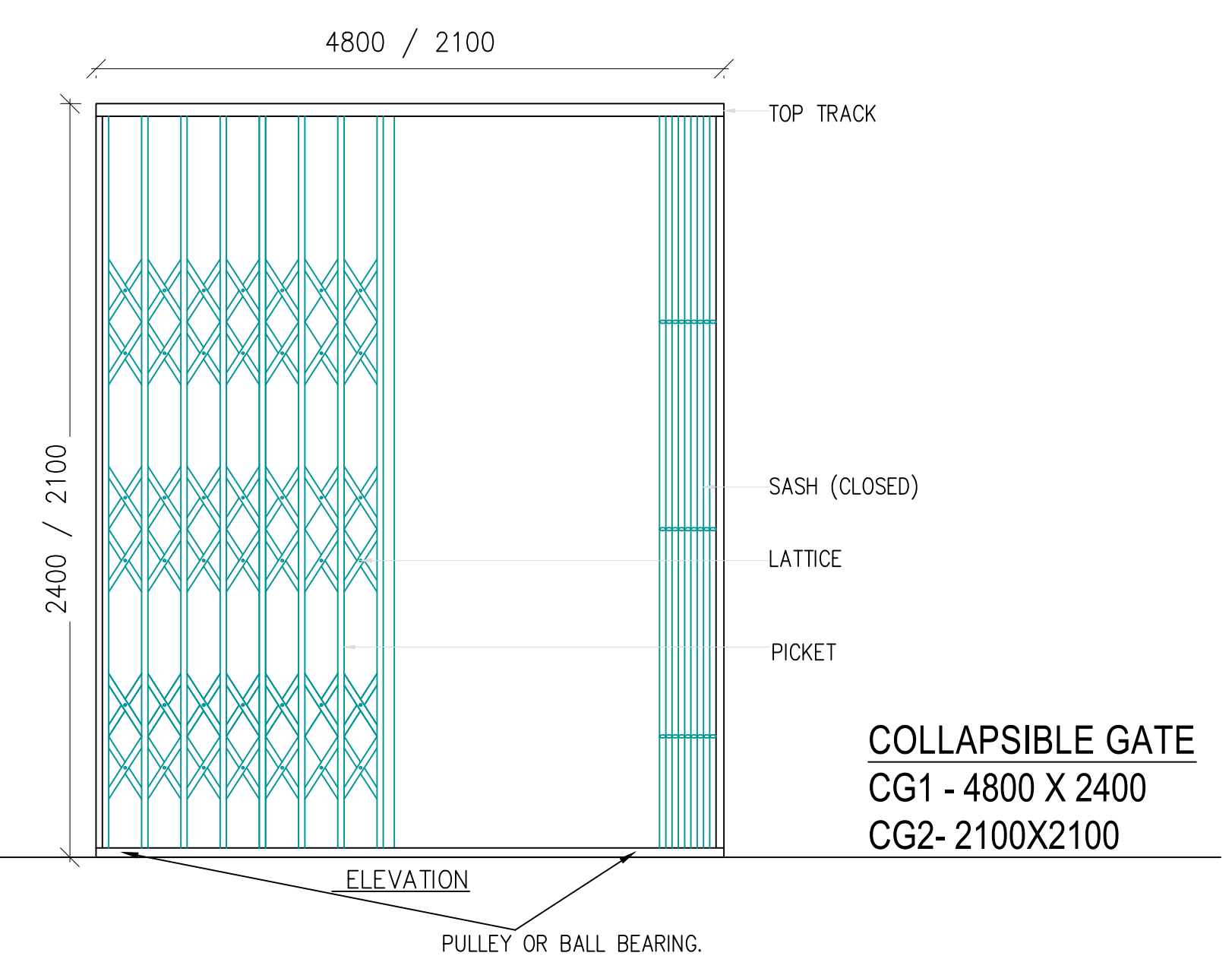
Drinking Water, H.toilet
 V1 - 750 x 600



Toilet
 V2 - 600 x 1200



Toilet
 V3 - 600 x 450



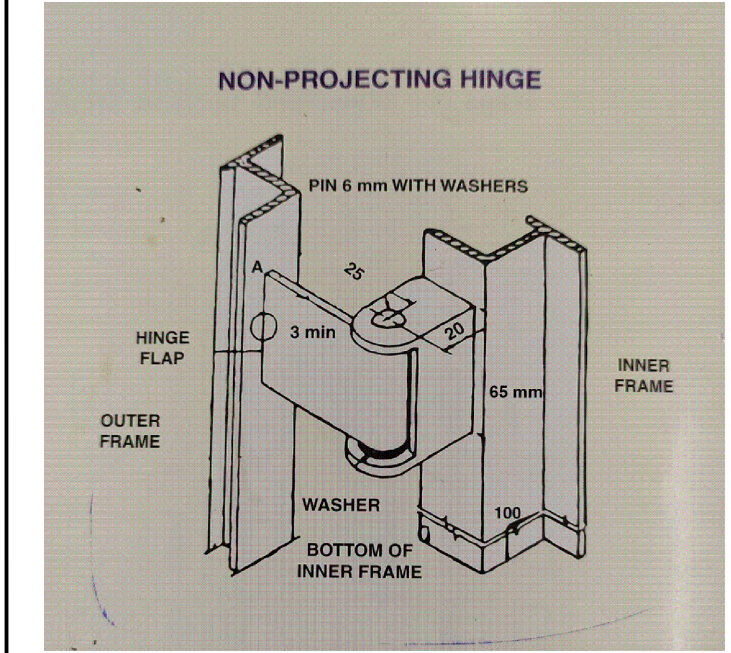
COLLAPSIBLE GATE
 CG1 - 4800 X 2400
 CG2 - 2100X2100

HOSTEL BLOCK - GRILL AND COLLAPSIBLE DETAIL

PROJECT - EMRS
CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -
GOVERNMENT OF INDIA
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS

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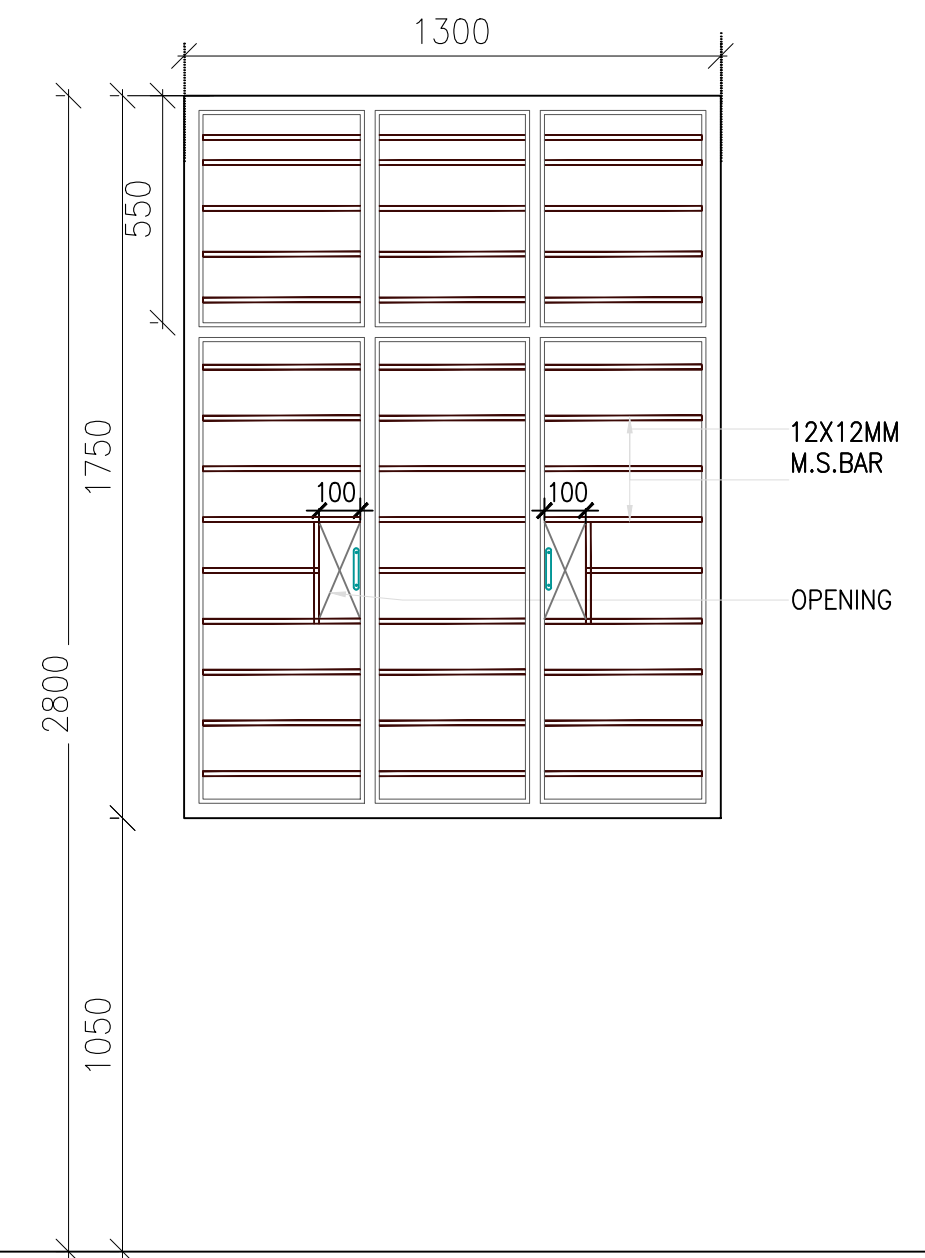
TYPICAL HINGE DETAIL

N.K.
 (NARENDRA KUMAR)
 p.k. Approved 10.3.23
 (Pranod Approved)
 leant 13/4/23
 (R.K. Gang)
 8 in SS 13/3/2023.
 (SANDEEP SOOD)
A.P.K.
A D P Keshri
Chief Technical Consultant

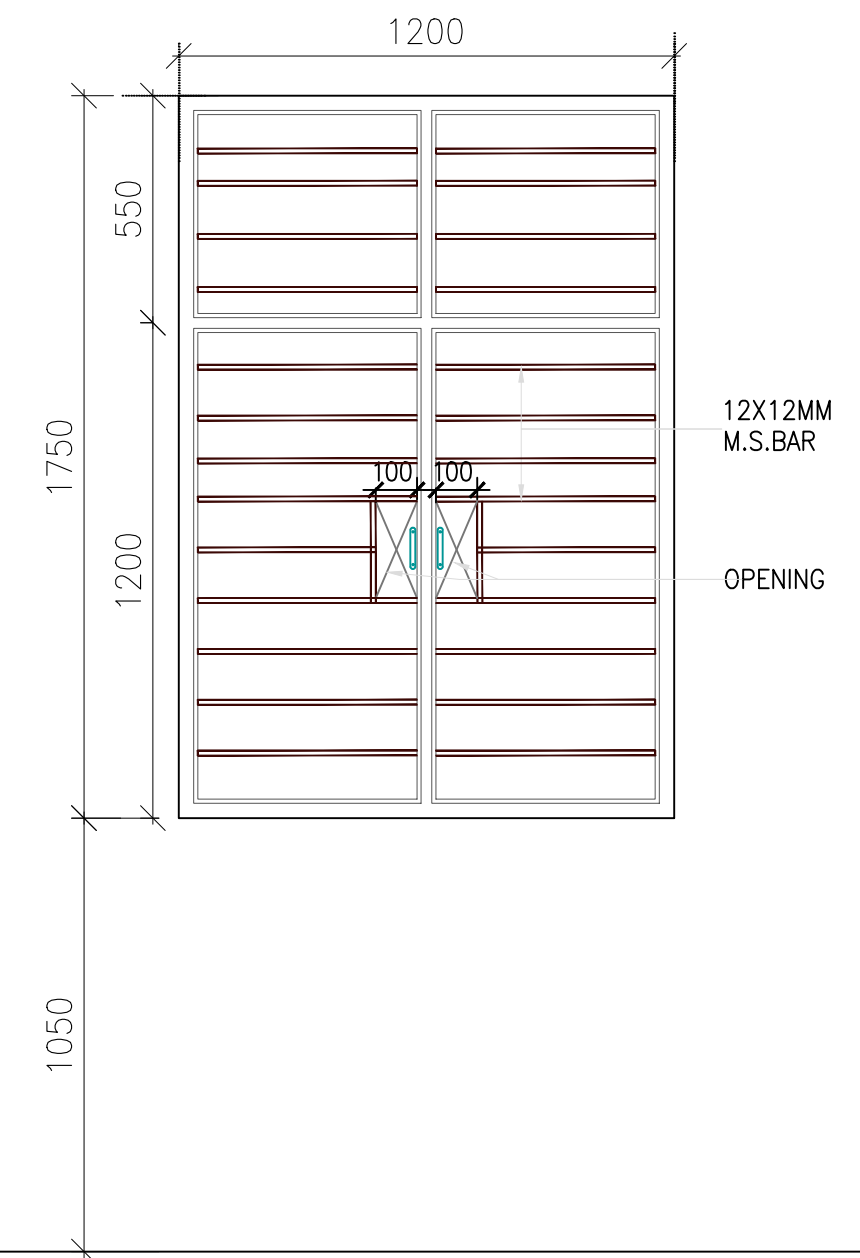
CATEGORY :
 DOOR WINDOW DETAIL

DRAWING TITLE :
 HOSTEL GRILL AND COLLAPSIBLE DETAIL

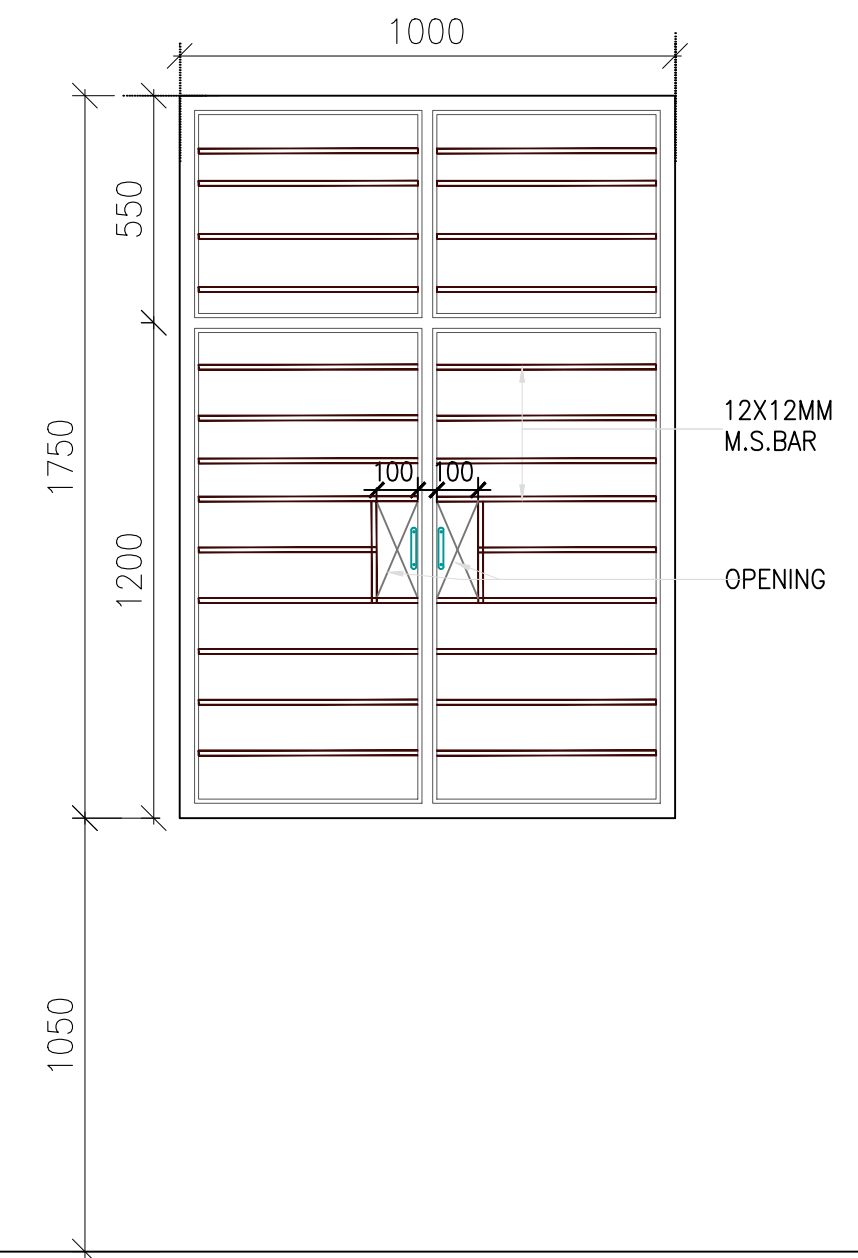
DWG. NO.-
 EMRS NAME/HOSTEL/DWD/AR_02



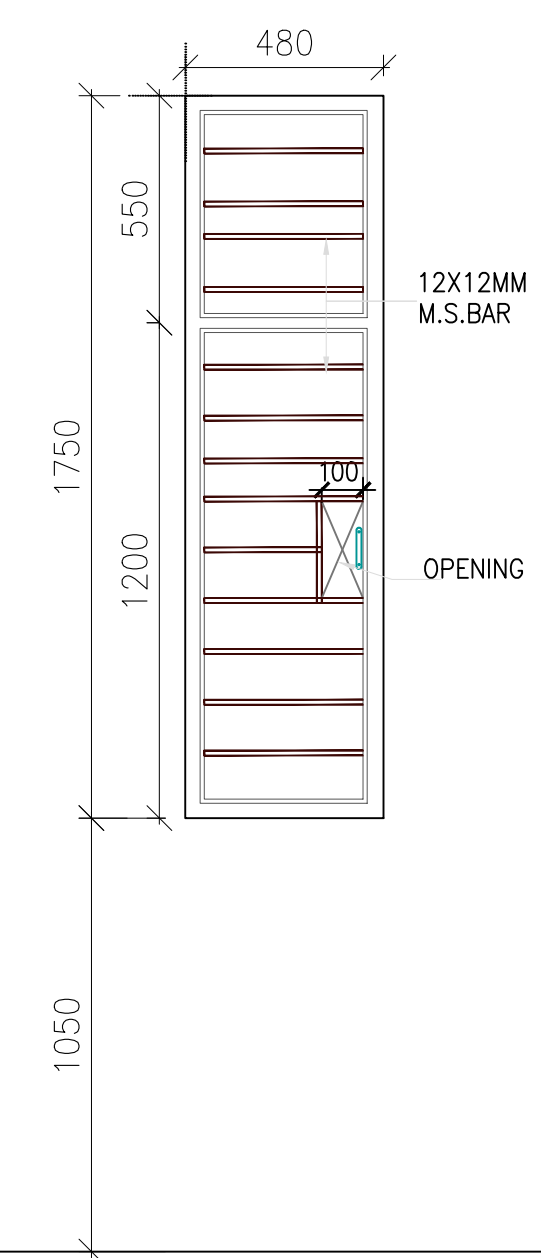
GRILL ELEVATION
 Dormitory Room, Corridor
 W1 - 1300 x 1750



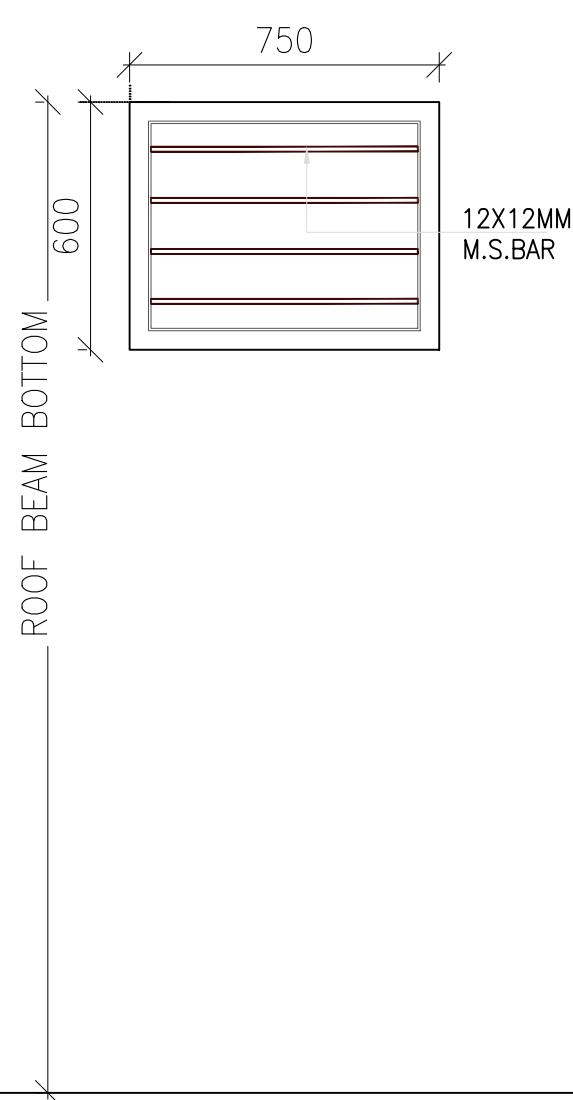
GRILL ELEVATION
 1200mm Corridor, Warden Room & Common Room
 W2 - 1200 x 1750



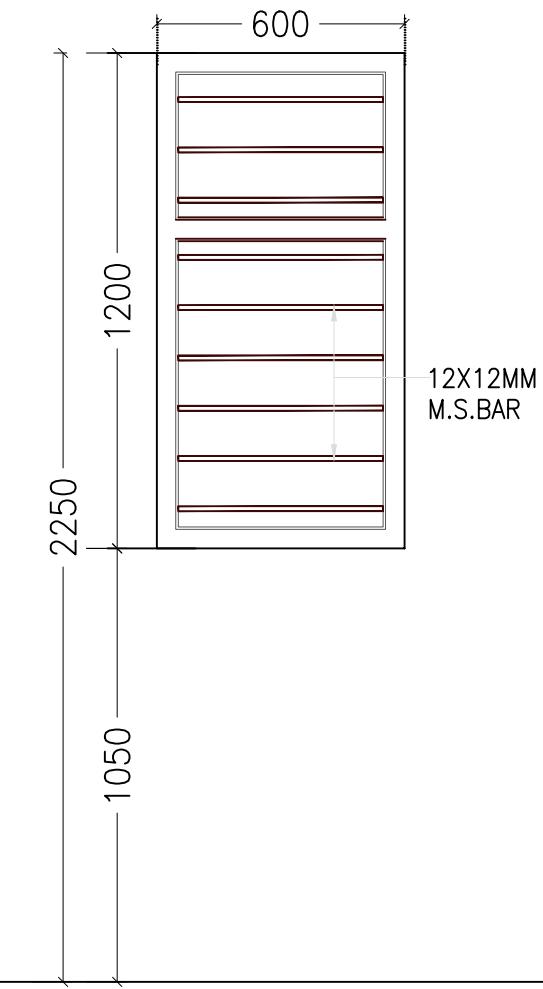
GRILL ELEVATION
 Dormitory Room
 W3 - 1000 x 1750



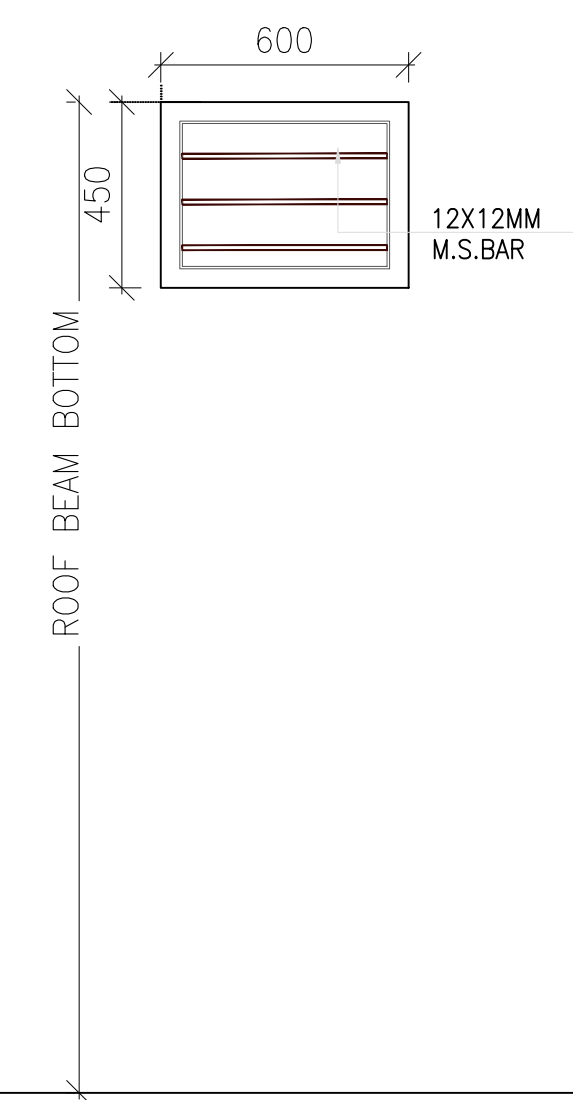
GRILL ELEVATION
 Dormitory Room
 W4 - 480 x 1750



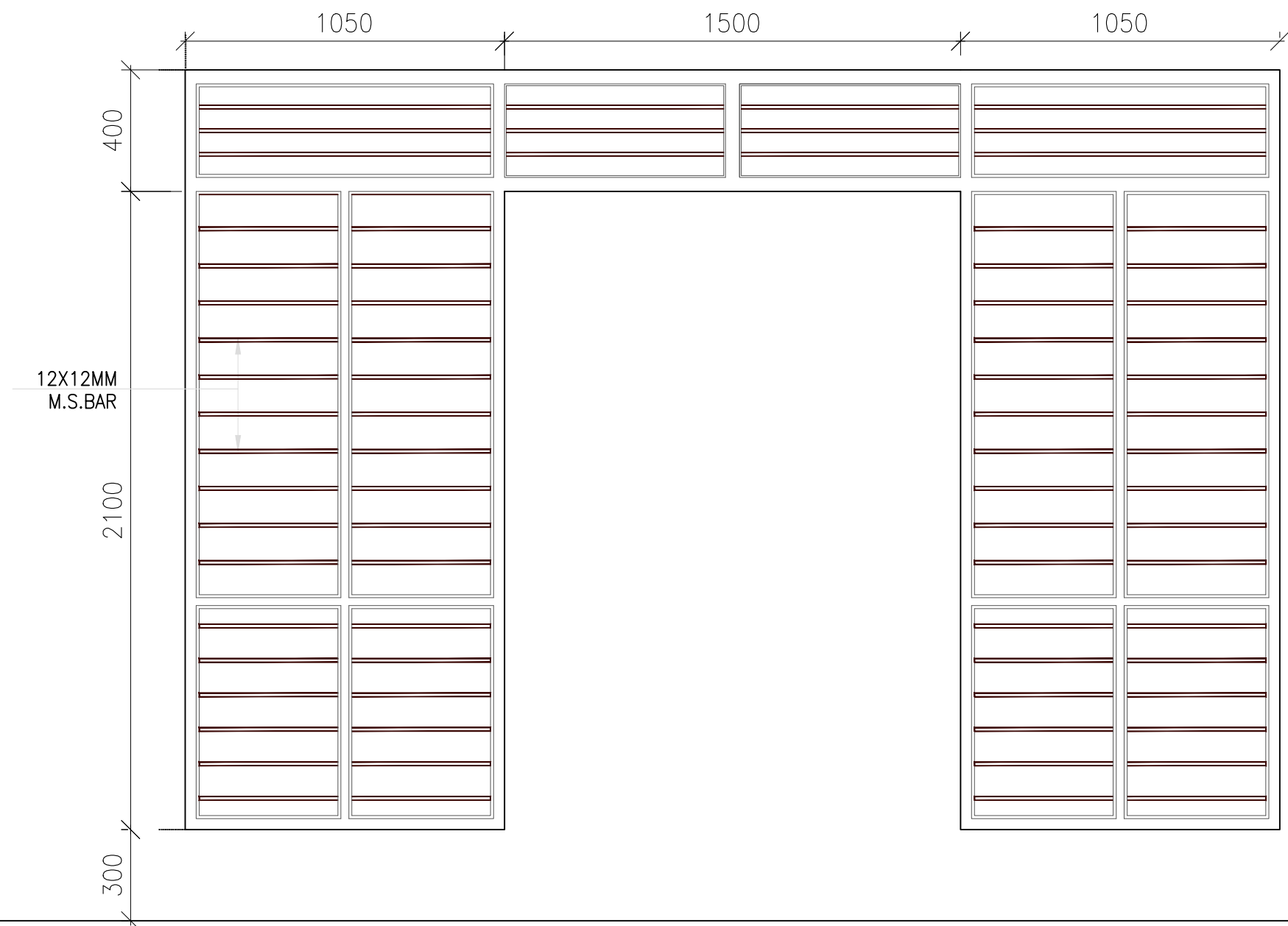
GRILL ELEVATION
 Drinking Water, H.toilet
 V1 - 750 x 600



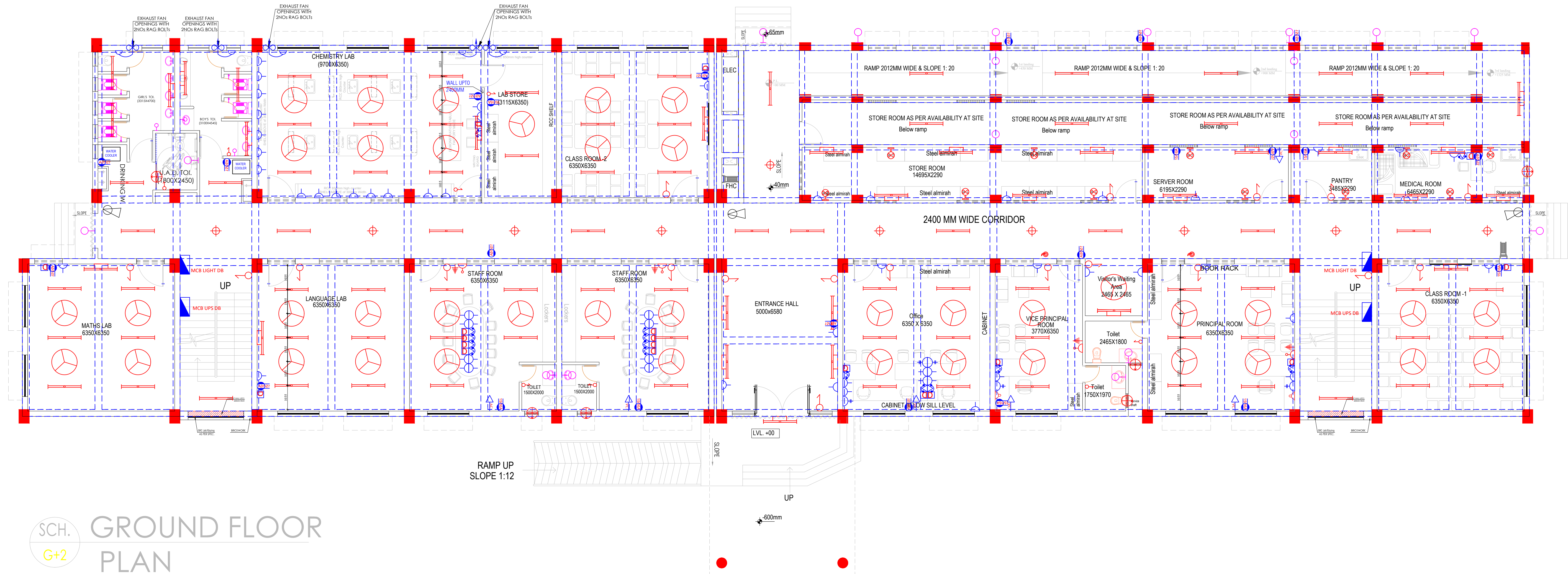
GRILL ELEVATION
 Toilet
 V2 - 600 x 1200



GRILL ELEVATION
 Toilet
 V3 - 600 x 450



GRILL ELEVATION
 MAIN ENTRANCE DOOR GRILL
 V4 - 1500 X 400 FIXED GLAZING ABOVE DOOR
 FGL - 1050X 2500 FIXED GLAZING ON SIDE



SCH. G+2
GROUND FLOOR PLAN

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT
	2x6A UPS PLUG POINT
	TELEPHONE OUTLET
	DATA OUTLET

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200mm
	WALL FAN
	BULKHEAD LIGHT

LEGENDS :

SYMBOL	DESCRIPTION
	EXHAUST FAN 300mm DIA METAL BODY
	DISTRIBUTION BOARD
	2X6A PLUG POINT FOR TV
	TELEVISION POINT
	BATTEN HOLDER WITH 20W LED BULB
	BELL
	DOME/BULLET CAMERA

(VIA ENDR KEMAR)
(R.K. Simanungkalot)
A D P Keshri
Chief Technical Consultant

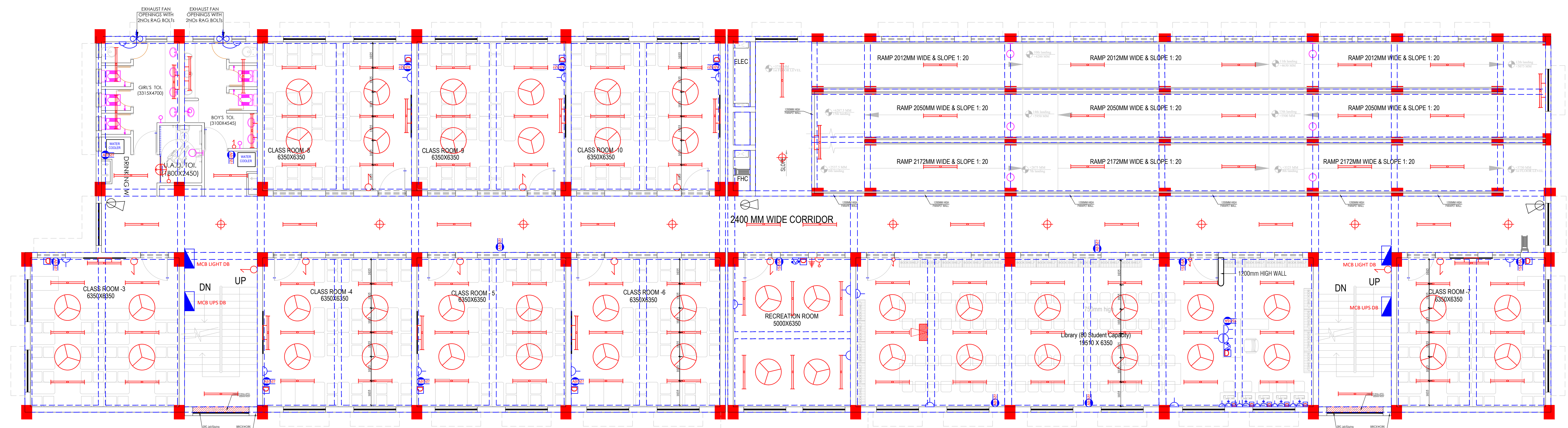
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_01

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

SCHOOL
GROUND FLOOR PLAN



SCH. G+2 FIRST FLOOR PLAN

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT
	2x6A UPS PLUG POINT
	TELEPHONE OUTLET
	DATA OUTLET

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200mm
	WALL FAN
	BULKHEAD LIGHT

LEGENDS :

SYMBOL	DESCRIPTION
	EXHAUST FAN 300mm DIA METAL BODY
	DISTRIBUTION BOARD
	2X6A PLUG POINT FOR TV
	TELEVISION POINT
	BATTEN HOLDER WITH 20W LED BULB
	BELL
	DOME/BULLET CAMERA

(VIA ENDR KEMAR)
(R.K. SINGH)
A D P Keshri
 Chief Technical Consultant

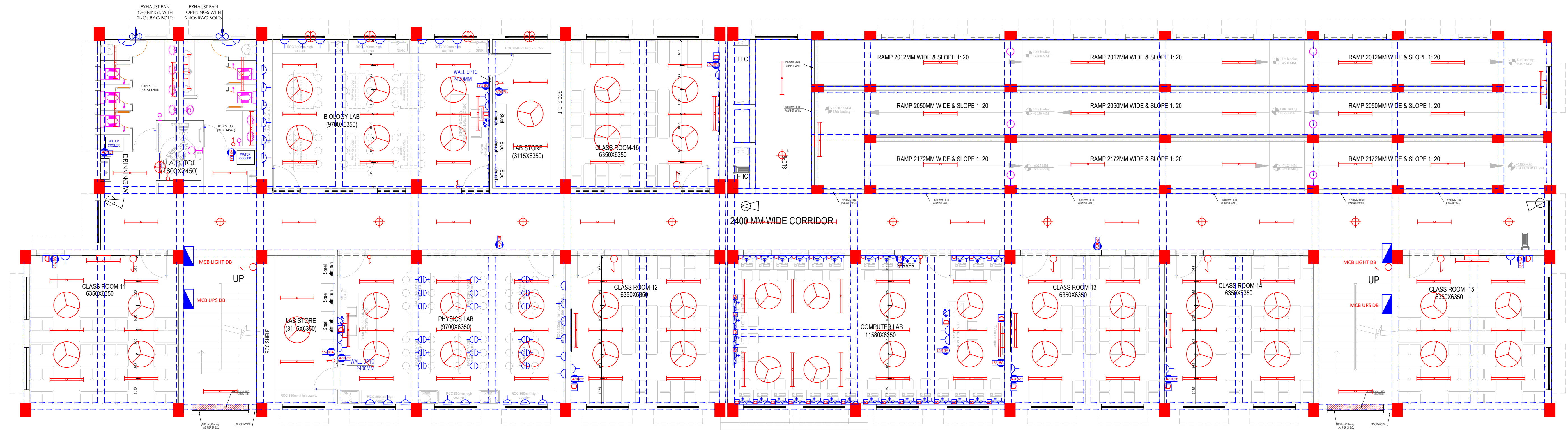
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_02

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

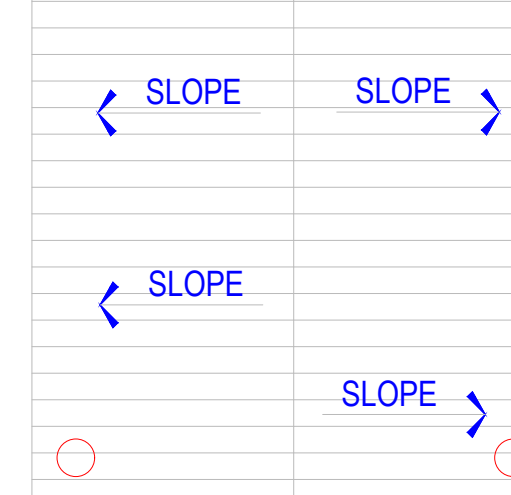
SCHOOL
FIRST FLOOR PLAN



SCH. G+2 SECOND FLOOR PLAN

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT
	2x6A UPS PLUG POINT
	TELEPHONE OUTLET
	DATA OUTLET



LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 200mm
	WALL FAN
	BULKHEAD LIGHT

LEGENDS :

SYMBOL	DESCRIPTION
	EXHAUST FAN 300mm DIA METAL BODY
	DISTRIBUTION BOARD
	2x6A PLUG POINT FOR TV
	TELEVISION POINT
	BATTEN HOLDER WITH 20W LED BULB
	BELL
	DOME/BULLET CAMERA

(VIA ENDR KEMAR)
(R.K. SINGH)
A D P Keshri
 Chief Technical Consultant

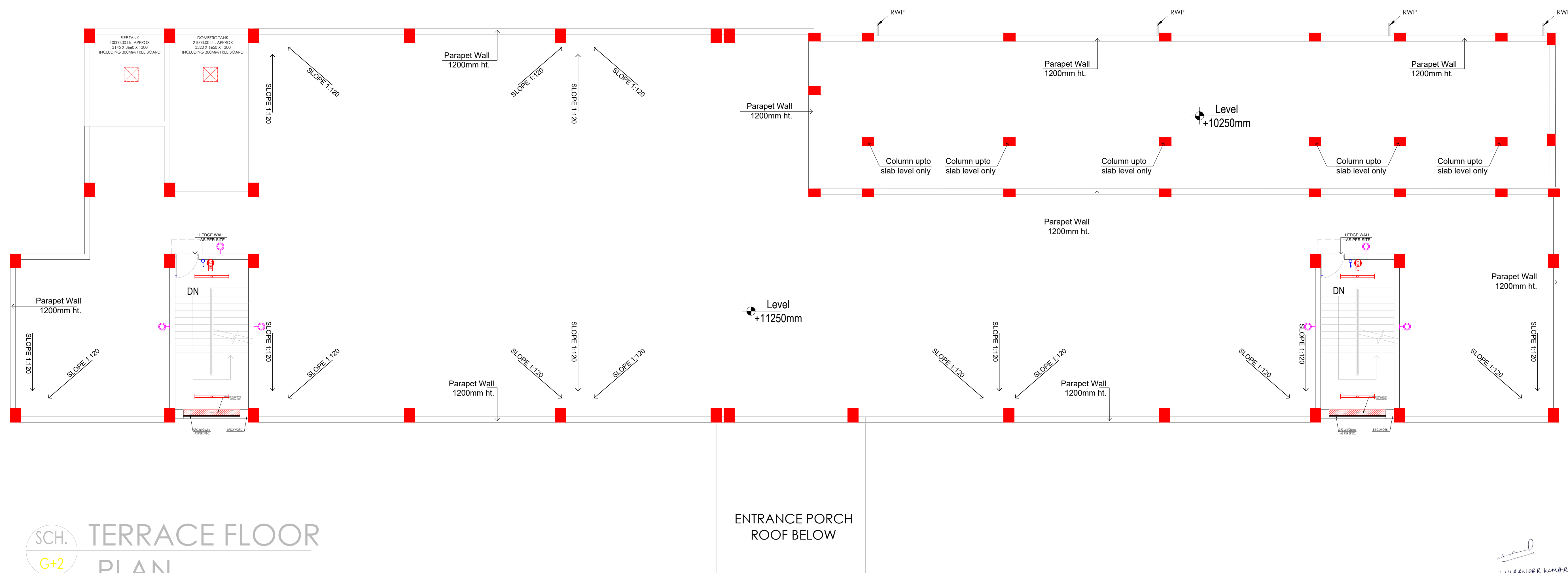
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_03

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

SCHOOL
SECOND FLOOR PLAN



SCH. G+2 TERRACE FLOOR PLAN

ENTRANCE PORCH ROOF BELOW

(Signature)
(VIJAYENDR KUMAR)
(Signature)
(R.K. SINGH)
(Signature)

A D P Keshri
Chief Technical Consultant

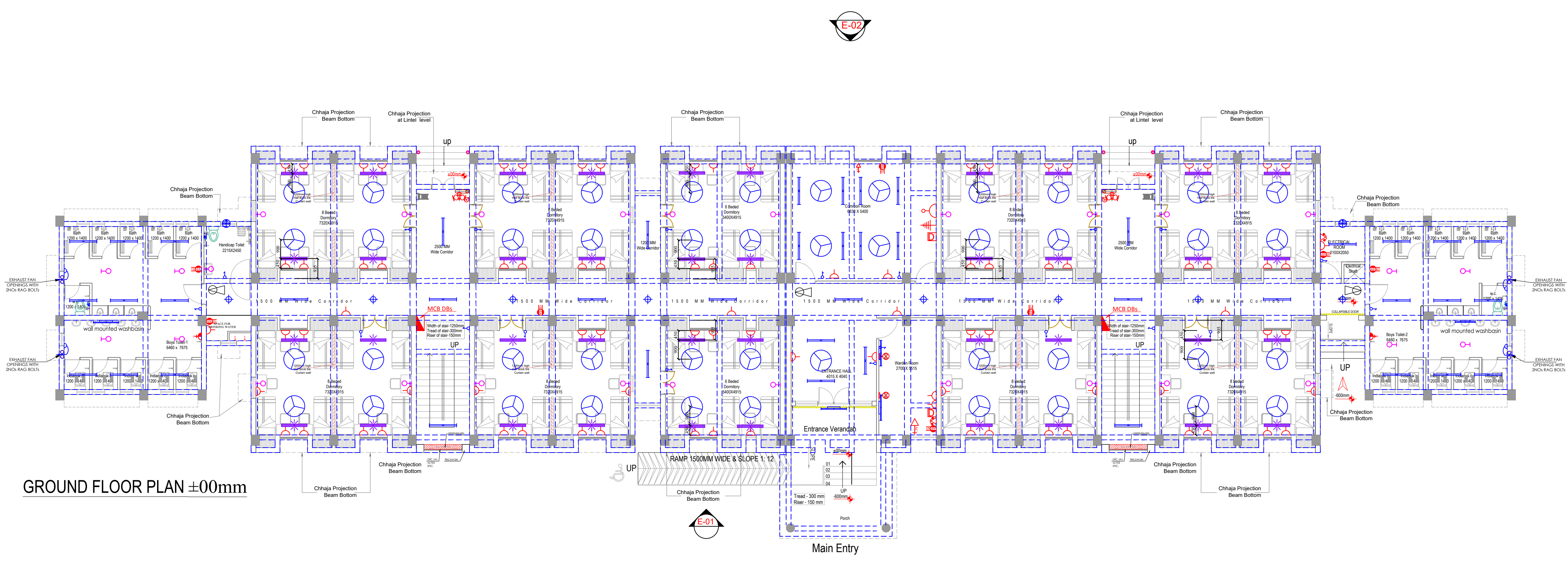
DATE - 09 MARCH 2023

DWG. NO.-
EMRS NAME/SCH/AR_04

SCHOOL
ROOF FLOOR PLAN

SCALE:

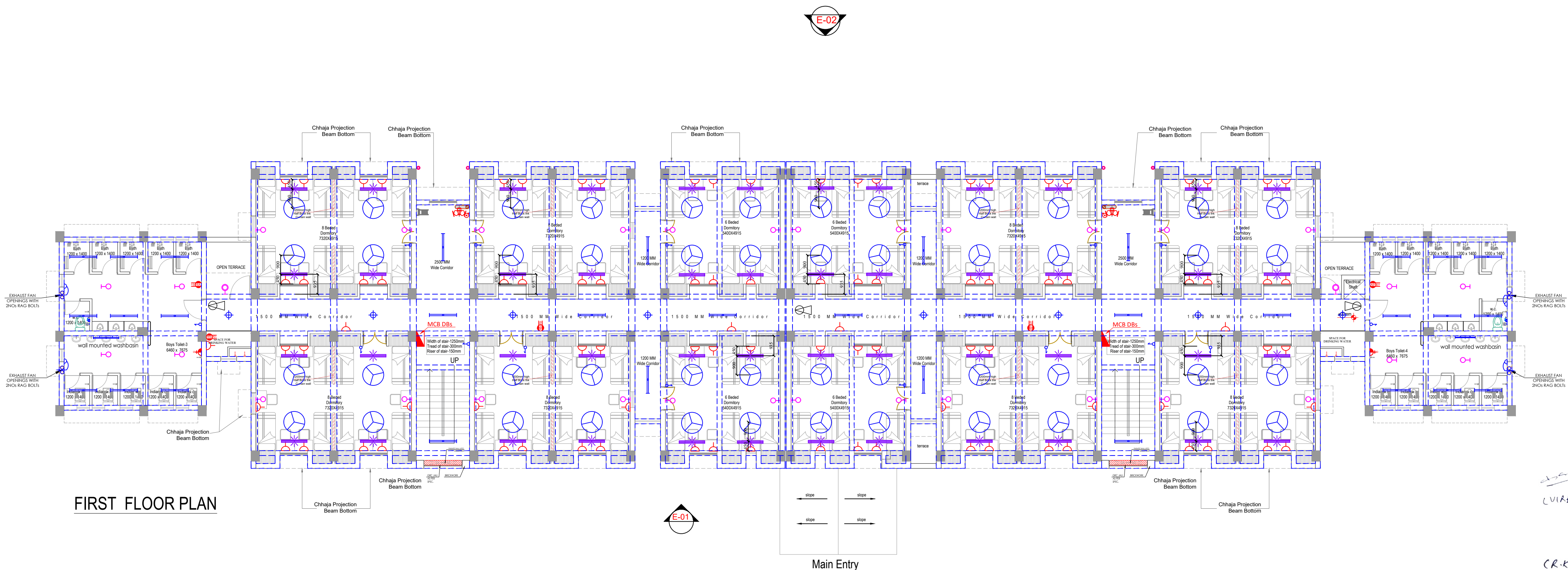
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)



GROUND FLOOR PLAN ±00mm

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT FOR TV
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT WITH SWITCH BOARD
	TELEPHONE OUTLET
	DATA OUTLET



FIRST FLOOR PLAN

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	40W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 300mm DIA METAL BODY
	DISTRIBUTION BOARD
	BATTEN HOLDER WITH 20W LED BULB
	WALL FAN
	BULKHEAD LIGHT
	DOME/BULLET CAMERA

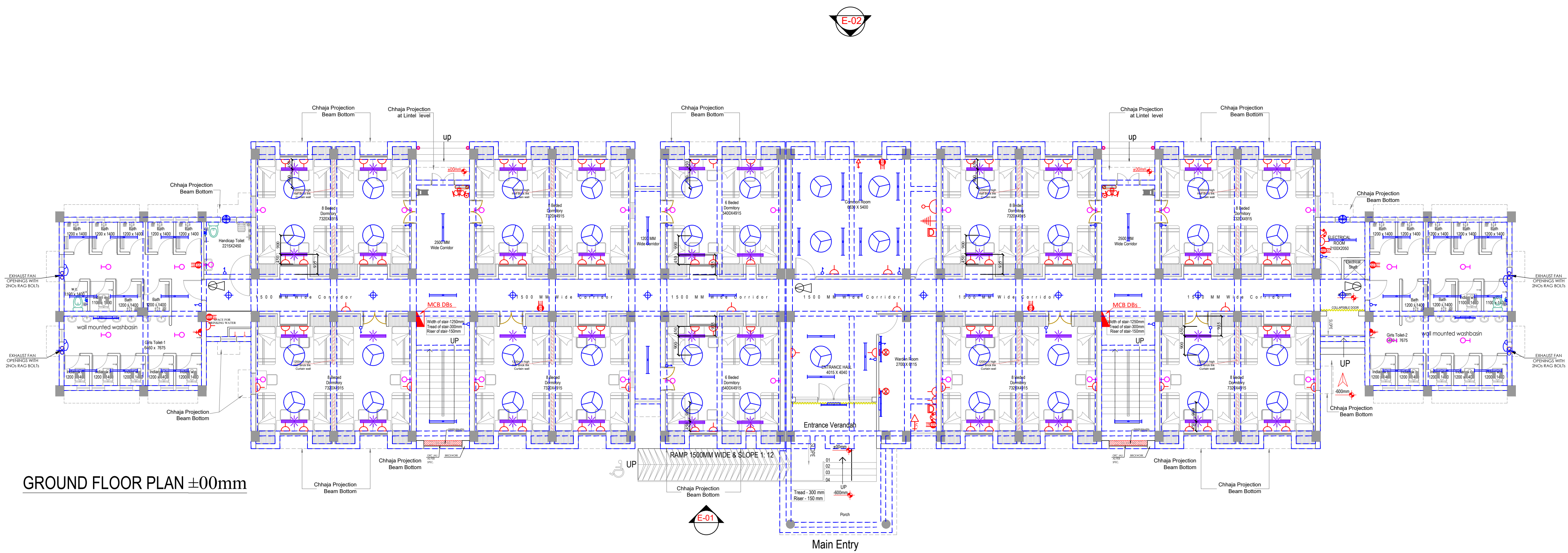
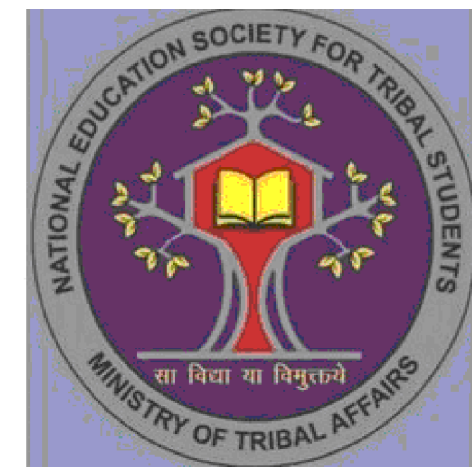
CATEGORY : BOYS 'HOSTEL

DRAWING TITLE : GROUND & FIRST FLOOR PLAN
G+2 BUILDING

DWG. NO.-
EMRS NAME/BH/AR_01

DATE - 09 MARCH 2023

(Signature)
VIAENDER KEMAR
(Signature)
R.K. SINGH
(Signature)
A.P. Keshri
Chief Technical Consultant



GROUND FLOOR PLAN ±00mm

LEGENDS :

SYMBOL	DESCRIPTION
	16-25A POWER PLUG POINT FOR AC UNIT
	15/16A POWER PLUG POINT
	5/6A LIGHT PLUG POINT FOR TV
	TELEVISION POINT
	5/6A LIGHT PLUG POINT
	5/6A LIGHT PLUG POINT WITH SWITCH BOARD
	TELEPHONE OUTLET
	DATA OUTLET

LEGENDS :

SYMBOL	DESCRIPTION
	SWITCH BOARD
	12W LED DOWN LIGHTER
	20W LED WALL MOUNTED TUBE LIGHT
	40W LED WALL MOUNTED TUBE LIGHT
	20W LED CEILING MOUNTED TUBE LIGHT
	CEILING FAN 1200MM
	EXHAUST FAN 300mm DIA METAL BODY
	DISTRIBUTION BOARD
	BATTEN HOLDER WITH 20W LED BULB
	WALL FAN
	BULKHEAD LIGHT
	DOME/BULLET CAMERA

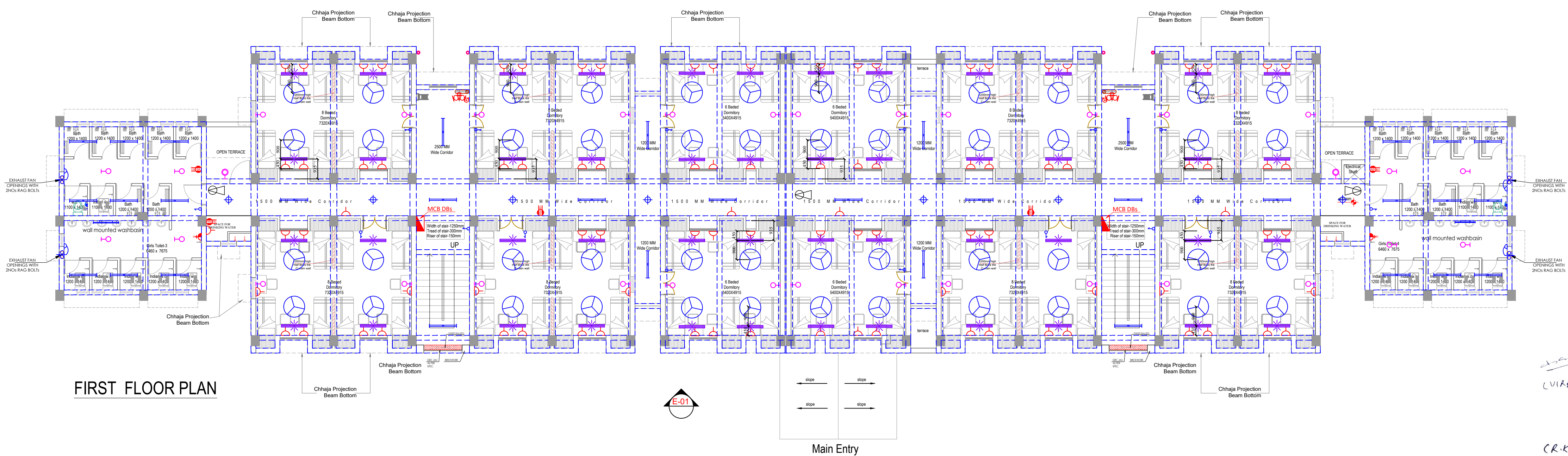
CATEGORY : GIRLS 'HOSTEL

DRAWING TITLE : GROUND & FIRST, SECOND FLOOR
G+2

DWG. NO.-
EMRS NAME/GH/AR_01

DATE - 09 MARCH 2023

A. D. P. Keshri
Chief Technical Consultant



FIRST FLOOR PLAN

ANNEXURE-B

**GENERAL SPECIFICATIONS OF CONSTRUCTION OF EMRS BUILDINGS
&UPGRADATION OF KSPs**

General on MLP: -

- a. **Layout of Building:** All the building units shall be planned judiciously according to contours to minimise excess cutting and filling. The location of buildings shall be placed in such a way that internal road lengths shall be minimum.
- b. **Facing of Building:** Building shall be planned preferably facing North or East.
- c. **Kitchen and Dining** shall be planned preferably in between the Boys and Girls Hostels. Preparation Courtyard of the Kitchen-Dining will be planned at the rear side.
- d. **Archery Ground** shall preferably be aligned with its face sighting towards North.
- e. **Pump Room** shall be centrally located in the campus. In case of hilly region, contours of the site should also be paid attention to take the benefit of flow of water under gravity & to minimise the pumping head.
- f. **Septic tank** shall be in the lower contour area near the building. The top level of septic tank should be well below the plinth of the respective building, so that, due gradient can be maintained in laying the sewer line. The gradient shall be as per IS Code Provision. Septic tank shall be of RCC with size designed as per IS 2470-1 (1985) taking users as 200 nos & retention period as 2 years. Tentative size may be taken as 9.0 (L) x 2.70 (B) x 2.10 m (av.) (H) for the 1st Chamber & 4.50 (L) x 2.70 (B) x 1.70 m (H) for the 2nd Chamber both excluding free board.
- g. **Rain Water Harvesting (RWH)** System shall be near the Sump Well. Sump Well and RWH System shall not be in the vicinity of Septic tank and sewer chamber.
- h. **Internal Roads:** Level of CC Road at entry shall be raised by 150 mm w.r.t. NGL at the entry gate and thereafter it will run in the campus 150 mm moderately or (av.) above the existing contour. Width of CC Road in front of School shall be 5.50 m and thereafter it will be 3.50 m.
- i. **Protection Work:** In case of construction in hilly region, due consideration should be given for safety of structures. If depth of cutting or filling is considerable then required protection measures in the form of retaining walls or stone pitching deemed necessary to be provided to maintain earth at its natural slope and avoid landslides during rains. If depth of cutting or filling is moderate, stone pitching or random rubble masonry retaining wall may be provided as per site condition. When depth of cutting is more than 1.5 m suitable RCC retaining wall may be considered as per the site condition. Location and details of the same to be shown in the MLP.
- j. MLP shall be aligned as per contour indicating retaining walls, stone pitching, if any.
- k. **Sump & Pump:** Sump shall be provided for 50,000 litres capacity in Phase-I with a future provision of 50,000 Litres to be built in Phase-II. Rectangular size Sump should be considered. Pump room with 12.0 Sqm floor area shall be single and will be planned over the sump in Phase I only. The top slab of UG sump shall be minimum 150mm above the NGL/FGL.

General on Detailed Project Report (DPR)

The draft detailed estimate shall be shared first and once it is scrutinized, then only the same may be finally submitted after incorporating corrections/suggestions for approval.

The draft DPR shall be accompanied with

- a. Approved Master Layout Plan duly signed with compliance of pending observation, if any.
- b. Complete Architectural Drawings i.e. Floor plans, Elevations & Sections of the building units.
- c. Detailed Soil Investigation Report along with remarks of the construction agency including feasibility report of the structure at the site corresponding to the soil investigation report. At least, one bore hole should be done near the tentative location of each building unit i.e., School building, Boys' Hostel, Girls' Hostel, Kitchen & Dining, Qtrs area. The location of bore pit shall be clearly marked in the MLP and the Soil Investigation Report.
- d. The DPR must include Structural Drawings of all the buildings including foundation proposal w.r.t. to bearing capacity of the soil. The structural drawings of foundation, all structural members (Columns, beams, slabs, etc) of all EMRS buildings including sump, pump room, ESS, Septic Tank shall be shared with NESTS before sending the same for vetting. The Vetted structural drawings shall be enclosed with

- the DPR. In case vetted copy is not ready, PSU shall enclose finalized structural drawings as per DPR Checklist.
- e. Details of measurement and its proper linking to the respective heads in BOQ and then to the main Detailed Estimate sheet (DE).
 - f. BOQ of EMRS Phase-II and Single-Phase shall be prepared on DSR-2019 with Item Sub-Head Wise (Vertically) and Heads Building & Service Wise (Horizontally). The applicable CPWD Cost Index shall be added as per relevant CPWD Cost Index order. A sample BOQ may be shared to PSUs for uniformity. The BOQ shall be divided into the approved Building & Service components such as School Building, Boys' Hostel, Girls' Hostel, Warden Residences (Boys'), Warden Residences (Girls'), Kitchen & Dining, Principal Quarter, Type III Quarter, Type II Quarter, Security Cabin & Entrance Gate, Electrical Sub Station (ESS), Sump & Pump Room, Septic Tank & Soak Pit, Site Development Cutting & Filling, retaining wall/Stone Pitching, Compound Wall and Roads and other Services such as Plumbing, Fire Fighting Electrical Internal and, Electrical External, etc.
 - g. Cost Index in the estimate shall be supported with Documents from CPWD. In case the CPWD Cost index is not available for the particular location, the Detailed Estimate shall be submitted at par with DSR-2019 without considering Cost Index.
 - h. The correctness in the quantities, rates and items are the responsibility of the concerned PSU. The quantities in the estimate are to be supported by details of measurements, MLP, designs, site conditions, approved drawings, inventories etc.
 - i. The construction agency must ensure that the site is free from encroachment, HT Transmission lines/ HT Poles, forest cover/land etc. while submitting DPR.
 - j. The DPR Checklist cum scrutiny sheet is enclosed at **Annexure-I**.

Soil Investigation

- a. The soil investigation shall be conducted at the major building locations i.e. School Building, Boy's Hostel, Girls' Hostel, Type II/III Quarters etc as per the relevant Guidelines.
- b. Geotagged Photographs and video clips of Soil investigation including N value shall be shared in EMRS WhatsApp's Coordination group from site.
- c. The location of building shall be clearly written in the report against each test pit.
- d. The N value in the Standard Penetration Test shall be obtained at 1.0 m and after this at every 0.5 metre interval upto 3.0 metre, thereafter at the interval of 1.0 metre upto 10 metre depth or till it is required as per soil conditions. During SPT, Un-Disturbed Soil sampling shall be taken, and result obtained shall also be shared with NESTS.
- e. The soil strata (Type of Soil) shall be clearly marked in the report.
- f. The depth of water table shall be clearly indicated in the report.
- g. The safe bearing capacity of soil shall be calculated based on soil parameter applying proper correction factors & safety factor for settlement & shear.
- h. Recommendation of Type and Depth of foundation shall be provided by the Geo-Technical Consultant with name & designation in the summary of the soil report.
- i. The Construction Agency shall ensure that site engineer shall be available while taking reading & sample of soil at the site.
- j. The Soil Laboratory testing shall be done in NABL accredited laboratory/Engineering College only.
- k. If water table is within 1 m of the base of footing, soil shall be checked for Liquefaction potential.
- l. Copy of the soil report shall be certified by the Zonal Head of the PSU.

Structure of Buildings

- a. All structural drawings shall be prepared as per the approved plans, elevations and section of buildings considering the overall functionality of buildings. No deviation in approved plan areas/ facility areas shall be permitted in any case.
- b. **Structural Members:** Size of structural member shall be taken as per the Architectural/ structural requirements of the structure ensuring soundness and stability of the structure.

Layout Planning & Foundation

- a. Plinth of Building shall be 600 mm to 750 mm above the ground level of the road (Finished Road Level) in its front which will be decided depending upon the terrain. Level of the Septic tank shall also be paid attention to while deciding plinth of the building.
- b. Foundation of each building unit shall be as per structural requirement based on the soil investigation report.
- c. Plinth beam of the building shall be kept at ground level just like grade beam with its soffit 300 mm below the Natural Ground Level (NGL) followed by brick work and finally DPC at the plinth level.
- d. Waterproof bitumen painting above plinth beam: Brick work above the plinth beam shall be started only after laying a coat of bitumen painting over the plinth beam.
- e. The locations where rock cutting etc. is unavoidable, the available stones recovered shall be utilized judiciously viz in foundations etc.
- f. Provision of grade slab consisting of RCC M20/1:1.5:3 (1 Cement: 1.5 Coarse Sand: 3 graded stone aggregate 20 mm nominal size) with a very nominal 8 mm Reinforcement @ 250 mm c/c may be considered at the plinth level to prevent settlement in floor. Grade Slab shall be provided over 80 mm PCC 1:5:10 and 100 mm sand filling below it. The filling underside shall be well compacted. The PSU shall ensure that the filling in plinth is well compacted in layers using compactor, etc. The provision of Grade Slab may be considered only in school building excluding ramp area, Hostel Buildings and Kitchen & Dinning excluding Kitchen back courtyard depending upon technical and site-specific requirements
- g. **Ceiling Height of Buildings:** Clear Ceiling height of Buildings shall be as follows;
 - School building - 3.60 metre
 - Kitchen & Dinning - 3.45 metre
 - Hostel - 3.15 metre
 - Warden residence - 3.0 metre
 - Ramp Mumty height - 2.4 metre
 - Principal Quarter - 3.00 metre
 - Type III & Type -II Quarter - 3.00 metre
- h. **External Cladding of Buildings from Ground Level:** School Building: - Only at front face upto bottom of FF Beam (as per Drawing).
- i. **Terrace parapet** of School Building and Hostel shall have height of 1200 mm i/c 50 mm CC coping at the top. Top course of brick work in parapet, sill of window etc shall be bricks on edge. For Kitchen-Dining & Warden Residence etc being inaccessible, it will be 600 mm. 50 mm thick CC coping with slope inward shall be provided over the parapet.
- j. **Locally available Materials:** The climatic conditions and locally available building materials may be considered for design of buildings.
- k. **Water Tank on Terrace:** Domestic water tank shall be provided over the toilet block on a slab at least 750 mm clear above the toilet block roof slab water proof terracing for school and hostel building and it will be supported on columns. Water tank of requisite capacity for fire purpose shall be provided over one of the toilet blocks. Placing of water tank shall be such that the overflow water of fire tank shall feed the domestic water supply tank. In kitchen, only domestic tanks shall be provided supported on columns near the central location of the building unit. Qtrs will also have similar arrangements (without fire tank).

School Building:

1. Facility area

- a. Facility area of rooms, corridor and stairs shall be maintained same as per the standard drawing. Width of stair, corridor, ramp etc shall be maintained in full width without any restriction.
- b. Facility for Person with disabilities: The entire requirement like ramp, hand-rails, tactile flooring, toilets, signage etc. shall be provided. They shall comply to the provisions as per guidelines issued for the person with disabilities.
- c. All the ramp floors will be provided with suitable anti-skid tiles with the provision of tactile tiles & handrails for person with disabilities.



- d. Width of Ramp shall be 1800 mm. Head Room anywhere shall not be less than 2.40 metre.
- e. Corridor Protection Railing of 1050 mm height with brick work in between the columns as per the approved drawings.
- f. Railing to front Ramp and internal stair case shall be 40 mm outer dia in SS 304 grade. The finished top height of the handrail in ramp shall be 900 mm and for staircase 1000 mm.
- g. Rear Stair cases shall have no approach to terrace.
- h. Electrical shaft and FHP shafts shall be provided as applicable. Only Holes/ slit shall be left in slab for taking cables or pipes. Terrace slab will not have any cut in the shaft area.

2. Doors and Windows:

- a. Entrance door of the building shall be provided with powder coated anodised aluminium glazed door with Floor Spring. Steel Collapsible Shutter will be provided additionally for safety purpose.
- b. All doors shall have T-Iron frame 40 x 40 x 6 mm.
- c. Single shutters with 35 mm thick factory-made exterior grade non-Decorative type flush door shutter with teak wood lipping on edges.
- d. Doors of Principal, Vice Principal and Staff Rooms, Toilet Main Doors shall be provided with hydraulic door closer. All the doors shall have rubber floor door stoppers. No floor door stopper to WC/ Bath/ Toilet doors.
- e. Toilets shall have 35 mm factory made machine pressed laminated flush door of exterior grade in single leaf.
- f. School Building shall have MS Glazed windows and ventilators.
- g. Factory Made ISI marked MS glazed Windows as per NESTS approved Drawing as detailed below as detailed below
 - i. Frame - MS Tubular Frame/Hollow Z section Profile fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15×10×10 cm of C.C. 1:3:6 as per respective DSR Item.
 - ii. Shutter- ISI marked Z section Shutter/ Tubular Profile Z Section of respective DSR item including MS grill of 12 mm square bars fixed @ spacing of 10 to 12 cms on Tubular Frame as per the approved drawings. Toilet portion windows/ventilators shall be with frosted glass panes.
 - iii. The windows shall be fitted with the required fixtures like stays and fasteners.
 - iv. The item shall be as per respective DSR item.
- h. The corridor portion will have no windows except specified. Other Rooms shall have ventilators in corridor of size as specified in the drawing just below the floor beams (No separate lintels are required for ventilators).

3. Flooring:

- a. The entrance lobby excluding the internal corridor and extended portion of the entrance platform i/c steps shall be provided with granite stone flooring of approved colour & shade.
- b. Heavy duty paver tiles may be used below porch in the down portion of entrance platform.
- c. Full body (homogeneous) Vitrified floor tile flooring with size not less than 600x600 mm shall be provided in Principal Room, Vice Principal Room and Staff Rooms.
- d. All other floors except WC area and ramp shall be with Kota flooring as per the respective DSR item with marble strips (approx. @ 5% area) and skirting upto 100 mm height.
- e. Treads and risers of stair shall have Kota in single length.
- f. All the ramp floors will be provided with matt finish anti-skid vitrified tiles of size 300 x 300 mm with provision of tactile tiles.
- g. Toilet block shall be provided with anti-skid rectified ceramic floor tiles with size of 300x 300mm or more. The walls shall have glazed ceramic tiles dado, inside WC area upto 900 mm height and for remaining area of toilet block upto 2100 mm height.
- h. Working platforms in labs shall be provided with Granite top with nosing and dado upto 100 mm height. Working Platform in Chemistry Lab may be with acid resistant tiles.
- i. In toilet, oval shaped wash basin shall be provided on RCC platform finished with granite stone.
- j. Corridor shall have outward slope with provision of rain water spout pipe 50 mm diameter in each bay as per flooring layout.

4. Finishing

- a. The external wall (excluding Brick Tile Cladding area) shall be plastered with 18 mm plaster as per respective DSR item and finished with 1 mm thick external white cement-based putty.
- b. The external surface including corridor walls shall be provided with Premium acrylic water proof exterior grade with silicon additive paint.
- c. Inside Walls shall have 12/15 mm plaster and 6 mm in ceiling as applicable.
- d. All RCC surface shall have 6 mm plaster only.
- e. Internal Finishing: Walls and ceiling shall be provided with 1st quality ready mix acrylic distemper.
- f. Walls of corridors (except entrance lobby), stair, ramp upto 1200 mm height to be painted with synthetic enamel paint of approved colour, brand and manufacture.
- g. All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

Hostels:

1. Facility area:

- a. Facility area of rooms, corridor, stairs etc shall be maintained same as per the standard drawing. Width of stair & corridor etc shall be maintained in full without any restriction.
- b. Handicapped toilet shall be provided at ground floor only.
- c. Electrical shaft and FHP shafts shall be provided as applicable. Only Holes/ slit shall be left in slab for taking cables or pipes. Terrace slab will not have any cut in the shaft area.
- d. Railing to front Ramp and internal stair case stair shall be 40 mm outer dia in SS 304 grade. Finished railing height shall be 900 mm.

2. Doors & Windows:

- a. Entrance door shall be provided with powder coated anodised aluminium glazed door with hydraulic door closures. Steel Collapsible door will be provided additionally for safety purpose.
- b. Frame of doors shall consist of T-iron frames 40 x 40 x 6 mm as per respective DSR item.
- c. Hostel will have 35 mm thick non decorative flush doors including teak wood edge lipping (except Wash area) with rubber floor door stoppers and synthetic enamel paints on both sides. Dormitory shall have double leaf doors. The door closer will be provided in the warden office.
- d. Wash Area and Toilets shall have 35 mm factory made machine pressed laminated flush door of exterior grade in single leaf. No rubber floor door stoppers in toilet doors.
- e. Factory Made ISI marked MS glazed Windows as per NESTS approved Drawing as detailed below as detailed below
 - (i) Frame - MS Tubular Frame/Hollow Z section Profile fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 as per respective DSR Item.
 - (ii) Shutter- ISI marked Z section Shutter/ Tubular Profile Z Section of respective DSR item including MS grill of 12 mm square bars fixed @ spacing of 10 to 12 cms on Tubular Frame as per the approved drawings. Toilet portion shall have MS louvered windows/ventilators with frosted glass panes.
 - (iii) The rooms shall also be provided with stainless steel wire (for mosquito) mesh steel shutters fixed in the tubular frame. The glazed window shutters shall open outside and the wire mesh shutters shall open inside. Dormitory corridor windows/ventilators shall be with frosted glass panes.
 - (iv) The windows shall be fitted with the required fixtures like stays and fasteners.

3. Flooring:

- a. Warden Room in Hostel shall be provided with Full body (homogeneous) Vitrified floor tile flooring with size 600x600 mm.
- b. Treads and risers of stair shall have Kota stone slab in single length.
- c. All other floors except WC area shall be in Kota Stone flooring with marble strips (approx. @ 5% area) and skirting upto 100 mm height.
- d. Toilet block shall be also be provided with anti-skid rectified ceramic floor tiles with size of 300mm x 300mm or more. The walls shall have 1st quality glazed ceramic tiles dado, inside WC area upto 900 mm height and for remaining area of toilet block upto 2100 mm height as per respective DSR items.
- e. Flat back wall mounted Wash basins shall be provided.



4. Finishing

- a. External Finishing: The external wall shall be plastered with 18 mm plaster as per respective DSR Item and to be finished with premium acrylic smooth paints with silicon additives.
- b. Internal Finishing: Walls and ceiling shall be provided with 1st qly ready mix acrylic distemper.
- c. Corridors (except entrance lobby), stair, ramp upto 1200 mm height to be painted with synthetic enamel paint of approved colour, brand and manufacture.
- d. All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

Kitchen & Dining:

1. Facility areas:

- a. Facility area of dining hall, kitchen, washing area, etc shall be maintained same as per the standard drawing.
- b. All floors except WC area and ramp shall be in Polished Kota Stone flooring as per respective DSR item with marble strips (approx. @ 5% area) and skirting upto 100 mm height.
- c. Dining Hall shall be provided with 1200 mm height ceramic glazed wall tiles. In Kitchen Hall, wash area and utensil area shall have glazed wall tiles upto 2100 mm height.
- d. WC area shall be provided with anti-skid rectified ceramic floor tiles of size 300x300 mm or more and wall with glazed ceramic tiles upto 1200 mm as per respective DSR items.
- e. Working/Service platforms in Kitchen Hall/ Pantry shall be provided with pre-polished Kota stone topping with proper nosing.
- f. For hand washing, oval shaped wash basin shall be provided on RCC platform finished with granite stone. For drinking water/ washing of utensils in utensil wash area, granite stone trough in full length having width 450 mm and depth 300 mm will be provided.
- g. Floor of utensil wash area shall be anti-skid vitrified tiles of size not less than 300x300 mm.
- h. Kitchen courtyard: Kota Stone flooring shall be provided as per the respective DSR item.
- i. Railing to Ramp at the entrance shall be of 900 mm height having 40 mm outer dia SS 304 grade pipe.
- j. Peripheral wall of the Kitchen Courtyard shall be of brick wall 1200 mm height. There will be MS Grill above 1200 mm height wall in the front and rear courtyard walls. Also, there will be MS grill in the rear wall of the Gas Bank above 1200 mm height.

2. Doors & Windows

- a. Powder coated aluminium door shutters at entry of the Dining Hall shall be in two leaves.
- b. Other doors of Kitchen and Dining will have 35 mm thick non decorative flush doors in single leaf with teak wood edge lipping all-round (except Wash area) with rubber floor door stoppers and synthetic enamel paints on both sides.
- c. Wash Area & toilets shall have 35 mm thick factory pressed Laminated flush doors shutter in exterior grade. No rubber floor door stoppers with doors.
- d. Factory Made ISI marked MS glazed Windows as per NESTS approved Drawing as detailed below as detailed below
 - (i) Frame - MS Tubular Frame/Hollow Z section Profile fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 as per respective DSR Item.
 - (ii) Shutter- ISI marked Z section Shutter/ Tubular Profile Z of respective DSR item including MS grill of 12 mm square bars fixed @ spacing of 10 to 12 cms on Tubular Frame as per the approved drawings. Toilet portion shall have MS louvered windows/ventilators with frosted glass panes. The windows shall be fitted with the required fixtures like stays and.
 - (iii) The Dining & Kitchen shall also be provided with stainless steel wire (for mosquito) mesh steel shutters fixed in the tubular frame. The glazed window shutters shall open outside and the wire mesh shutters shall open inside. Dormitory corridor windows/ventilators shall be with frosted glass panes. The windows shall be fitted with the required fixtures like stays and fasteners.
 - (iv) The windows shall be fitted with the required fixtures like stays and fasteners.
 - (v) The item shall be as per respective DSR item.
- e. Railing to Ramp at the entrance shall be of 900 mm height provided with 40 mm outer dia SS 304 grade.

3. Finishing

- a. External Finishing: The external facia shall be plastered with 18 mm plaster as per respective DSR item.
- b. The external surface shall be provided with premier acrylic water proof exterior grade paint. The external surface including courtyard walls shall be provided with premium acrylic water proof exterior grade with silicon additive paint.
- c. Internal Finishing: Walls and ceiling shall be provided with first quality acrylic distemper (ready-mix).
- d. All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

Principal Quarter

1. Doors & Windows:

- a. Frame of doors shall consist of T-iron frames 40 x 40 x 6 mm as per respective DSR item.
- b. Single shutters with 35 mm thick factory-made exterior grade non-Decorative type flush door shutter with teak wood lipping on edges with rubber floor door stoppers and synthetic enamel paints on both sides.
- c. Entrance door shall be 35 mm factory made machine pressed laminated flush door of exterior grade in single leaf along with MS safety grill door opening outside.
- d. Toilets shall have 35 mm factory made machine pressed laminated flush door of exterior grade in single leaf. No rubber floor door stoppers to doors.
- e. Factory Made ISI marked MS glazed Windows as per NESTS approved Drawing as detailed below as detailed below
 - (i) Frame - MS Tubular Frame/Hollow Z section Profile fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15×10×10 cm of C.C. 1:3:6 as per respective DSR Item.
 - (ii) Shutter- ISI marked Z section Shutter/ Tubular Profile Z of respective DSR item including MS grill of 12 mm square bars fixed @ spacing of 10 to 12 cms on Tubular Frame as per the approved drawings. Toilet portion shall have MS louvered windows/ventilators with frosted glass panes. The windows shall be fitted with the required fixtures like stays and.
 - (iii) The Rooms shall also be provided with stainless steel wire (for mosquito) mesh steel shutters fixed in the tubular frame. The glazed window shutters shall open outside and the wire mesh shutters shall open inside. Dormitory corridor windows/ventilators shall be with frosted glass panes. The windows shall be fitted with the required fixtures like stays and fasteners.
 - (iv) The windows shall be fitted with the required fixtures like stays and fasteners.
 - (v) The item shall be as per respective DSR Item.
- f. Balcony shall have MS Railing of 900 mm height over 150 mm high brick wall finished with Kota stone at the threshold coping.

2. Flooring:

- a. All Room except kitchen shall be provided with Vitrified Tiles of size 600x600 mm.
- b. Treads and risers of stair shall have Kota stone slab in single length.
- c. Kitchen including utility shall be provided with rectified glazed ceramic anti-skid floor tiles of size not less than 300 x 300 mm and 1st quality ceramic glazed wall tiles dado over kitchen platform upto 600mm height whereas in utility area dado shall be 1200 mm height.
- d. Toilet/Bath shall be provided with anti-skid rectified ceramic floor tiles with size of 300mm x 300mm or more. The walls shall have glazed ceramic tiles dado, inside WC area upto 900mm height and for bath upto 2100 mm height as per respective DSR items.
- e. The Kitchen platform shall be with Granite Stone fixed over RCC slab.
- f. Flat back wall mounted Wash basins shall be provided.

3. Finishing

- a. External Finishing: The external face with 18 mm plaster as per respective DSR item and to be finished with premium acrylic water proof exterior grade with silicon additive paint.
- b. Internal Finishing: First quality acrylic distemper (ready-mix).
- c. All wood work & steel work shall be provided with synthetic enamel paint of the approved brand & manufacture.



Warden Residences, Type III Quarter & Type II Quarter

1. Doors & Windows:

- a. Frame of doors shall consist of T-iron frames 40 x 40 x 6 mm as per respective DSR item.
- b. Single shutters with 35 mm thick factory-made exterior grade non-Decorative type flush door shutter with teak wood lipping on edges (except Wash area) with rubber floor door stoppers and synthetic enamel paints on both sides.
- c. Toilets shall have 35 mm factory made machine pressed laminated flush door of exterior grade in single leaf.
- g. Factory Made ISI marked MS glazed Windows as per NESTS approved Drawing as detailed below as detailed below
 - (i) Frame - MS Tubular Frame/Hollow Z section Profile fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15×10×10 cm of C.C. 1:3:6 as per respective DSR Item.
 - (ii) Shutter- ISI marked Z section Shutter/ Tubular Profile Z of respective DSR item including MS grill of 12 mm square bars fixed @ spacing of 10 to 12 cms on Tubular Frame as per the approved drawings. Toilet portion shall have MS louvered windows/ventilators with frosted glass panes. The windows shall be fitted with the required fixtures like stays and.
 - (iii) The Rooms shall also be provided with stainless steel wire (for mosquito) mesh steel shutters fixed in the tubular frame. The glazed window shutters shall open outside and the wire mesh shutters shall open inside. Dormitory corridor windows/ventilators shall be with frosted glass panes. The windows shall be fitted with the required fixtures like stays and fasteners.
 - (iv) The windows shall be fitted with the required fixtures like stays and fasteners.
 - (v) The item shall be as per respective DSR Item.
- h. Balcony shall have MS Railing of 900 mm height over 150 mm high brick wall finished with Kota stone at the threshold coping.
- i. Railing of internal stair case shall be of MS of finished height 1000 mm.

2. Flooring:

- a. All Rooms except kitchen shall be provided with Vitrified Tiles of size 600x600 mm.
- b. Treads and risers of stair shall have Kota stone slab in single length.
- c. Kitchen including utility shall be provided with rectified glazed ceramic anti-skid floor tiles of size not less than 300mm x 300mm and 1st quality ceramic glazed wall tiles dado over kitchen platform upto 600 mm height whereas utility area shall be 2100 mm height.
- d. Toilet block shall be provided with anti-skid rectified ceramic floor tiles with size of 300mm x 300mm or more. The walls shall have glazed ceramic tiles dado, inside WC area upto 900 mm height and for bath upto 2100 mm height as per respective DSR items.
- e. The Kitchen platform shall be with Polished Kota Stone Slab fixed over RCC slab.
- f. Flat back wall mounted Wash basins shall be provided.


3. Finishing

- a. External Finishing: The external face shall be plastered with 18 mm and to be finished with premier acrylic water proof exterior grade with silicon additive paint.
- b. Internal Finishing: Walls and ceiling shall be provided with first quality acrylic distemper (ready-mix).
- c. All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.


(Narendra Kumar)


(Sandeep Sood)


(Pawan Kumar Garg)


(P.K. Agrawal), NESTS
12.3.23


Chief Consultant (Civil), NESTS
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SPECIFICATION : HOSTEL DORMITORY & RESIDENTIAL QUARTERS- Annexure-B-1

SN	Item	Hostel Dormitory	Warden Residence/ Type III & Type II Quarters	Principial Quarters & Guest House.
1	Foundation & Structure	As per structural requirements based on soil investigation report. The design shall vary as per soil conditions.		
2	Superstructure			
	(a) Structure	RCC framed & Filler walls of Aerated Cement Concrete (ACC) / Cellular Concrete Block(CLC)/ Clay Brick work/Fly-ash brick		
	(b) Internal Partition	Half brick thick masonry in ACC/CLC/Fly-ash Bricks		
	(c) Clear Ceiling height	3.15 Mt	3.00 Mts	
	(d) Plinth Height	Plinth height of buildings shall be kept as 60cm from the adjoining ground level/plinth protection level . Where plinth height becomes more then 60 cm special care shall be taken. If plinth height more than 1.20 mtrs., approval of the competent authority may be sought.		
3	DOORS & WINDOWS			
	(a) FRAME			
	(i) Door Frame	Providing and fixing T-iron frames of 40×40×6 mm with 15×3 mm lugs 10 cm long embedded in cement concrete block 15×10×10 cm of C.C. 1:3:6 (As per D.S.R.-2019 item no. 10.13.1)		
	(ii) Window /Ventilators Frame & Shutters	Factory Made ISI marked MS glazed Windows as per NESTS approved Drawing as detailed below as detailed below: (i) Frame - MS Tubular Frame/Hollow Z section Profile fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15×10×10 cm of C.C. 1:3:6 as per respective DSR Item. (ii) Shutter- ISI marked Z section Shutter/ Tubular Profile Z Section of the respective DSR item including MS grill of 12 mm square bars fixed @ spacing of 10 to 12 cm on Tubular Frame as per the approved drawings. Toilet portion shall have MS louvered windows/ventilators with frosted glass panes. (iii) The Rooms shall also be provided with stainless steel wire (for mosquito) mesh steel shutters fixed in the tubular frame. The glazed window shutters shall open outside and the wire mesh shutters shall open inside. Dormitory corridor windows/ventilators shall be with frosted glass panes. (iv)The windows shall be fitted with the required fixtures like stays and fasteners. (v) Item shall be as per resective DSR Item.		
	(b) Door Shutters			
	(i) Main Doors	i) Powder coated Aluminium Glazed Doors with fixed glazing on either side. ii) M.S. collapsible steel shutters (for safety measure) to main entrance lounge at GF.	(i) Factory made Machine pressed pre-laminated flush door exterior grade with teak wood lipping on edges. The lamination sheet used shall be decorative high pressure of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S. The door shall be fixed to T Iron frame with SS Hinges. (ii) Safety door MS tubular box section styles and rails frame i/c stainless steel Mosquito Proof Jali.	
	(ii)Other Doors	Single shutters with 35 mm thick factory made exterior grade Non- Decorative type flush door shutter with teak wood lipping on edges & finished with one coat of wood primer followed by two or more coat of synthetic enamel paints. (As per D.S.R.- item no. 9.21.1 & 9.23 for flush door)		
	(iii) Bath, WC, Toilets Doors	Factory made Machine pressed pre-laminated flush door exterior grade with teak wood lipping on edges. The lamination sheet used shall be decorative high pressure of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S. The door shall be fixed to T Iron frame with SS Hinges.		
	(c) Hardware & Fittings	Powder coated/anodized Aluminum/ SS fittings		
4	FLOORING			
	(i) Living/Drawing Room, Bed Rooms, Dining & Family Lounge with matching grouting of joints	All flooring Kota stone combination with marble strip except WC/toilets area with matching grouting of joints	600 mm x 600 mm Vitrified Tile (Homogenous Body)Flooring laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) jointing with grey cement slurry @ 3.3 kg/sqm including grouting the joints with white cement and matching pigments etc., complete.	600 mm x 600 mm Vitrified Tile (Homogenous Body)Flooring laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) jointing with grey cement slurry @ 3.3 kg/sqm including grouting the joints with white cement and matching pigments etc., complete.

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	(ii) Kitchen		Anti skid Ceramic/ vitrified tiles of size not less than 300 mm × 300 mm with water absorption less than 0.08% laid with 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.	Anti skid Ceramic/ vitrified tiles of size not less than 300 mm × 300 mm with water absorption less than 0.08% laid with 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.
	(iii) Common circulation area	Kota stone slab flooring with marble strips (upto 50mm width) in required pattern including rubbing and polishing complete		
	(iv) Staircase	Kota stone in single length up to 1.05 metre of treads & risers.		
	(v) Toilets / Bathroom	Glazed ceramic anti-skid of size not less than 300×300 mm with matching grouting of joints.		
	Dado & Skirting			
	(i) Skirting in rooms and other areas.	100 to 150 mm height skirting matching with floor materials		
	(ii) Kitchen Platform/ Dado	NA	(i) Platform- Kota Stone (ii) Dado over kitchen platform-Ist Quality Ceramic Glazed wall tiles of approved sizes from 600 height from platform	(i) Platform- Granite (ii) Dado over kitchen platform-Ist Quality Ceramic Glazed wall tiles of approved sizes from 600 height from platform
	(iii) Toilets/bathrooms/ WC Dado	1st quality ceramic glazed wall tiles of size not less than 200mm × 300mm inside WC area upto 900mm height & for remaining area of toilet block shall be upto 2100mm height.	1st quality ceramic glazed wall tiles of size not less than 200mm × 300mm inside WC area upto 900mm height & for remaining area of toilet block shall be upto 2100mm height.	1st quality ceramic glazed wall tiles of size not less than 200mm × 300mm inside WC area upto 900mm height & for remaining area of toilet block shall be upto 2100mm height.
5	FINISHES			
a)	Internal Walls	(i) All walls to be painted with low VOC Acrylic washable distemper. (ii) Synthetic enamel paint on all wood works and steel works	(i) All walls to be painted with low VOC Acrylic washable distemper. (ii) Synthetic enamel paint on all wood works and steel works.	(i) All walls to be painted with low VOC Acrylic washable distemper. (ii) Synthetic enamel paint on all wood works and steel works
b)	External Walls	Synthetic enamel paint on all wood work & steel work. Premium Acrylic Smooth exterior paint with Silicone additives or its equivalent		
6	Hand Rail	Stair Case Railing -SS	Stair Case Railing -MS	NA
7	Roof	RCC Slab brick with Koba treatment (Item No. 22.7.1 of DSR-19).		
8	Stair Case External Façade	External Wall shall have MS Glazing with MS tubular frame		
9	Toilets for Physically disabled person	One each for boys and girls (specification as per NBC)	NA	NA
10	Overhead Water Tank(OHT)	8000 Litres on over each toilet block	500-750 Litres per Quarter	1000 Litre
11	Internal plumbing	Internal plumbing of water supply lines shall be with CPVC pipe of required sizes as per respective DSR Item		
12	Internal Sewerage	Internal plumbing of Sewerage system shall be with UPVC pipes required sizes as per respective DSR Item		

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SPECIFICATION : SCHOOL BUILDING & KITCHEN & DINING - Annexure- B-2

SN	Item	School Building	Kitchen & Dining
1	Foundation & Structure	As per structural requirements based on soil investigation report. The design shall vary as per soil conditions.	
2	Superstructure		
	(a) Structure	RCC framed & Filler walls of Aerated Cement Concrete (ACC) / Cellular Concrete Block(CLC)/ Clay work/Fly-ash brick	
	(b) Internal Partition	Half brick thick masonry in ACC/CLC/Fly-ash Bricks	
	(c) Ceiling height (Clear)	3.60 Mts/Floor Height-3.75 Metre	3.45 Mts/ Floor Height(3.60 Metres)
	(d) Plinth Height	Plinth height of all the buildings shall be kept as 75 cm from the adjoining ground level/plinth protection level for other building it should be kept as 60 CmWhere plinth height becomes more then 60 cm special care shall be taken. In case plinth height more than 1.20 mtrs, approval of the competent authority may be sought.	
3	DOORS & WINDOWS		
	(a)FRAME		
	(i)Door Frame	Providing and fixing T-iron frames of 40×40×6 mm with 15×3 mm lugs 10 cm long embedded in cement concrete block 15×10×10 cm of C.C. 1:3:6 (As per D.S.R.-2016 item no. 10.13.1)	
	(ii) Window /Ventilators Frame & Shutters	Factory Made ISI marked MS glazed Windows as per NESTS approved Drawing as detailed below as detailed below (i.) Frame - MS Tubular Frame/Hollow Z section Profile fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15×10×10 cm of C.C. 1:3:6 as per respective DSR Item. (ii.) Shutter- ISI marked Z section Shutter/ Tubular Profile Z Section of the respective DSR item including MS grill of 12 mm square bars fixed @ spacing of 10 to 12 cm on Tubular Frame as per respective DSR item including MS grill of 12 mm bar fixed @ spacing of 10 to 12 cm on Tubular Frame as per the approved drawings. (iii) Toilet portion windows/ventilators shall be with frosted glass panes. (iv) The windows shall be fitted with the required fixtures like stays and fasteners. (v) Item shall be as per respective item	Factory Made ISI marked MS glazed Windows as per NESTS approved Drawing as detailed below as detailed below (i) Frame - MS Tubular Frame/Hollow Z section Profile fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15×10×10 cm of C.C. 1:3:6 as per respective DSR Item. (ii) Shutter- ISI marked Z section Shutter/ Tubular Profile Z Section of the respective DSR item including MS grill of 12 mm square bars fixed @ spacing of 10 to 12 cm on Tubular Frame as per the approved drawings. (iii) Toilet portion shall have MS louvered windows/ventilators with frosted glass panes. (iv) The rooms shall also be provided with stainless steel wire (for mosquito) mesh steel shutters fixed in the tubular frame. The glazed window shutters shall open outside and the wire mesh shutters shall open inside. Dormitory corridor windows/ventilators shall be with frosted glass panes. (v) The windows shall be fitted with the required fixtures like stays and fasteners. (vi) Item shall be as per respective DSR Item.
	(b) Door Shutters		
	(i) Main Doors	(i) Powder coated Aluminium Glazed Doors with fixed glazing on either side and on the top below floor beam (ii) M.S. collapsible steel shutters at main entrance (for safet measure) only	(i) Powder coated Aluminium Glazed Doors with fixed glazing on either side and on the top below floor beam (ii) M.S. collapsible steel shutters at main entrance (for safet measure) only
	(ii)Other Doors	Single shutters with 35 mm thick factory made exterior grade Non- Decorative type flush door shutter with teak wood lipping on edges & finished with one coat of wood primer followed by two or more coat of synthetic enamel paints. (As per D.S.R.- item no. 9.21.1 & 9.23 for flush door)	
	(iii) Bath, WC, Toilets Doors	Factory made Machine pressed pre-laminated flush door exterior grade with teak wood lipping on edges. The lamination sheet used shall be decorative high pressure of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S. The door shall be fixed to T-Iron frame with SS Hinges.	
	(c) Hardware & Fittings	Powder coated/anodized Aluminum/ SS fittings	
4	Flooring , Skirting, Dado, Counter/pantry, court yard		
	a) Flooring		
	(i) Main entrance hall, common circulation area.	Mirror polished Kota stone with marble strip	
	(ii)Other	Classroom - (Kota stone slab flooring with marble strips (upto 50mm width) in required pattern including rubbing and polishing complete)	Dining Hall & Kitchen Area - (Kota stone slab flooring with marble strips (upto 50mm width) in required pattern including rubbing and polishing complete)
	(iii)Toilet/WC/Bath (including common circulation area of toilet block)	Glazed ceramic anti-skid of size not less than 300×300 mm with matching grouting of joints.	
	(iv) Staircase/steps	Kota stone in single length up to 1.05 metre of treads & risers.	
	(b) Skirting : In rooms and other area	100 to 150 mm height skirting matching with floor materials	
	(c) Dado		

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	(i) In toilets/WCs /Baths (including common circulation area of toilet block)	Ist Quality Ceramic Glazed wall tiles of approved sizes from floor up to 900 mm height in toilet inside and remaining area of toilet block upto 2100 mm height.	Ist Quality Ceramic Glazed wall tiles of approved sizes from floor up to 2.1 metre height except in WC., which shall be 900 mm dado.	
	d) Counter/ pantry/Diining	At Laboratory platform: Granite stone with nosing	Kota stone for kitchen and pantry platform.	
	d) Kitchen/Pantry	NA	Ist Quality Ceramic Glazed wall tiles of approved sizes from floor up to 2.1 metre height	
	e)Diining Area	NA	Ist Quality Ceramic Glazed wall tiles of approved sizes from floor up to 1.20 metre height	
	f) Open Court Yard	Flag Hoisiting /Central court yard of School Building: (i)Top Course: 60 mm thick factory made cement concrete interlocking paver block of M-30 grade made by block making machine with strong vibratory compaction etc. in required colour, pattern, 50 mm thick compacted bed of course sand etc.... (as per item no. 16.68, DSR-19) (ii) Based course: 7.50 cm thick CC (1:5:10). (iii) The top level of Court yard shall be 15 cm from formation level of School Building.	Kitchen back courtyard with Kota Stone Slab flooring and front Dinning courtyard with anti skid virtified tile 300 x 300 mm flooring	
5	ROOFING		Kitchen back side courtyard and Dinning Front Courtyard : Precoated GI profile sheet roofing	
6	FINISHING			
	(a) External	(i) Premium Acrylic Smooth exterior paint with Silicone additives or its equivalent (ii) Synthetic enamel paint on all wood work & steel work. (iii) 1 mm thick cement based putty on external face leaving CC tile cladding area.	Synthetic enamel paint on all wood work & steel work. Premium Acrylic Smooth exterior paint with Silicone additives or its equivalent	Synthetic enamel paint on all wood work & steel work. Premium Acrylic Smooth exterior paint with Silicone additives or its equivalent
	(b) Internal	(i) All walls & ceiling to be painted with low VOC Acrylic washable distemper. (ii) Synthetic enamel paint on all wood works and steel works.	(i) All walls & ceiling to be painted with low VOC Acrylic washable distemper. (ii) Synthetic enamel paint on all wood works and steel works	
8	Railing	(i) Stair Case & Ramp- SS 304 Grade (ii) Corridor in between Columns - 1350 mm height MS grill/railing as per approved drawings	(i) Stair Case & Ramp- SS 304 Grade	
9	Roof Water Treatment	Brick Coba Treatment as per DSR-19, item No. 22.7.1.		Brick Coba Treatment as per DSR-19, item No. 22.7.1.
10	Roof Water Tank	10,000 Litres over each toilet block for general use and 10,000 Litres for files in one toilet block only for Fire Fighting purpose	10,000 Litres	
11	Cooking platform	-	RCC as per design and drawings.	
12	Pantry	-	RCC as per design and drawings.	
13	Laboratories Counter/ platform	RCC as per design and drawings.	NA	
14	Ramp for Physically disable person	One no. (specification as per NBC)	One no. (specification as per NBC) on each entrance	
15	Toilets for Physically disable person	One each for boys and girls (specification as per NBC)	NA	
16	Stair Case External Façade	Only Two Front Stair Case shall run upto mumty, The back Stair Case shall stop to FF Level. Stair Case External Wall shall have MS Glazing with MS tubular frame	MS Ladder shall be provided to reach the roof for maintenance purpose	
17	Internal plumbing	Internal plumbing of water supply shall be with CPVC pipe with respective DSR Item		
18	Internal Sewerage	Internal plumbing of Sewerage sysem shall be with UPVC pipes		

Details scope & specification of Development works and Campus Boundary wall:Annexure- B-3		
Development/external services work for EMRS/EMDBS Campus:-		
Sl. No.	Name of work	Details
1	Preparation of play fields:	
	(i) Playfield of Size 190mx110m for foot ball, cricket, hockey etc. including 400mtrs/200mtrs.- running track: 1 no. (Size may vary as per availability of land)	Leveling with good earth after filling/cutting of earth. The quantities of earth filling/cutting shall be worked out in detailed calculation basis as per initial level, contour plan. Finished level shall be 15 higher than the adjoining ground level so that water logging can be avoided.
	(ii)Basket Ball fields – 2 nos.	(a) Size-40mx30m: Leveling with good earth after filling/cutting of earth. The quantities of earth filling/cutting shall be worked out in detailed calculation basis as per initial level, contour plan. Finished level shall be 15 cm. higher than the adjoining ground level, so that, water logging can be avoided. (b) Size 30mx18m CC court with pole, board, basket etc. (i) Base concreting CC (1:5:10) of 7.50 cm thick (ii) Top course Concreting (M-20 grade designed mix) of 10 cm thick. (iii) Pole, board, Basket: As per SAI standard.
(iii) Khokho/ Volley Ball court: 2 nos. (Size-40mx30m for each)	Leveling with good earth after filling/cutting of earth. The quantities of earth filling/cutting shall be worked out in detailed calculation basis as per initial level, contour plan. Finished level shall be 30 cm. higher than the adjoining ground level, so that, water logging can be avoided.	
2	Internal roads, paths and culverts:	
	(i) Internal roads (Cement Concrete roads) :	(i) Width: Shall be 3.50 mtrs. + 1 mtrs. Shoulder/side berm of each side. (ii) Road shall be constructed up to the all building units. (iii) Base Course CC (1:5:10) of 10 cm thick. (iv) Top Course (M-20 grade designed mix) of 15 cm thick. (v) Finished/top level of the edge of the roads i.e. shoulder level shall be 15 cm. higher than the adjoining ground level.
	(ii) Pathways :	(i) 2.00 mtrs. width + 1 mtrs. shoulder/side berm each side of the pathways. (ii) Pathways shall be provided to connect the buildings/ permanent infrastructure to nearby internal roads. (iii) No pathways shall be provided on side of the roads. (iv) Top Course: 60 mm thick factory made cement concrete interlocking paver block of M-30 grade made by block making machine with strong vibratory compaction etc. in required colour, pattern, 50 mm thick compacted bed of course sand etc.... (as per item no. 16.68, DSR-16) (v) Base course: 7.50 cm thick CC (1:5:10). (vi) Kerb stone on edge (50 mm thick, 250 mm height (for which shall be embedded underground): Factory Made kerb stone of M-25 grade cement concrete (as per item no. 16.69, DSR-16). (vii) Finished/top level of the edge of the paths shall be 15 cm. higher than the adjoining ground level.
	(iii) Culverts:	As per actual requirement.
3	External water supply:	
	(i) Tube/open well i/c 2 Nos. submersible pump 7.5 HP(preferably Solar Powered)& cabling etc. complete.	Shall be executed as per availability of underground water after examination by the local PHED or any other related Govt. agencies i.e. Central Ground Water Board, Local PHED etc. The yield of water source shall be 15000 LPH or more.
	(ii) Overhead Tank	Required in all building
	(iii)Under Ground Sump:	100000 ltr. capacity with 2 nos. centrifugal pumps including one standby.
	(iv) Pump house	(i) Maximum size-3.0mx3.00m, (ii) Plinth area-11.97 sqm. (iii) Floor height 2.90 mtrs. (iv) Building shall be RCC framed structure with slop roof and shall be executed over Under Ground Water Tank. (v) Flooring -CC (vi) Internal Painting- White Wash (vii) Door- Laminated Machine Pressed Flush Door (viii) Windwow - Steel Glazed Door
	(v) Water filtration plant (if required)	Shall be executed if required, after conducting necessary water test through local PHED or any other related Govt. agencies.
(vi)GI/CI water supply distribution line	External water supply from borewell to sump and from sump to Overhead tank shall be with GI Pipes of required sizes	
4	External Electrification:	

	(i) Substation building	(i) Plinth area-52.80 sqm. (ii) Floor height 4.25m (iii) Building shall RCC framed structure with slop roof. (iv) Flooring -CC (vi) Internal Painting- White Wash (vii) Door- Laminated Machine Pressed Flush Door (viii) Windwow - Steel Glazed Door
	(ii) LT Panel	Fabricated from CPRI approved workshop.
	(ii) External wiring/cable connection using U.G. cables from sub-station to feederpillar, building & pump house and necessary connection from DG set to infrastructures.	200 KVA/ 250KVA sub-station depending on the location of the School. However capacity of sub-station may be confirmed after consultation with concern state electricity board.
5	External sewerage System:	
	(i) Septic Tank & Soak pit	(i) Proper planning shall be made before preparation of Preliminary estimate. (ii) Septic tank shall be designed as per the user and as per CPWD specification. (iii) Septic tank shall be RCC including walls as per IS dimension for 200v users for school, Girls Hostel and Boys' Hostel each (iv) Sufficient soak pit or dispersion channels shall be provided as per the soil condition. (v) Two Stack System for Hostels and Kitchen & Dinning Block and One Stack Syatem for school & other buildings.
	(ii) External sewerage line (RCC NP2 pipe)	Proper planning shall be made before preparation of Preliminary estimate.
6	5.0 H.P. Sewerage Pump	Air Cool, mounted on trolley with 10m. suction & 10m. del. Flexible pipe
7	25 KVA DG Set	(i) Including erection, installation, testing, commissioning etc. (ii)Essential connection to various building shall be provided as per latest NVS guideline/ order.
8	Retaining wall / Breast wall (if required)	Proper planning shall be made before preparation of Preliminary estimate.
9	Strom Water Drain	(i) Proper planning shall be made after examining the levels of the campus very carefully before preparation of Preliminary estimate. Rain water pipe collect from the buildings shall be connected with the campus storm water drain. (ii) Road side drain shall be avoided. (iii) Level of out fall drains of EMRS is always kept higher than the highest water level of Nallah/Natural drainage where water will be disposed off finally.
10	Rain water harvesting	Proper planning shall be made before preparation of Preliminary estimate.
(B) Campus Boundary Wall including Main Gate and Chowkider Hut:		
Sl. No.	Name of work	Details
1	Campus Boundary wall	(i) Boundary wall shall be 1.80 mtrs. height masonry wall + 0.8 mtrs. fencing with 600 mm dia. concertina coil over masonry wall. (ii) The total height of Boundary wall shall be 2.60 mtrs. (iii) The campus boundary wall shall be of RCC column, plinth beam, top band and filler wall in brick work.
2	Chowkider Hut/Sentry Booth	(i) Plinth area-5.11 sqm. (ii) Floor height 2.90m. (iii) Building shall RCC framed structure with slope roof. (iv) Other specification as per Annexure-V of PAR-19 for Type-I qtrs.
3	Main Gate - Depending upon layout two gates, one for school and other for residential area may be provided.	(i) Width & Height of Main Gate: As per NBC (ii)Wicket Gate: As per NBC





ANNEXURE-C

Schedule of Quantities: Furniture						
Item No	Specification	Items	Quantity	Unit	3-D Indicative Photographs	
1	Knock down class room dual desk is specially designed for rugged use. The desk are made of pressed formed MS CRCA section & CRCA tube fitted with pre laminated Particle board top, seat & back with Machine pressed PVC edge banding 2 mm thick glued with industrial adhesive and diffused with board monolithically. Hanger for water bottle and bag. Space for keeping pen, pencil and scale. The overall appearance of the product shall be as per indicative photographs attached: DESK TOP – 18mm Both Side laminate(BSL) PreLam Partical Board 400 mm wide BENCH TOP – 18mm BSL PreLam Partical Board 330 mm wide FRONT SHELF – 18mm BSL PreLam Partical Board 300(Wide)mm. BENCH BACK – 18mm BSL PreLam Partical Board 250(W)mm. Modesty Panel – 18mm BSL PreLam Partical Board 300 (W)mm. Supporting Understructure- Left Hand and Right Hand FRAME consisting of vertical, horizontal and Cross Member made up of 25 x 1.2 mm outer dia MS ERW tube conforming to IS Grade 4923 and shall be finished with epoxy polyester powder coated finish with DFT 50-60 Micron conforming IS 13871:1993. The support system of Bench and Shelf shall also made up of made up of 25 x 1.6 mm outer dia MS ERW tube conforming to IS Grade 4923 and shall be finished with epoxy polyester powder coated DFT 50-60 Micron conforming IS 13871:1993. Resting support plate made of Table top, provided on the top of vertical members shall be made up of 3mm Thk CRCA sheet Conforming IS-Grade 513:2008. Legs shall be fitted with PVC Leveler. Construction is fully welded with MIG welding and assembled using M6 trilobularscrews(As per DIN 7500)with Zn blue plating. Compact top, seat and back panels are assembled using M6 Countersunk Trilobular screws(as per DIN 7500) with Zn Black Plating (As per IS 1573:1986).	Dual Desk				
a)	Dual Desk-(Overall Size 1100 (W) x 930-950(D) x 650 (H) - Desk Depth 390-400 mm. Seat Height 375 mm for Classes 6-8)		96	Each		
b)	Dual Desk-(Overall Size 1100 W x 940-975(D)x 750 H - Desk Depth 400 mm.Seat Height 450 mm for Classes 9-12)		160	Each		
2	Supply and installation of Office table as per approved design and as directed by Engineer-in-charge Work Top - Work top shall be made 25mm thick Pre-lam MDF board conforming to IS 12406:2003 with post foming on front and back and machine pressed PVC edge banding 2 mm thick glued with industrial adhesive and diffused with board monolithically on other two sides Understructure- C-type leg shall be made of 50X50X1.6mm thick vertical member and 40x40x1.6mm thick M.S. pipe of Horizontal/Cross member conforming IS-Grade 4923 shall be finished shall be finished with epoxy polyester powder coated DFT 50-60 Micron. Legs shall be fitted to the ground with M8 screw leveler with the height adjustment up to 12mm to 15mm.Cross members shall be mounted by end brackets made of 3mm thick IS 513: 2008 CRCA sheet shall be finished with epoxy polyester powder coated DFT 50-60 Micron conforming IS 13871:1993. Wire management-Electrical wires shall be carried from horizontal/ vertical duct made of 0.7mm CRCA sheet conforming to IS 513:2008. Switch Plate or Cromet depending upon requirement shall also be provided for electrical/LAN connection on table top. Modesty Panel -Modesty Panel of height 450 mm shall be made of 1.5mm thick CRCA sheet conforming to IS 513: 2008 and shall be finished with epoxy polyester powder coated DFT 50-60 Micron. Storage body- Storage top shall also be made of 25mm thick Pre-lam MDF board conforming to IS 12406:2003 with post forming on two sides and machine pressed PVC edge banding 2 mm thick glued with industrial adhesive and diffused with board monolithically on other two sides. The body of storage units shall be made of 0.8mm thick CRCA sheet and skirting shall be of 1.2mm thick CRCA sheet conforming to IS 513: 2008 finished with epoxy powder coated of DFT 50-60 Micronconforming IS 13871:1993. Internal Shelves shall be also made up of 0.8mm CRCA sheet conforming to IS 513: 2008 and shall be mounted with the Metal shelf support pin made of 2mm thick CRCA sheet with Nickel or Chrome plating. M10 screw leveler is given with height adjustment up to 12mm to 15mm.	Principal & Vice Principal Table				
2a	Table of Size 1800 W x 750 D x 750 H with Side Storage of Size 900W x 450W X 750H and Back Storage 1800 W x 450 D x 750H	Principal Table	1	Each		
2b	Table of Size 1650 W x 750 D x 750 H with Side Storage of Size 900W x 450W X 750H and Back Storage 1800 W x 450 D x 750H	Vice Principal Table	1	Each		
2c	Office table with overall Size of desk 1350 x 750 x 750 mm & Side Storage Unit of size 900 x 450 x 750 mm	Office Table	6	Each		
3	Office Table made of Pre-laminated table top of size 1199 X 590 X 735 mm with one drawer unit made of 0.5mm thick CRCA sheet. The table top shall be supported over legs consists of MS ERW round tube of 25.4 x 1.2mm and Cross Horizontal Members including Leg rest of 25.4 x 1.2 mm MS ERW tube. All steel components be shall be finished with epoxy polyester powder coated DFT 50-60 Micron.	Teacher's table	22	Each		
4	Supply and Installation of 12 Seater Meeting Table of overall size 3600 x 1350 (Average) x 750 mm (Knock down construction). Table Top and Gable End shall be made of 25mm thick Pre-Laminate Partical Board with 2mm thick Machine pressed PVC edge banding glued with industrial adhesive and monolithically diffused. Supporting Understrucur consists of 2 Metal C Legs on either ends of table support frame made of 50 x 50 x 1.6 mm MS ERW tube and One number Wire Carrier leg at middle of 50X50X1.6 mm. 4 numbers Horizontal connector of 40mm X 40mm X 1.6mm thick MS Pipe between supporting vertical legs. All The MS Pipes and Sheet shall be finished with epoxy powdercoated of DFT 50-60 Micron. C typed metal legs shall be kept 150 mm inside from from end of table. WIRE MANAGEMENT - The Vertical (snake) & Horizontal(cable tray) wire carriers are placed below worktop, made up of CRCA with epoxy powder Coating & Fixed to the understructure with specially designed brackets. Provision of placing switch plates/Cromet in the cable tray.	Meeting Table	2	Each		







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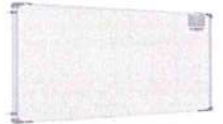

5	Supply and Installation of Library Table in sizes of 2400 L x 900 W x 750 H mm consisting of following specification:- Work Top - Work top shall be made 25mm thick Prelam (One Side laminated) particle board conforming to IS 12823: 1990 post formed edge moulding on two sides and 2 mm thick Machine pressed PVC edge banding glued with industrial adhesive and monolithically diffused with board on other two sides. Understructure Supporting frame consists of two Metal C Legs on either ends of table made up of 50X50X1.6 mm and are joined by two numbers Horizontal connector made of 40mm X 40mm X 1.6mm thick MS Pipe between supporting vertical legs. All Metal Pipes and Sections are made up of CRCA steel conforming to IS 513:2008 and shall be shall be finished with epoxy polyester powder coated DFT 50-60 Micron. C typed metal legs shall be kept 150 mm inside from end of table. Legs shall be fitted to the ground with M8 screw leveler with the height adjustment up to 12mm to 15mm(Payment Shall be per running metre length)	Library Table	10	Each	
6	Supply and Installation of Computer Work Station of unit Size 750 mm X 600 mm X 750 mm. Work Top- Work top shall be made 25mm thick Prelam particle board conforming to IS 12823: 1990 with post formed edge moulding on one side and 2 mm thick Machine pressed PVC edge banding glued with industrial adhesive and monolithically diffused with board on other three sides. Understructure supporting frame consist of Metal C Legs type made up of 50 x 50 x 1.6 mm and Wire Carrier leg of 50X50X1.6 mm in placed alternatively and are connected with horizontal cross connectors of 40mm X 40mm X 1.6mm thick MS Pipe between supporting vertical legs. The MS Pipes shall be finished with epoxy powdercoated with DFT of 50-60 Micron conforming to IS 13871:1993. Legs shall be fitted to the ground with M8 screw leveler with the height adjustment up to 12mm to 15mm. Wire management-The Vertical /Electrical duct & Horizontal Cable tray (wire carriers) are made of CRCA & fixed to the understructure below worktop with specially designed brackets. Provision for fixing Switch plates are provided in the cable tray for easy access through wire manganer or PVC grommet. Screens / privacy panel:- Screen height will be 300 above work-top made of prelam particle board/White Board alternatively as approved by Engineer-in-Charge.	Computer Work Station	36	Per Unit	
7	Supply and Installation of Library Open book Shelf (Single Side) of Sizes 1800 mm x 900 mm x 316 mm body made up of 0.8mm thick CRCA Sheet and skirting of 1.2mm thick CRCA sheet conforming to IS 513: 2008 with epoxy powder coated finish (DFT minimum 50-60 micron). Shelves shall also be made up of 0.8mm CRCA sheet conforming to IS 513: 2008 and fixed with CRCA sheet brackets of approved design. Number of adjustable shelf shall be five with six loading levels. Load bearing capacity of the shelf shall be 30Kgs UDL. The construction shall be aesthetically appealing completely welded. M10 screw leveler is given with height adjustment up to 12mm to 15mm	One Side book Shelf	20	Per Unit	
8	Supply & Placing of Glassdoor Storage of Size 916mm(W)x486mm(D)x1980mm(H). It should have shelf thickness of 0.7 mm, Back thickness of 0.8mm, Door thickness of 0.8mm (high yield strength) and all other components shall have a thickness of 0.9mm. These components shall be made of CRCA 'D' grade high yield strength as per IS:513. The glass door storvel shall have a brass handle and a 2 way locking mechanism with shooting bolt. It should have a height wise adjustable shelf mounting which shall have a Uniformly Distributed Load Capacity of max 40 Kg. It should also have a M10 Screw type Leveller with Hex plastic base.All metal components would be epoxy polyester powder coated DFT 50-60 Micron conforming to IS 13871:1993	Steel Glass Door Almira	6.00	Per Unit	
9	Supply & Placing of Metal Almira of Size 916mm(W)x486mm(D)x1980mm(H). It should have the shelf thickness of 0.7 mm, Back thickness of 0.8mm, Door thickness of 0.8mm (high yield strength) and all other components shall have a thickness of 0.9mm. These components shall be made of CRCA 'D' grade high yield strength as per IS:513. The Storvel Plain should have a Mazak handle and a Three way locking mechanism with Shooting Bolts. It should have a height wise adjustable shelf mounting which shall have a Uniformly Distributed Load Capacity of max 40 Kg. It shall have 4 no.s full shelves. A4 size box file(85 W x 285 D x 345 H mm) can be stored vertically on three shelves and the clear space above fourth shelf is 240mm. It should also have a M10 Screw type Leveller with Hex plastic base. All metal components would be powder coated with epoxy powder coating of 50-60 micron DFT Confirming IS 13871:1993	Steel Almira	20.00	Per Unit	
10	Supply and Installation of One 2- Seater Sofa (1550 X 785 X 675 mm) one 3-Seater Sofa of overall size (1950 X 785 X 675 mm),understructure is made up of Natural Hard wood battens and 12mm THK COMMERCIAL PLYWOOD. High density foam is used for seat and back , The seat is made up of PU foam with density 32+/-2 Kg/m3 having an additional top layer of PU foam with density 28+/-2 Kg/m3, upholstered with leatherette. The back is made up of 28+/-2 Kg/m3 with additional top layer of PU foam with density 23+/-2 Kg/m3, upholstered with eatherette. LEATHERITE -ABRASION RESISTANCE in excess of 60,000 cycles, 600 to 650 GSM PVC composition Legs are made of SS 304 GRADE	Sofa Set 2 Seater + 3 Seater	1.00	Per Set	

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11	Supply and installation of two 2-Seater Sofa (1550 X 785 X 675 mm) ,understructure is made up of Natural Hard wood battens and 12mm THK COMMERCIAL PLYWOOD. High density foam is used for seat and back ,The seat is made up of PU foam with density 32+/-2 Kg/m3 having an additional top layer of PU foam with density 28+/-2 Kg/m3, upholstered with leatherette. The back is made up of 28+/-2 Kg/m3 with additional top layer of PU foam with density 23+/-2 Kg/m3, upholstered with eatherette. LEATHERITE -ABRASION RESISTANCE in excess of 80,000 cycles, 600 to 650 GSM PVC composition Legs are made of SS 304 GRADE	Sofa Set 2 Seater + 2 Seater	2.00	Per Set	
12	Supply and installation of Steel bed of overall size 1800-1825(L)x870(W)x650/450mm(H) consisting of following specification- HEADBOARD: Head Board consists of MS tube of 25 x 50 x 1.6 mm thick vertical legs connected with 2 number horizontal members of MS ERW tube 25x50x1.6mm thick and one number MS ERW tube of 25 x 25 x 1.6 mm at middle conforming to IS-Grade 4923. Construction is partially welded with MIG welding conforming to IS standard IS 816:1969 and is also tested as per the IS grade IS 822:1970. Legs shall be fitted to the ground with M8 screw leveler with the height adjustment up to 12mm to 15mm. Head Board and Tail board are connected to middle frame with 2 mm thick CRCA bracket conforming to IS 513:2008. Connecting bracket is welded on vertical pipe. End to end dimensions for the Headboard is 870(W) x 650mm (H). TAILBOARD: Tail Board consists of vertical legs of MS ERW tube of 25x50x1.6mm thick connected with one number horizontal MS pipe 25x50x1.6mm thick Conforming IS-Grade 4923. Construction is partially welded with MIG welding conforming to IS standard IS 816:1969 and welding is also tested as per the IS grade IS 822:1970. Legs shall be fitted to the ground with M8 screw leveler with the height adjustment up to 12mm to 15mm .To connect Tailboard with middle frame 2mm thick CRCA sheet bracket is used conforming IS 513:2008 with powder coated of 45 Micron. Connecting bracket is welded on vertical pipe. End to end dimensions for the Tailboard is 870(W)x450mm(H). Whole Assembly is finished with epoxy powder coated of a minimum thickness of 45 Micron. Bed Staging- Head board and Tail board are joined together by bed stage made up of 1.2 mm thick CRCA steel supported over steel framework consisting of two outer MS Pipe 25x50x1.6mm thick and one MS pipe of 25x25x1.6mm thick in middle conforming IS-Grade 4923. In addition to that there will be four numbers 25 x25 x 1.6 mm MS ERW tubes as a cross bracing welded to each other by MIG welding. End to end dimensions for the middle frame is 1700(L)x870mm(W). FINAL ASSEMBLY: Headboard, Tailboard, and middle frame shall be assembled and connected by 4 Nos of connecting Brackets & M8x16 Allen Bolt. The bed stage shall be 10-12 mm below side frame to provide proper fixity to mattress. End to end dimensions for the bed is 1800 (L)x870(W)x650/450mm(H) Finish- All metal components are given anti-rust surface treatment and are finished with epoxy polyester powder coated DFT 50-60 Micron conforming to IS 13871:1993.	Metal Bed	246	Each	
13	Hard foam mattress with 40 density size 1750 x 820 x 100 of All India existed standard make with BIS certification with Pillow and 100% cotton bedsheet.	Bedding	246	Each	
14	Metal Table with Integrated Storage 1750(L) x 600(W) x 750(H) for two students Work Top Shall be made up of 25mm thick Prelam (OSL) particle board conforming to IS 12823: 1990 with post formed edge moulding on one side and 2 mm thick Machine pressed PVC edge banding glued with industrial adhesive and monolithically diffused with board on other three sides. Supporting Structure of table top consists of 4 vertical Legs of ERW tube 40 x40 x 1.6 mm and one storage unit at middle. The vertical legs are connected with 2 cross horizontal members of size MS ERW Tube of 40 x 40 x 1.6 mm provided at top. The table shall have provisions of foot rest made up of 25 x25 x1.2 mm ERW pipe fitted in between two vertical legs and also support the storgae unit & acts as bracing member. All MS ERW pipes are pipe shall conform to IS grade IS 4923 and shall be finished with epoxy polyester powder coated DFT 50-60 Micron Conforming IS 13871:1993. Drawer Unit: SPECIFICATIONS :- Table shall have 2 numbers of Metal Storage consisting of Shutter of size consisting of 350 (W) x 550 (D) x 280 (H) mm Pad Lock provision. All metal component including shutter and Shelf shall be made of 0.8mm thick CRCA conforming to IS grade 513:2008 and shall be powder coated with epoxy powder coating of 50 micron DFT Conforming IS 13871:1993.	Metal Table with Integrated Storage 1750(L) x 600(W) x 750(H).	120	Each	
15	SS Dining Table consists of Dining Top is made up of and 1 mm thickness Stainless steel sheet of SS 304 Grade with overall dimension of 2400(L) X 760(D) X 750(H). The table top is reinforced with a 20 mm HDHMR Board. Dining top sheet shall be extended to the sides for a depth of 24 mm in all directions including , edge rounding, grinding and finishing ,etc all complete . The Table top shall finish in such a manner to avoid any sharp edges. Stool Seats are made of 300 mm dia SS 202 Grade formed Plates of 1 mm thickness welded over 3 mm thick MS Plate. Supporting understructure of table consists of 4 number C legged frame made up of 40 x40 x1.6 mm ERW tube and are connected to 6 numbers horizontal members of MS ERW tube 40 x 40 x 1.6 mm. The supporting vertical member of each stool seat consists of MS ERW tube 40 x 40 x 1.6 mm and is connected to C legged frame of table top. All Metal components of entire assembly confirm to IS 4923. Both the horizontal and vertical pipes are welded together by MIG welding conforming to IS standard IS 816:1969 and is tested for welding conforming to IS 822:1970. All CRCA Comonents would be shall be finished with epoxy polyester powder coated DFT 50-60 Micron conforming IS 13871:1993. Understructure height will be 725mm from the ground, and the stool height will be 500mm from the ground.	8 Seater SS Top Fixed Canteen Table 2400 x 750	4	Each	
16	SS Dining Table consists of Dining Top is made up of and 1 mm thickness Stainless steel sheet of SS 304 Grade with overall dimension of 1800(L) X 760(D) X 750(H). The table top is reinforced with a 20 mm HDHMR Board. Dining top sheet shall be extended to the sides for a depth of 24 mm in all directions including , edge rounding, grinding and finishing ,etc all complete . The Table top shall finish in such a manner to avoid any sharp edges. Stool Seats are made of 300 mm dia SS 202 Grade formed Plates of 1 mm thickness welded over 3 mm thick MS Plate. Supporting understructure of table consists of 3 number C legged frame made up of 40 x40 x1.6 mm ERW tube and are connected to 4 numbers horizontal members of MS ERW tube 40 x 40 x 1.6 mm. The supporting vertical member of each stool seat consists of MS ERW tube 40 x 40 x 1.6 mm and is connected to C legged frame of table top. All Metal components of entire assembly confirm to IS 4923. Both the horizontal and vertical pipes are welded together by MIG welding conforming to IS standard IS 816:1969 and is tested for welding conforming to IS 822:1970. All CRCA Comonents shall be finished with epoxy polyester powder coated DFT 50-60 Micron conforming IS 13871:1993. Understructure height will be 725mm from the ground, and the stool height will be 500mm from the ground.	6 Seater SS Top Fixed Canteen Table 1800 x 750	16	Each	
17	Supply and installation of Lab Stool Seat made up of 300 mm dia SS 202 Grade formed Plates of 1 mm thickness welded over 3 mm thick MS Plate. The Stool seat is supported by four legs 19x19x1.2mm SQUARE Pipe. Stool shall be provided with foot rest made of 19 x 19 x 1.2 mm thick MS Tube at a height of 100 mm from ground. Height of stool from the ground shall be 540. Legs are provided with PU/PVC leveller at the bottom. All MS Components are conforming to IS 4923 and CRCA Components are conforming to IS 513:2008 finished with epoxy powder coated finish (DFT Minimum 45 micron) Conforming IS 13871:1993.	Lab Stool	91	Each	

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18	<p>Supplying & placing in position Executive Chair as per indicative photograph and specification: SEAT/BACK ASSEMBLY: The seat and back should be made up of 1.2 ±0.1cm. thick hot-pressed plywood and upholstered with fabric upholstery covers and moulded Polyurethane foam. The back foam should be designed with contoured lumbar support for extra comfort. The seat has extra thick foam on front edge to give comfort to popliteal area. BACK SIZE 47.5 cm. (W) x 69.5 cm (H) SEAT SIZE 47.0 cm. (W) x 48.0 cm. (D) 2.. HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane foam should be moulded with density = 45±2 kg/m3 and hardness load 16 ± 2 kgf for 25% compression. 3. ARMRESTS :The one-piece armrests should be injection moulded from black Co-polymer Polypropylene. 4. CENTER TILT SYNCHRO mechanism: The mechanism should be designed with the following features: • 360° revolving type. • Upright-position locking • Tilt tension adjustment • Seat/back tilting ratio of 1:3. 5.PNEUMATIC HEIGHT ADJUSTMENT: The pneumatic height adjustment has an adjustment stroke of 12.0 ±0.3cm. 6.TELESCOPIC BELLOW ASSEMBLY The bellow should be 3 piece telescopic type and injection moulded in material of black Polypropylene. 7.PEDESTAL ASSEMBLY:The pedestal should be injection moulded in black 33% glass-filled Nylon-66 and fitted with 5 nos. twin wheel castors. The pedestal should be 66.3 ±0.5cm. pitch-center dia. (76.3 ±1.0cm with castors). 8.TWIN WHEEL CASTORS:The twin wheel castors should be injection moulded in Black Nylon.</p>	Bravo High Back Chair	1	Each	
19	<p>1.SEAT/BACK ASSEMBLY: The seat and back should be made up of 1.2 ±0.1cm. thick hot-pressed plywood and upholstered with fabric upholstery covers and moulded Polyurethane foam. The back foam should be designed with contoured lumbar support for extra comfort. The seat has extra thick foam on front edge to give comfort to popliteal area BACK SIZE 47.5 cm. (W) x58.0 cm (H) SEAT SIZE 47.0 cm. (W) x 48.0 cm. (D) 2. HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane foam should be moulded with density = 45±2 kg/m3 and hardness load 16 ± 2 kgf for 25% compression. 3. ARMRESTS :The one-piece armrests should be injection moulded from black Co-polymer Polypropylene. 4. CENTER TILT SYNCHRO mechanism: The mechanism should be designed with the following features: • 360° revolving type. • Upright-position locking • Tilt tension adjustment • Seat/back tilting ratio of 1:3. 5.PNEUMATIC HEIGHT ADJUSTMENT: The pneumatic height adjustment has an adjustment stroke of 12.0 ±0.3cm. 6.TELESCOPIC BELLOW ASSEMBLYThe bellow should be 3 piece telescopic type and injection moulded in black Polypropylene. 7.PEDESTAL ASSEMBLY:The pedestal should be injection moulded in black 33% glass-filled Nylon-66 and fitted with 5 nos. twin wheel castors. The pedestal should be 66.3 ±0.5cm. pitch-center dia. (76.3 ±1.0cm with castors). 8.TWIN WHEEL CASTORS:The twin wheel castors should be injection moulded in Black Nylon.</p>	Bravo Medium Back Chair	1	Each	
20	<p>1.SEAT/BACK ASSEMBLY: The seat and back should be made up of 1.2 ±0.1cm. thick hot-pressed plywood and upholstered with fabric upholstery covers and moulded Polyurethane foam. The back foam should be designed with contoured lumbar support for extra comfort. The seat has extra thick foam on front edge to give comfort to popliteal area. BACK SIZE 47.5 cm. (W) x58.0 cm (H) SEAT SIZE 47.0 cm. (W) x 48.0 cm. (D) 2.HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane foam should be moulded with density = 45±2 kg/m3 and hardness load 16 ± 2 kgf for 25% compression. 3. ARMRESTS :The one-piece armrests should be injection moulded from black Co-polymer Polypropylene. 4. TUBULAR FRAME: The powder coated (DFT 40-60 microns) tubular frame should be cantilever type & made of 2.54 ±0.03cm. x 0.2 ±0.016cm.thick MS ERW Tube.</p>	Visitor Chair	37	Each	
21	<p>1)SEAT/BACK ASSEMBLY: The seat and back should be made from 1.0±0.1cm. thick hot pressed ply and should be true moisture and bore resistant commercial plywood and upholstered with P.U. foam and fabric. BACK SIZE: 42.0cm. (W) X 26.5cm. (H) SEAT SIZE: 42.0cm. (W) X 42.0cm. (D) 2)HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR Polyurethane foam should be moulded with density =45±1-2 kg/m3 and Hardness load 16 ± 2 kgf for 25% compression. 3)UNDERSTRUCTURE ASSEMBLY : The assembly mainframe made of 0 2.54 ±0.03cm. x 0.2 ±0.016cm.thick MS ERW tube and a welded leg tube made of dia. 0 2.54 ±0.03cm. x 0.2 ±0.016cm.thick MS ERW tube to form the complete assembly which should be black powder coated (DFT 40-60 microns) conforming to IS 13871:1993.</p>	Chair without arm	393	Each	
22	<p>Supply and installation of Metal Lockers with Cam Lock - 381W x 381D x 1831H with 4 Lockers. Body-LH and RH Side and back panel is made up of 0.8mm thick CRCA sheet conforming to IS 513:2008 which is having standard dimension 1831 x380mm. Shelf hanging bracket is welded on both the side panel by spot welding. Shelf hanging bracket is made up of 0.8mm thick CRCA sheet conforming to IS 513:2008. front frame top and bottom part made up 0.8mm thick CRCA sheet conforming to IS 513:2008 and horizontal part is made up 1mm thick CRCA sheet conforming to IS 513:2008. On a front frame horizontally provision is given at a common distance to hold shutter bracket. Locker's top is made up of 0.8mm thick CRCA sheet conforming IS 513:2008 which is having standard dimension 375 x378mm. Shelf is also made up of 0.8 mm CRCA sheet conforming to IS 513:2008. Shutter- Is made up on 0.7mm thick CRCA sheet conforming to IS 513:2008. All the shutter are hung on shutter pin and shutter bracket, louvers are given in shutter for air flow. PVC flush handle and name plate shall be provided for handling and for name plate tagging. Standard PAD/CAM lock is used for locking each shutter. The bodies including shelves are given anti-rust surface treatment & are powder coated with epoxy polyester powder coating of DFT 50-60 Micron conforming to IS 13871:1993.</p>	Personal Locker Unit	8	Each	
23. A	<p>Super White writing grade resin coated writing surface conforming to International Standards. A 100% smooth and 100% scratch-free surface shall ensure maximum pleasure of writing. The surface can also be used for sticking magnets or magnet impregnated objects Satin-finish alloy aluminium (6063-T6) frame and precision engineered paper honeycomb core to make the board 100% warp-free and 100% flat. Can be mounted in landscape as well as portrait orientation on a wall with the help of built-in wall hanging clips Excellent erasability with no ghost-marks, high scratch-resistance with easy- wipe properties and maximum readability with minimum glare shall be provided.</p>	Magnetic White Board- 6' x 4'	4	Each	
23. B	<p>'Green' writing grade melamine writing surface (chalk sheet) conforming to IS:2046/1997. A 100% clean and 100% scratch-free surface shall be provided. Satin-finish alloy aluminium (6063-T6) frame and precision engineered paper honeycomb core shall be provided to make the board 100% warp-free and 100% flat. Can be mounted in landscape as well as portrait orientation on a wall with the help of built-in wall hanging clips. Excellent erasability with no ghost-marks, high scratch-resistance with easy- wipe properties and maximum readability with minimum glare shall be provided. Board Size: 3x4 Feet (90x120 CM).</p>	Melamine Surface Non-Magnetic Chalk Board- 6' X 4'	18	Each	

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ANNEXURE-D

SL	Description of works	SIZE	PICS	Qty
01	<p>SS STOCK POT RANGE 16Ga. S.S. 304 GR Top.with all side turned down 50mm & in 12mm, Top and body secured to 38mm x 38mm x 3mm welded M.S. frame work. Exterior 20 Ga. 304 FR S.S. cladding. 1 no. 400mm x 400mm Cast iron grate (Removable) 1 no. H.P. burner with pilot lamp. 1 no. 20 Ga. S.S. drip tray with Integral handle. Built in pressure Controller regulator. 38mm SQ pipe legs. With adjustable bullet feet. 100mm setback Body/legs for Gas pipe routing.</p>	24 X 24 X 26		3
	<p>SS 2 BURNER INDIAN COOKING RNGE 16 SWG. S.S. 304 GR Top.with all side turned down 50mm & in 12mm, Top and body secured to 12/25mm x 75mm x 25/12mm # 1.6 mm Thick S.S. hat type welded Channel frame work. Exterior 20 SWG. 304 FR S.S. cladding. TWO (2) no. 400mm x 400mm Cast iron grate (Removable) TWO (2) no. H.P. burner with pilot lamp. TWO (2) no. 20 SWG. S.S. drip tray with Integral handle. Built in pressure Controller regulator. 38mm SQ pipe legs. With adjustable bullet feet. 100mm setback Body/legs for SWGs pipe routing.</p>	44 X 24 X 34		1
02	<p>SS SINGLE SINK UNIT 16 Ga. S.S. 304 GR Top. 150mm High Rear splash . Top secured to 12/25mm x 75mm x 25/12mm # 1.6 mm Thick S.S. hat type welded channel frame work. Top provide One (1) no. 450mm x 450mm x 250mm deep # 16 Ga. S.S. 304 GR sink, Sink Complete with 50mm dia lever handle operated waste outlet. (04) no. 38mm SQ S.S. legs. With adjustable feet. With three side cross bracing.</p>	24 X 24 X 34+6		1
03	<p>SS TILTTING TYPE BULK COOKER Inner Cell of bottom 4 mm & side wall 1.5 mm Stainless Steel 304 grade, Outer - made of 18 swg SS 304 grade, Lid - 18 swg SS 304 grade with Heavy Duty Spring loaded for Easy open & close with SS Handle, Panels - made of 20 swg SS 304 grade, Stand - SS Pipe 50mm x 50mm,16swg. Tilting arrangement - On wheel with Gear arrangement and Interlock Brake by Penium to prevent extra tilting during the Cooking period. For Water - One Swivel Type Sink Cock fitted with S S pipe Long Nipple to Connect Existing Water Point. 1 no. H.P. burner with pilot lamp.</p>	200 LTRS		1
04	<p>SS TILTTING TYPE BOILING PAN Inner Cell of bottom 4 mm & side wall 3 mm Stainless Steel 304 grade, Outer - made of 18 swg SS 304 grade, Lid - 18 swg SS 304 grade with Heavy Duty Spring loaded for Easy open & close with SS Handle, Panels - made of 20 swg SS 304 grade, Stand - SS Pipe 50mm x 50mm,16swg. Tilting arrangement - On wheel with Gear arrangement and Interlock Brake by Penium to prevent extra tilting during the Cooking period. For Water - One Swivel Type Sink Cock fitted with S S pipe Long Nipple to Connect Existing Water Point. 3 no. "V" type H.P. burner with pilot lamp</p>	200 LTRS		1
05	<p>SS SPICE TROLLY 16 Ga.304 S.S. top all side turned up 50mm , Four (4) no. 100mm dia uprights on Castors. Two (2) noFull width 18 Ga. S.S. 304 Bottom shelves.</p>	18 X 24 X 34		2

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Senior Technical Consultant

06	SS WORK TABLE WITH 1 BS 16 Ga. 304 S.S. Top. All sides turned down 50mm & in 12mm. Top And body secured to 12/25mm x 100mm x 25/12mm S.S. hat type welded channel 18 Ga. S.S. 304 Bottom shelves. Four (04) no. 38mm sq S.S. legs. With adjustable bullet feet.	44 X 24 X 34		7
07	CHAPATI HOT PLATE Full 12 mm thick M.S. Plate with LHS puffer plate Exterior 20 Ga. S.S. 304 cladding. Built in pressure Controller regulator. 38mm SQ 16 Ga. S.S. pipe legs with adjustable bullet feet. Four (4) no. "V" type H.P. burner with pilot lamp. Smooth Plate.	52 X 26 X 34		2
08	SEMI AUTOMATIC CHAPATI MAKING MACHINE Capacity: 800- 1000 Pcs/ hrs. Gas Operated, Electric Load : 0.75 KW, 220V.	82 X 77 X 50		1
13	CONVEYOR TYPE TOSTER Power : 1,5 kw, 220V	STD		2
15	SS 4 DOOR VERTICAL CHILLER Exterior/Interior # 20 Ga. 304 S.S. cladding. Body secured to 12/25mm x 100mm x 25/12mm # 1.6 mm Thick S.S. welded channel frame work, without paint. Internal temp is 0 deg to + 4Deg Celsius. 18 GA. S.S. Four (4) Nos. half size Insulated self closing type S.S. doors, complete with handle, gasket Emerson Compressor & Controls. .adjustable bullet feet 1 KW 220 V AC	48 X 28 X 78		2
16	DEEP FREEZER 50mm thick P.U. foam on all sides. 1 KW 220 V AC	500 LTRS		1
17	DEEP FREEZER 50mm thick P.U. foam on all sides. 1 KW 220 V AC	300 LTRS		1
19	DRY MASALA GRINDER Capacity : 5 kg. Power : 1/2 hp, 220V	5 KG		1










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Senior Technical Consultant

20	PULVERISER Power : 2 hp, 220V	2 HP		1
22	DOUGH KNEADER Capacity : 20 ltrs Power : 2 hp, 220V	20 LTRS		1
23	WET MASALA GRINDER Capacity : 10 ltrs. Power : 1.5 hp, 220V	10 LTRS		1
25	SS 6 VESSEL HOT BAIN MARIE WITH 1/1 GN PAN WITH FRONT TRAY RAIL 16 Ga. S.S. 304 Top. Top and body secured S.S.welded frame work. 1No.225mm deep tank 16 Ga.304 S.S. Bain Marie complete with water outlet, 4.0 k.w. heating element, 6 no. GN 1/1 Pan, 150mm deep with lid. Front Pipe Trai Rail Full length 18 Ga. S.S. 304 Bottom shelves. Electrical panel complete with thermostat, on off switch & light indicator. 4 No. 38mm sq. S.S. legs with adjustable bullet feet...	84 X 26+12 X 34		4
27	SS PLATFROM TROLLY 16 Ga.304 S.S. top all side turned up 50mm , Four (4) no. 100mm dia uprights on Castors.	34 X 24 X 34		3
28	SS KITCHEN UTILITY TROLLY 16 Ga.304 S.S. top all side turned up 50mm , Four (4) no. 100mm dia uprights on Castors. Two (2) noFull width 18 Ga. S.S. 304 Bottom shelves.	34 X 24 X 34		2
29	SS POT RACK - 4 SHELF 38mm x 38mm x 16 304 Ga. S. S. squre pipe upright with adjustable bullet feet Four 20mm x 20mm x 16 Ga. S. S. squre pipe Ga. 304 S.S. Shelves. 4 no. S.S. shelves welded to S.S. square pipe uprights.	60 X 30 X 66		2
30	SS STORAGE RACK - 4 SHELF Shelve 3 sides TURNED up 40mm & front turned down 25mm & in 12mm. 38mm x 38mm x # 14 Ga. S. S. angle upright with adjustable bullet feet 18 Ga. 304 S.S. Shelves. Four no. S.S. shelves	44 X 16 X 66		6

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Senior Technical Consultant

	PVC PALLET	48 X 40 X 8		4
39	POTATO MILLER Capacity : 20 kg. Power : 2 hp, 220V	20 KG		1
KITCHEN VENTELATION SYSTEM				
V1	SS HOOD WITH SS FILTER 304 GRADE 22 GA. Welded Body Construction. Removable 20 GA.S.S "V" section, measuring 510*510*50 mm thick, in full length w/bottom of filters set in continuous channel. To be suspended on ceiling with hanger rods.	54 X 30 X 24		1
V2	SS HOOD WITH SS FILTER 304 GRADE 22 GA. Welded Body Construction. Removable 20 GA.S.S "V" section, measuring 510*510*50 mm thick, in full length w/bottom of filters set in continuous channel. To be suspended on ceiling with hanger rods.	36 X 30 X 24		3
V4	SS CANOPY HOOD 22 GA. Welded Body Construction. To be suspended on ceiling with hanger rods.	60 X 60 X 14		
V5	GI DUCTING FOR HOT AIR SUCTION 22 GA. GI ducting size as per CFM 20 GA. GI grill Air Adjustable handle	50 FT APPROX		500
V6	GI DUCTING FOR FRESH AIR INTAKE 22 SWG. GI ducting size as per CFM	5 HP CENTRIFUGAL		1
KITCHEN LPG SYSTEM				
L1	10 X 2 = 20 CYLINDER LPG GAS MANIFOLD SYSTEM WITH ALL FITTINGS COMPLITE SET	20 CYLINDER		20
L2	1/2" DIA LPG PIPE LING FROM MANIFOLD TO ALL LPG EQUIPMENTS WITH CONNECTION COMPLITE SET	160 FT APPROX		200


P K Garg
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A D P Keshri
Chief Technical Consultant

ANNEXURE-E

UNDERTAKING ON QUALITY CONTROL MEASURES

This to undertake that following Quality Control measures & specification shall be followed in the construction of Eklavya Model Residential School at, District, State

1. CPWD specifications vol. I & ii with upto-date corrections/amendments (Civil -2019 & Electrical -2013)
2. CPWD Minimum quality Assurance (QA) plan considering all provisions under Para 53.2 of CPWD work manual 2014 and test required as per mandatory tests/contract schedule of events for various buildings/infrastructure i.e., of Civil, Electrical and Mechanical works as outlined in the work description (Annexure-I to Annexure V)
3. Inspection Checklist issued by NESTS for site inspection
4. DELHI SCHEDULE OF RATE for item details/specification
5. Preferred make list.
6. NESTS approved Architectural Drawings (Plan, Section, Elevation & MLP) & Guidelines
7. Vetted Structural Drawings

Name & Designation of State Head/PSU with Stamp.

Minimum Quality Assurance (QA) Plans

Sl. No.	Tentative Date Planned for site visit	Target Activity *	Remarks of TPQA	
1	2	3	4	

*The visit shall be planned in such a manner so that the major milestones of building construction can be checked from quality point of view. The activities like layout of building components, retaining structures, marking of depth of foundation & centre of columns, foundation concreting, accuracy of plinth levels & lintel level, brickwork, slab casting, plastering, flooring, joinery, surface drains & sewerage planning, finishing works and all other relevant activities as considered necessary to be included in the **Quality Assurance Plan**.

Signature of PSU

Signature of TPQAA

Annexure – I A		
Sr. No.	List of Equipment available For Field Testing Laboratory	Comments of TPQA
A.	For Building Works	
1	Balances	
(i)	7 kg. to 10 kg. capacity, semi-self indicating type – accuracy 10 gm.	
(ii)	500 gm. capacity, semi-self indicating type – accuracy 1 gm.	
(iii)	Pan balance – 5 kg. capacity – accuracy 10 gms.	
2	Ovens-electrically operated, thermostatically controlled upto 110 C – sensitivity 1 C.	
3	Sieves: as per IS 460=1962.	
(i)	I.S. sieves – 450mm internal dia, of size 100 mm, 80 mm, 63 mm, 50 mm, 40 mm, 25 mm, 20 mm, 12.5 mm, 10 mm, 6.3 mm, 4.75 mm, complete with lid and pan.	
(ii)	I.S. sieves- 200mm internal dia (brass frame) consisting of 2.36mm, 1.18mm, 600 microns, 425 microns, 300 microns, 212 microns, 150 microns, 90 microns, 75 microns, with lid and pan.	
4	Sieve shaker capable of 200 mm and 300 mm dia sieves, manually operated with timing switch assembly.	
5	Equipment for slump test- Slump cone, steel plate, tamping rod, steel scale, scoop.	
6	Dial gauge, 25 mm travel – 0.01 mm/division least count - 2nos.	
7	100 tonnes compression testing machine, electrical-cum manually operated.	
8	Graduated measuring cylinders 200 ml capacity – 3 Nos.	
9	Enamel trays (for efflorescence test for bricks).	
(i)	300 mm x 250 mm x 40 mm- 2 nos.	
(ii)	Circular plates of 250 mm dia – 4 nos.	

Annexure – I B		
Sr. No.	List of Non-Destructive Test Equipment Available testing RCC Work	Comments of TPQA
1	Rebound Hammer	
2	Pulse Velocity Testing Instrument	
3	Bar Re-locator/Bar Scanner	

Signature of PSU

Signature of TPQAA

Annexure – II		
Sr. No.	Field Testing Instruments	Comments of TPQA
1	Steel tapes – 3 m	
2	Vernier calipers	
3	Micrometer screw 25 mm gauge	
4	A good quality plumb bob	
5	Spirit level, minimum 30 cms long with 3 bubbles for horizontal vertical	
6	Wire gauge (circular type) disc	
7	Foot rule	
8	Long nylon thread	
9	Rebound hammer for testing concrete	
10	Dynamic penetrometer	
11	Magnifying glass	
12	Screw driver 30 cms long	
13	Ball pin hammer, 100 gms	
14	Plastic bags for taking samples	
15	Moisture meter for timber	
16	Earth resistance tests (for Electrical Divisions)	
17	Megger (for Electrical Divisions)	

Signature of PSU

Signature of TPQAA

Annexure – III

Proforma For Mandatory Tests To Be Attached With Running Bills

Name of the work Name of Contractor..... Agreement No. and Date
 R/A Bill No.

Sl. No.	Item	Quantities as per agreement	Frequency as per specification	No. of tests required	Upto date quantity	No. of tests required	No. of tests actually done	Remarks
1	2	3	4	5	6	7	8	9

Note: If the number is less than that required, then reasons shall be recorded.

Signature of PSU

Signature of TPQAA

Annexure – IV

Check Lists for Various Items

PART – A

CHECK LIST FOR ITEMS OF FOUNDATION CONCRETE

Name of work

Name of contractor

Agreement No.

- | | |
|--|--------|
| 1. Date of inspection | |
| 2. Location | |
| 3. Material used for concrete whether tested | |
| (a) Sand | Yes/No |
| (b) Coarse aggregate | Yes/No |
| (c) Water | Yes/No |
| (d) Admixture, if any | Yes/No |
| 4. Raft top level, whether provided as per details | Yes/No |
| 5. Architectural/structural drawing correlated | Yes/No |
| 6. Whether location of construction joint has been discussed with Executive Engineer, and he has approved it | Yes/No |
| 7. Cleaning over water proofing surface and construction joint done | Yes/No |
| 8. CC cover blocks of 60 mm, thickness provided (min 2 in one square metre area) | Yes/No |
| 9. Reinforcement placement as per relevant structural drawing checked | Yes/No |
| 10. Layout of columns as per relevant structural drawing checked | Yes/No |
| 11. Placement of shuttering plates and key board for proper construction joint with shuttering oil | Yes/No |
| 12. Cement slurry applied on construction joint before pouring of concrete | Yes/No |
| 13. Trained mason available | Yes/No |
| 14. Concreting to start from farthest point to nearest point with respect of weight batching plant | Yes/No |
| 15. Concrete mix has been designed | Yes/No |
| 16. Plasticiser being used | Yes/No |
| 17. Adequate number of concrete vibrators in working condition available | Yes/No |
| 18. Slump checked | Yes/No |
| 19. Sample cubes taken | Yes/No |
| 20. Signature of Junior Engineer | |
| 21. Signature of Assistant Engineer | |
| 22. Signature of Executive Engineer | |

Signature of PSU

Signature of TPQAA

PART – B

CHECK LIST FOR COLUMNS/BEAMS/SLABS

1. Date of inspection
2. Drawing No.
3. Location
4. Whether materials used conform to relevant Specifications
 - (a) Sand Yes/No
 - (b) Coarse aggregate Yes/No
 - (c) Water Yes/No
 - (d) Admixture, if any Yes/No
5. Whether structural drawings correlated with architectural drawings? Yes/No
6. Whether the centre line of column/beams checked with references to grid lines as per architectural drawings? Yes/No
7. Whether treatment of expansion joint, wherever required, is done? Yes/No
8. Whether cleaning, repairing and approval of shuttering plate, application of quality shuttering oil is done? Yes/No
9. Whether shuttering is in true plumb and vertical and properly done and maintained during concreting? Yes/No
10. Whether reinforcement detailing, their placement are as per structural drawings? Yes/No
11. Whether proper gauge binding wire is used and with full cross binding and tightening of reinforcement bars with stirrups? Yes/No
12. Whether required minimum cover to reinforcement is maintained? Yes/No
13. Whether stainless steel cramps, angle irons for holding stones and any holding arrangement for electrical/mechanical/fire fighting/other services have been seen and approved by JE (E)/AE (E) Yes/No
14. Whether conduits for various electrical/mechanical/fire fighting/ other services have been seen and approved by JE (E)/AE (E) Yes/No
15. Whether concrete of approved design mix within maximum permissible water-cement ratio is used? Yes/No
16. Whether admixture of good brand quality approved by Engineer-in-charge is used? Yes/No
17. Whether technical supervision at batching plant/mixer and at point of concreting done? Yes/No
18. Whether concreting is placed within initial setting time of mixing? Yes/No
19. Whether proper compaction with vibrator is done? Yes/No
20. Whether the concreting has been done in a lift not exceeding 1.5 m? Yes/No
21. Whether cubes as per requirement filled for testing? Yes/No
22. Signature of Junior Engineer
23. Signature of Assistant Engineer
24. Signature of Executive Engineer

Post-concreting:

25. Whether shuttering stripped off as per specification, and laitance removed immediately thereafter? Yes/No
26. Whether proper arrangement of curing and curing period maintained as per specifications? Yes/No

27. Whether hacking of RCC surface by proper hacking tool for subsequent plastering/finishing is carried out? Yes/No
28. Signature of Junior Engineer
29. Signature of Assistant Engineer
30. Signature of Executive Engineer

Signature of PSU

Signature of TPQAA

PART – C

CHECK LIST FOR BRICK WORK

1. Date of Inspection
2. Drawing No.
3. Location
4. Whether materials used conform to relevant Specifications and whether mandatory tests doen?
 - (a) Sand Yes/No
 - (b) Bricks Yes/No
 - (c) Water Yes/No
5. Whether structural drawings co-related with architectural drawings? Yes/No
6. Whether the centre line of brickwork checked with reference to grid lines as per architectural drawings? Yes/No
7. Whether bricks soaked in water before use for sufficient period? Yes/No
8. Whether queen closers are used at junction of walls? Yes/No
9. Whether brickwork is in true plumb and vertical and all layers truly horizontal? Yes/No
10. Whether graduated wooden straight edge storey rod being used for keeping height of brick courses uniform? Yes/No
11. Whether wall height being constructed in a day is being restricted to 1 m height? Yes/No
12. Whether parts of wall left at different levels are raked back at an angle of 45 degrees or less with the horizontal? (Toothing is not to be permitted) Yes/No
13. Whether top courses of all plinths, parapets, steps and top of walls below floor and roof slabs laid with brick on edge? Whether marucona provided at corners in such brickwork? Yes/No
14. Whether thickness of joints in brickwork is kept 1 cm +_ 20%? Yes/No
15. Whether mortar of approved mix within maximum permissible water cement ratio is used? Yes/No
16. Whether all horizontal and vertical joints are being filled? Yes/No
17. Whether proper arrangement of curing and curing period maintained as per specification? Yes/No
18. Whether date of work done written? Yes/No
19. Signature of Junior Engineer
20. Signature of Assistant Engineer
21. Signature of Executive Engineer

Signature of PSU

Signature of TPQAA

PART – D

CHECK LIST FOR PLASTERING

1. Date of inspection
2. Drawing No.
3. Location
4. Whether materials used conform to relevant specifications and whether mandatory tests done? Yes/No
5. Whether surface cleaned of all loose mortar and efflorescence? Yes/No
6. Whether all conduiting and electrical piping done? Yes/No
7. Whether all doors, windows etc. fixed? Yes/No
8. Whether all defects of brickwork/CC/RCC rectified? Yes/No
9. Whether preparation of surface done? Yes/No
10. Whether 2.5 m long aluminium straight edge and plumb bob being used to check vertically and evenness of surface? Yes/No
11. Whether 15 cm x 15 cm bunda at every 2 m horizontally and vertically being provided to serve as gauges? Yes/No
12. Whether uniform groove provided at junctions of all plaster and ceiling plaster? Yes/No
13. Whether mortar of approved mix within maximum permissible water cement ratio is used? Yes/No
14. Whether proper arrangement of curing and curing period maintained as per specifications? Yes/No
15. Whether date of work done written? Yes/No
16. Signature of Junior Engineer
17. Signature of Assistant Engineer
18. Signature of Executive Engineer

Signature of PSU

Signature of TPQAA

PART – E

CHECK LIST FOR WATER SUPPLY LINES

1. Date of inspection
2. Drawing No.
3. Location
4. Whether materials used conform to relevant specifications and whether mandatory tests done? Yes/No
5. Whether plumber employed is licensed plumber or not? Yes/No
6. Whether plan for piping system has been prepared and got approved? Yes/No
7. Whether all pipes and fittings are ISI marked? Yes/No
8. Whether a sample system has been prepared and got approved? Yes/No
9. Whether clamps provided at specified spacing? Yes/No
10. Whether pipe lines checked at required pressure before covering? Yes/No
11. Whether weight of flushing pipe checked? Yes/No
12. Whether flushing cistern is ISI marked and internally painted with bitumastic paint? Yes/No
13. Whether fittings like wash basin, sink pan, cistern, bib cock, stop cock, wheel valves, etc. are ISI marked? Yes/No
14. Whether PVC water storage tank is ISI marked? If not, whether sample sent for testing? Yes/No
15. Signature of Junior Engineer
16. Signature of Assistant Engineer
17. Signature of Executive Engineer

Signature of PSU

Signature of TPQAA

<u>Annexure-V(Modified)</u>		
Name of TPQA Agency : -		
SI No.	Particulars of work:	Remarks.
1.1	(a) Name of work	
	(b) Description/Scope of work	
1.2	(a) Sub-Division and name of Assistant Engineer:	
	(b) Division and name of Zonal Manager or Representative	
	(c) Circle and name of superintending Engineer.	
	(d) Zone and name of Chief Engineer.	
1.3	Agency/contractor	
	(a) Name:	
	(b) Registration class	
1.4	Agreement No.	
1.5	Stipulated time and date of start.	
1.6	Stipulated time and date of completion.	
1.7	(a) Estimated cost put to tender	
	(b) Schedule of rates applicable.	
1.8	Accepted tendered cost with overall percentage.	
1.9	Percentage progress at time of inspection vis-à-vis expected as per contract and reasons for delay, if any.	
1.10	Inspection officers (Name and Designation)	
1.11	Officers and contractor present during inspection (Name and Designation)	
1.12	Date of inspection and number	
2.0	Quality control Aids:	
2.1	Is site equipped with	
	(a) Copy of agreement	
	(b) CAs specification along with upto date correction slips.	
	(c) List of ISI marked/approved materials to be used.	
	(d) Guard file containing inspection report of CTE/QCTA/AE/QC/Zonal Head/GM/SE/SE etc.	
	(e) Testing facilities to check conformation to acceptance criteria	
	(f) QAFW circular on quality control	
2.2	Is field laboratory existing and well equipped	
3.0	Department procedure aspects	
3.1	Maintenance of inspection register.	

3.2	Highlights of inspection by GM, Engineer-in-Charge requiring compliance.	
3.3	Are all site register maintained in standards forms?	
3.4	Are test registers reviewed by Engineer-in-Charge with dates	
3.5	Cement Registers	
	a.) Is cement store checked by Engineer-in-Charge periodically as stipulated	
	b.) Comment of TPQA on cement stock with reference to cement register. (Critical Analysis/Elaborative opinion of TPQA is required required)	
3.6	Site order book and schedule of defects	
	a) Is site order book properly maintained?	
	b) Is site order book reviewed by GM and Engineer-in-Charge (Mention details)	
	c) Have timely notices been issued to the contractor with the schedule of defects/damages whether action under clause 14/17 initiated? (Please elaborate)	
4.0	Process control aspects:	
4.1	Is soil investigation done? (Give brief details)	
4.2	Suitability of water for construction:	
	(a) What is the sources of water?	
	(b) Has water been tested subsequently (i.e. after every 03 months) and found fit for use in works.	
	(c) Has water been tested subsequently (i.e. after every 03 months) and found fit for use in works.	
4.3	Are 10% (25% for concrete) of all samples for testing taken in presence of Engineer-in-Charge	
4.4	Are all mandatory tests carried out at stipulated frequency?	
4.5	Are materials approved by Engineer-in-Charge If so, are samples available at site?	
4.6	Are sample units/items completed and approved by Engineer-in-Charge before start of mass finishing work?	
4.7	Specific control on RCC work like centering/shuttering, proportioning with boxes: mixing by full bag capacity hopper fed mixer: control of slump: placing/compaction with vibrator.	
4.8	Any other particular comments on adequacy of process control.	

5.0	Site inspection for observations and comments on quality control system in place.	
5.1	Observation on floor slope (especially in Bath, WC, Kitchen, Terrace, Balcony etc).	
5.2	Observation on QC for dampness/leakages prevention. If dampness/leakages notices, then locations and probable reasons.	
5.3	Are Samples collected by Quality Control Cell of Construction Agency	
6.0	Observations on site materials QC aspects (Keeping in view the requirement of contract specifications: BIS marked/CAs approved products etc.) (Attached separate sheet, if required). (Critical Analysis/Elaborative opinion of TPQA is required required)	
7.0	Observations on workmanship QWC aspects. (Attached separate sheet, if required) (Critical Analysis/Elaborative opinion of TPQA is required required)	

Signature of PSU

Signature of TPQAA

INSPECTION CHECKLIST PSU/NESTS ENGINEER

INSPECTION CHECKLIST PSU/NESTS ENGINEER			
	Items	Brief Details to be provided by PSU's engineer	Remarks of Visting Consultant
EMRS Site			
1	Name of Site		
2	PSU		
3	Architectural Consultant		
4	Structural Consultant		
5	Zonal Head		
6	Project Engineer with mob.		
7	Site Enginner with mobile		
8	Name of Contractor		
9	Contractor's Site Engineer		
Work Award Details			
1	Agreement No.		
2	Estimated Cost put to tender		
3	Tendered Amount		
4	Tender Percentage below/above		
5	Stipulated date of Start		
6	Actual date of Start		
7	Stipulated date of Completion		
8	Period of Completion		
Drawings			
1	MLP	Appd. MLP with letter of approval.	
2	Architectural Drawings	School, Boys', Hostel, Girls' Hostel, Kitechen & Dining, Warden, ESS, G. RM, UG Tank & Pump, Gate, Compund Wall	
3	Electrical & Plumbing Drg	Schhol, Boys' Hostel, Girls' Hostel, K&D, Warden, ESS, Security Room, UG Tank & Pump, Gate, Compund Wall	
4	Vetted Structural Drawings	Schhol, B. Hostel, G. Hostel, K&D, Warden, ESS, G. RM, UG Tank & Pump, Gate, Compund Wall	
5	Vetting Certificate from NIT/IIT	Whether provided from vetting authority	
Documents & Registers			
1	Copy of Agreement		
2	Bills of Quantities		
3	EMRS Specifications		
4	Approved Make list as per tender		
5	Quality Paln indicating number and frequencities of Testing of materials as per BOQ and checklist, T & P ,etc for Quality Assurance		

5.1	Proforma For Mandatory Tests indicating frequencies and number of tests required w.r.t. BOQ vis-à-vis number of tests actual done (See Annexure III)		
5.2	Checklist (See Annexure IV)		
5.2.1	Foundation		
5.2.2	Columns/Beams/Slabs		
5.2.3	Brick Work		
5.2.4	Plaster		
5.2.5	Plumbing		
6	Files concerning remarks of NESTS and TPQA regarding quality issues and compliance by PSU there of.		
7	PERT Chart /Work Plan for completion		
Registers			
1	Site Order Register		
2	Cement Register		
3	Steel Register		
5	Brick Test Register		
6	Water Test Register		
7	Other Test Register		
11	Inspection Report Register by higher officer		
12	TPQA Visit Register		
Tools & Plants			
1	List of Equipment available For Field Testing Laboratory (See Annexure-I)	Whether availble/functional	
2	Field Testing Instruments (See Annexure-II)	To see availability Set of sieves, Silt Testing Glass, Slump Cone, Cube moulds	
3	Batching Plant	Whether availble/functional	
4	Vibrators (Needle & Plate)	Whether availble/functional	
4	Compression Testing Machine	Whether availble/functional	
5	Non Destructive Test Instrument	Rebound Hammer, Pulse Velocity Test & Bar Scanner	
Material Quality			
1	Source and Quality of Water	To see whether potable	
2	Cement	Make, Grade, OPC or PPC?	
3	Steel	Make, Grade?	
4	Bricks	Factory made fly ash brick/clay brick	
5	Admixture	Make with details	
6	Aggregates (Grading and Nominal Size)	Quality of metal aggregates	
7	Fine Aggregate-	Quality of sand, whether approval of competent authority in case of stone duat is being used	

8	Centring and Shuttering	Steel prop and plyboard/steel shuttering to be checked	
Progress Check			
1	School	Stages/Milestone of progress to be indicated	
2	G. Hostel	Stages/Milestone of progress to be indicated	
3	B. Hostel	Stages/Milestone of progress to be indicated	
4	Kitchen & Dining	Stages/Milestone of progress to be indicated	
5	ESS, Security, S/T, Pump	Stages/Milestone of progress to be indicated	
6	Campus Development-Cutting & Filling, Road, Protection Work,etc	Deviation, if any from approved MLP	
7	Work Plan/PERT Chart		
8	Reason for Slow Progress, if any	Lagging period to be mentioned	
Quality Check			
1	MLP Check	Whether layout of Bldgs & Boundary wall as per MLP? If any issue w.r.t. levels, locations,etc, MLP may also be proposed for modification	
2	Bench Mark	Whether bench mark pillars for fixing plinth level and grid lines are provided before foundation work	
3	Layout as per architectural drawings	To see layout of rooms , toilets, stair case and ramp, portico,etc as per approved architectural drawings.	
4	Important Items to be cautioned to PSU	<ul style="list-style-type: none"> * Buildings shall be placed at higher ground level, not at down area and drainga shall be ensured around the buildings. * Plinth beams of portico to be at NGL/FGL * School buildings to be at minimum at 75 cm and other buildings at 60 cm above NGL. However if required it may be incresed upto 1.2 metre. * Back Side Stair Case shall be stopped at GF Slab. * Ramp roof shall be of Profile Sheet with Truss work 	
2	Cement Godown	Whether storage is as per CPWD specification?	
3	Casting Quality	<ul style="list-style-type: none"> *Check for honeycomb & overall. *Shuttering should be such that height of drop of concrete is restricted to 1.5 m otherwise use tremie method. *For slab, plate vibrator has to be used. 	

4	Curing Quality	Whether date of casting mentioned & curing being attended	
5	Plinth beams Level	Whether plinth beam is at level given in the structural drg	
6	Plinth beam in Toilet Block	Layout should be as per the latest drg.	
7	Plinth beam for CB wall & window wall in Hostel	Layout should be as per the latest drg.	
8	Stair flight thickness	Minumum of 185 mm	
9	Reinforcements	<ul style="list-style-type: none"> *Whether reinforcements are as per the vetted drgs? * First ring in beam near column should be within 50 mm. *Avoid laps near joint and lapping shall not be more than 50% at one location *Check reinf. & rings in confinement Zone. * Columns shall be casted leaving 200 mm gap from beam bottom. * Maintain proper cover * Cover Blocks- precast cover blocks of M35 and above shall be used to avoid crushing by steel 	
10	Filling in Plinth	Filling to be done in layers well compacted at OMC.	
11	Brick Work	B/W at plinth, sill & coping shall be brick on edge. B/W in Parapet coping will be slightly tilted inward.	
12	Half brick work	Every third course shall have bars as per MOU	
13	Check for size of Flag Hoisting Platform	Size to be as per the latest drawing.	
14	Check for rear wall of ramp	Openings as much as can be made.	
15	Earth Filling & Compaction		
Site Logistic			
1	Availability of Electric Connection	Whether available?	
2	Availability of Tubewell	Whether available?	
3	Approach to School	Whether available?	
Overall Workmanship			
1	RCC Foundation		
2	RCC Column/Slab/Beam		
3	Brick Work		
4	Protection Work		
5	Plastering		
6	Plumbing		
7	Flooring		
8	Doors/windows		
9	External & Internal painting		

10	Cladding		
11	Road work		
12	Eletrical Layout		
NESTS Technical Consultant to comment on overall quality and workmanship			
1	Suggestions to improvise quality, process, progress, etc		

Signature

**PSU Engr. With Designation
Name
Date**

Signature

**NESTS Technical Consultant
Name
Date**

Annexure-F

GUIDELINES FOR ELECTRO-MECHANICAL SERVICES

GENERAL

- a. All electrical works shall be carried out in accordance with the provision of Indian Electricity Act, 2003, and Electricity Authority (Measures Relating to Safety & Electric Supply) Regulations 2010, NEC 2011 amended to date. They shall also conform to CPWD General Specifications for Electrical Works, Part-I(Internal)-2013, Part-II(External)-1994, Part-IV(Sub-station)2013, Part-VII (D G Sets)-2013 and Part-V (Wet Riser& Sprinkler System) 2020 amended to date.
- b. All materials and equipment supplied by the contractor shall be new. They shall be of such design, size and materials as to satisfactorily function under the rated conditions of operation and to withstand the environmental conditions at site.
- c. All components shall conform to relevant Indian Standard Specifications, wherever existing. Materials with ISI certification mark and NESTS Make shall be followed.
- d. All the materials, equipment and work shall be strictly as per the agreement/ MOU.
- e. The materials shall be tested from Third party's laboratories.

Internal Electrical Installation, Fans & Fittings

1. No conduit less than 20mm in diameter shall be used.
2. The maximum number of PVC insulated aluminum / copper conductor cables of 650 / 1100 V grade conforming to IS694:1990 that can be drawn in one conduit of various sizes are given in Table.
3. Conduit size shall be selected accordingly.

Nominal cross-sectional area of conductor in sq.mm	20 mm		25 mm		32 mm	
	Straight	Bend	Straight	Bend	Straight	Bend
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.5	5	4	10	8	18	12
2.5	5	3	8	6	12	10
4	3	2	6	5	10	8
6	2	-	5	4	8	7
10	2	-	4	3	6	5
16	-	-	2	2	3	3

4. Conduits for Light / Power wiring shall be separate. No mixing of wiring is allowed.
5. Essential/ non-essential/ UPS distribution, each shall have a completely independent and separate distribution system.
6. Generally, no switch board will have more than one source of incoming supply.
7. Each MDB / DB/Switch Board will have reasonable spare outgoing ways for future expansion.
8. Balancing 3-Phase circuit shall be done.
9. Submain wiring shall mean the wiring from one main / distribution switch board to another.
10. Circuit wiring shall mean the wiring from the DB to the first tapping point inside the switch box, from where point wiring start.
11. Conduit carrying point wiring will not carry submain / circuit wiring.
12. Wiring shall be done only by the looping system. Phase / live conductors shall be looped at the switch board.
13. In wiring, no joints in wiring will be permitted anywhere, except in switch board or point outlets, where suitable connectors are used.

deep

16/3

14. The wiring throughout the installation shall be such that there is no break in neutral wire.
15. Group wiring shall be preferred for Light Points in school building, Kitchen & Dining building and corridors of all buildings.
16. To facilitate subsequent drawing of wires in the conduit, GI fish wire of 1.6 mm/1.2mm (16/18 SWG) shall be provided along with the laying of the recessed conduit.
17. All floor opening for carrying any wiring shall be suitably sealed after installation.
18. The Switch shall be "ON" when the knob is down.
19. 2 pin or 5 pin socket outlets will not be permitted. Only 3 pin / 6 pin socket outlet will be permitted.
20. 5A/6A and 15A/16A socket outlets shall be installed at the following positions, unless otherwise specified.
 - Residential / non-residential buildings 23 cm above floor level
 - Kitchen 23 cm above working platform & away from stove and sink
 - Bathroom 2 m from the floor level
21. The switch box shall normally be mounted with their bottom 1.25 m from floor level. Leveling of switch boxes shall be ensured.
22. Unless otherwise specified, all ceiling fans shall be hung at 2.75m (minimum) from the floor level. It should be ensured that minimum distance between fan's blade and the ceiling is about 0.3m.
23. Fittings shall be installed such that the lamp is at a height of 2.4 m above floor level, unless otherwise directed by the Engineer-in charge.
24. For fixing of exhaust fan, a circular opening shall be provided in the wall to suit the size of the frame, which shall be fixed by means of rag bolts embedded in the wall.
25. **COLOR CODING:** Following color coding shall be followed in wiring:

Phase	Red/ Yellow/Blue (in Three phase wiring)
Live	Red (In single phase wiring)
Neutral	Black
Earth	Yellow/Green
26. **MINIMUM SIZE OF WIRING**

Light Wiring	1.5 sq.mm.
Power Wiring	4.0 sq.mm.
27. Only three core flexible cable shall be used for connecting single phase appliances.
28. Termination of circuit into switch board/ DB shall be done at cable/ wire ends with suitable size of connector/lugs/ thimbles as per CPWD Specifications.
29. Each main board/ submain board shall be marked indicating rating of each incoming / outgoings switch and the details of loads/ areas it feeds.
30. Power /Light/ Essential / UPS DBs shall be marked 'P','L','E' & 'UPS' respectively.
31. The light circuit of corridors, toilets & staircase of School & hostel blocks, complete light circuits of Dining & Kitchen block, substation & security room, one number each of borewell monobloc submersible pump & booster monobloc pump set are on essential (emergency) circuit.
32. On completion of installations, the following tests shall be carried out in the presence of and to the satisfaction of Engineer-in charge:
 - a) Insulation Resistance Test
 - b) Polarity test of Switch
 - c) Earth continuity test
 - d) Earth electrode Resistance test
33. On completion of electrical installation, a certificate in the prescribed form (given below) in addition to the test certificate required by the local electric supply authorities, shall be furnished.



FORM OF COMPLETION CERTIFICATE

I/We certify that the installation detailed below has been installed by me/us and tested and that to the best of my/our knowledge and belief it complies with Indian Electricity Rules, 1956, as well as the C.P.W.D. General Specifications of Electrical Works 2013.

Electrical installation at

Voltage and system of supply

I. Particulars of work:

(a) Internal Electrical Installation

No.	Total	Type or system Load of wiring
-----	-------	-------------------------------

(i) Light point

(ii) Fan point

(iii) Plug Point

(a) 3 pin 5 Amp.

(b) 3 pin 15 Amp.

(b) Others Description

HP/KW

Type of Starting

(a) Motors:(i)

(ii)

(iii)

(b) Other plants:

(c) If the work involves installation of overhead line and/or underground cable.

(d) (i) Type & description of overhead line.

(ii) Total length and no. of spans.

(iii) No. of street lights and its description.

(e) (i) Total length of underground cable & its size.



M.V. PANEL

1. The panel shall be floor mounted free standing totally enclosed & extensible type.
2. Cubicle panel shall be dust and vermin proof & shall be suitable for the climate condition.
3. The general construction shall conform to IS8623:93 for factory assembled panel & include all provisions for safety of operation and maintenance personnel.
4. Degree of IP Protection shall be IP42 for indoor application and IP54 for outdoor, unless otherwise specified.
5. The panel shall be compartmentalized having space and arrangement for each circuit / feeder.
6. Multitier mounting of feeder is permissible.
7. It shall be fabricated out of CRCA sheet not less than 2mm thick for load bearing members and 1.6 mm for doors of M.V. Panel. The frame work may be angle iron / channel/ bolted type construction.
8. Operating handle of highest unit shall be at a height not more than 1.7 m. Overall height of Panel shall not exceed 2.3 m.
9. The MCCB shall invariably be used with terminal spreader.
10. Cable entries for various feeders shall be either from top or bottom & shall be provided either from the rear or from the front through cable alley of suitable size.
11. Removable gland plate to be provided for each cable entry.
12. Cable support arrangement to be provided inside cable alley so that cables are neatly arranged and fixed.
13. The panel will be provided with necessary instrumentation like CTs, PTs, Ammeters & Voltmeters (or Multifunctional meter), LED type phase indication lamps, other required instruments, control wiring, fuses/MCB etc.
14. Incomer and bus section panel shall be separate & independent and shall not mixed with section required for feeders.
15. Neoprene gaskets shall be provided
16. Flexible connection shall be provided by braided or multi-leafed conductors for terminations at transformer bushings and switchgear.
17. On all incomers of M.V panels, ON/OFF indicating LED lamps with necessary ON/OFF toggle switch shall be provided.
18. The minimum clearance to be maintained for enclosed indoor air insulated bus bars for medium voltage applications shall be as follows:

Clearance between	Minimum
Phase to Earth	26mm
Phase to Phase	32mm

Note: For strip connections from bus bars to switchgear the above clearances don't apply.
19. All routine test at manufacturer's works and site shall be carried out and test certificate shall be produced.
20. **Tests at site:**
 - a) All wiring checks & connections
 - b) Relay adjustment setting
 - c) Operation checks
 - d) Interlock function checks
 - e) Continuity checks of wiring, fuses etc. as required
 - f) Insulation tests when measured with 500 V meggar insulation resistance shall not be less than 100MOhms.



EARTHING

- a. 2 Nos. 20 x 3 mm copper strip for mb panel shall be fixed all around the panel connected to 2 Nos. earth bus copper strip connected to incoming earth conductors.
- b. For a single transformer substation, the total nos. of earth electrodes shall be four(2 for neutral and 2 for connection to a common earth bus for body earthing).
- c. **Earth Continuity Strip for Protective Earthing of Sub-Station Equipment**

S.No.	Type of Installation	Earth Electrode	Earth Strip from Earth Electrode to Earth Bus and Loop Earthing of Equipment
1.	Indoor sub-station, Generating Set	Copper Plate	25 x 5 mm Copper Strip
2.	LT Switch room having LT Switch Board	Copper Plate	20 x 3 mm Copper Strip

d. Neutral Earthing of Transformers and Generators

S.No.	Equipment	Earth Electrode	Earth Strip from Earth Electrode to Earth Bus and Loop Earthing of Equipment
1.	Transformer	Copper Plate	25 x 5 mm Copper Strip
2.	Generating set	Copper Plate	25 x 5 mm Copper Strip

e. Location for Earth Electrodes

- (i) Normally an earth electrode shall not be located closer than 1.5m from any building.
- (ii) The Location of the earth electrode will be such that the soil has a reasonable chance of remaining moist as far as possible.
- (iii) Entrances, pavements and roadways should be avoided for locating earth electrode.

f. Earth Resistance

- (i) The earth resistance at each electrode shall be measured.
- (ii) No earth electrode shall have a greater ohmic resistance than 5 ohms. In rocky soils the resistance may be up to 8 ohms.

g. Material and size of Earth Electrodes

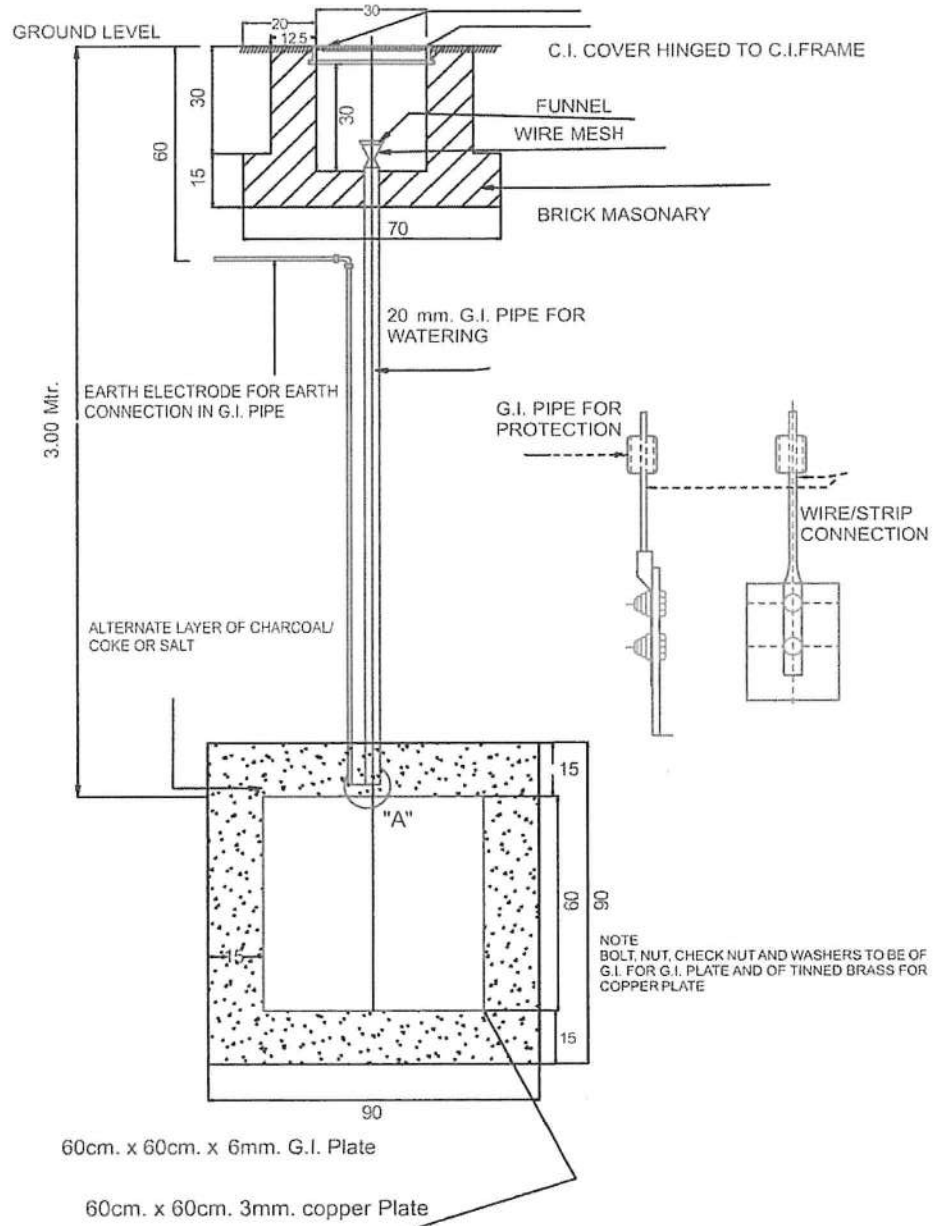
Type of Electrodes	Material	Size
Pipe	GI medium class	40 mm dia., 4.50 m long (without any joint)
Plate	(i) GI (ii) Copper	60 cm x 60 cm x 6mm thick 60 cm x 60 cm x 3mm thick
Strip	(i) GI (ii) Copper	100 sq mm section 40 sq mm section
Conductor	(i) Copper	4 mm dia. (8 SWG)

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Method of Plate Earthing

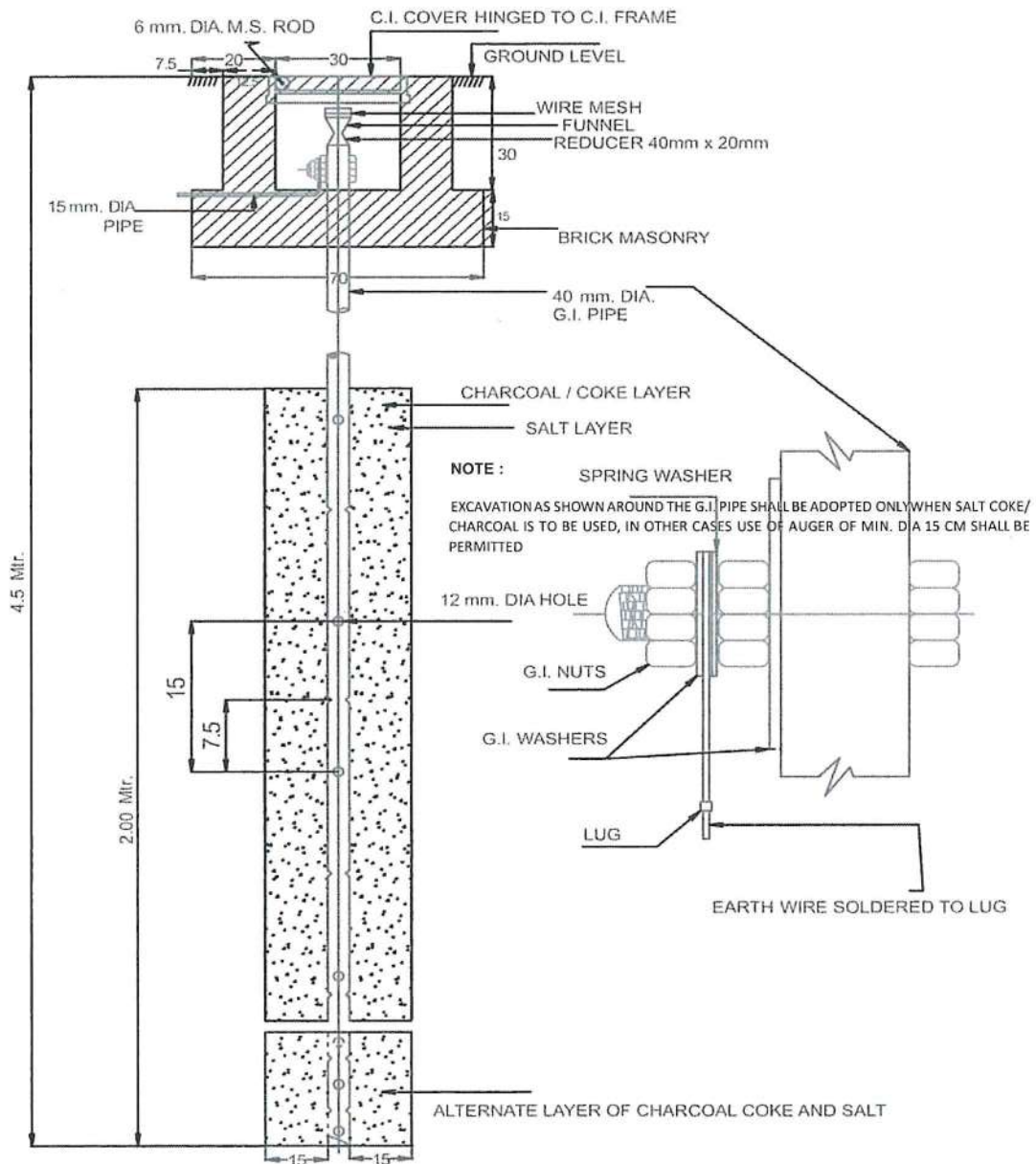
NOT TO SCALE



CPWD

Method of Pipe Earthing

NOT TO SCALE

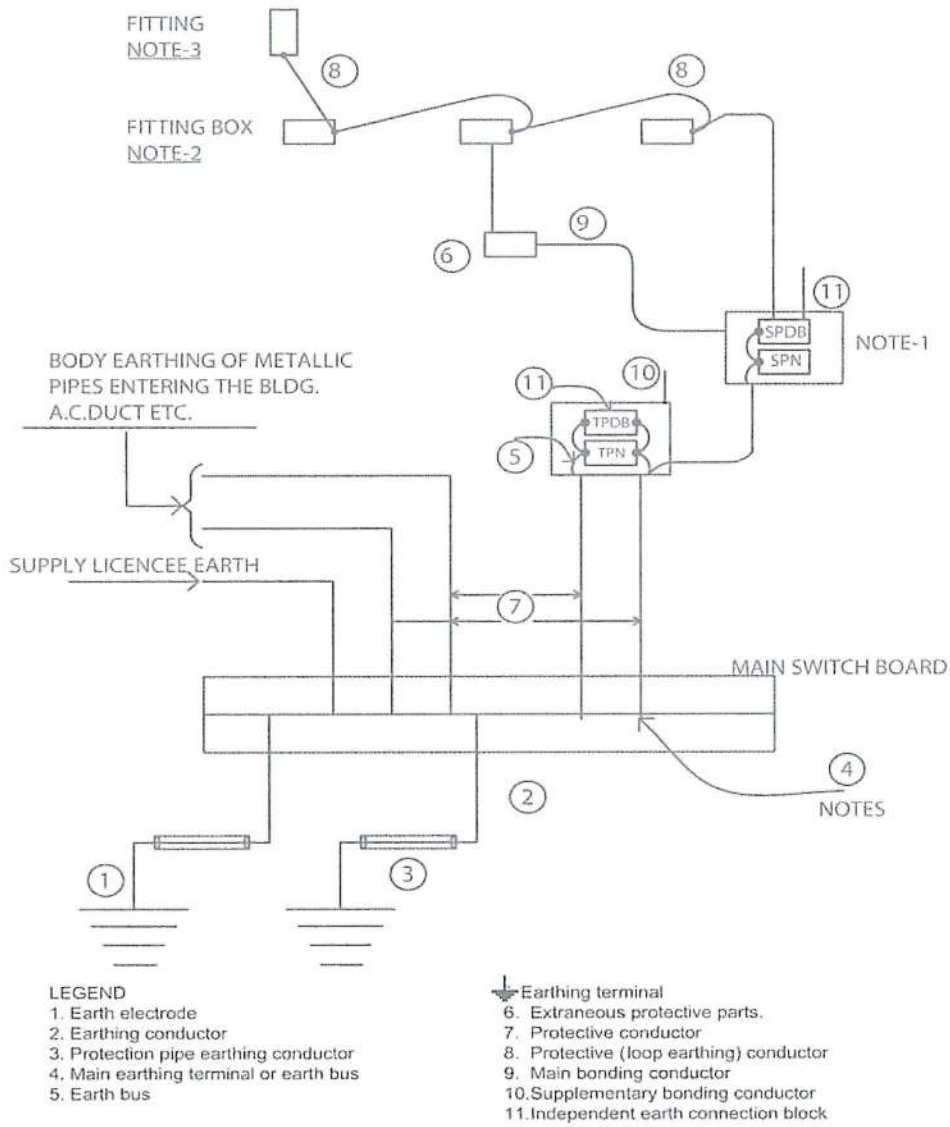


ALL DIMENSIONS ARE IN CM (OTHER DIMENSIONS SHOWN)

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Typical Earthing Schematic for Internal E.I.



CPWD

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SUBSTATION

A sub-station installation work generally comprises of supply, installation, testing and commissioning of following:

- High Voltage Panel
- Step down Transformer complete with associated auxiliaries as specified.
- High voltage cable for interconnection between the H.V. Panel & Transformer including terminations.
- M.V. Panel(s)
- LT Cables for interconnection between transformer's M.V. Terminals and the M.V. Panel as specified.
- Power factor improvement Capacitors panel
- Earthing system
- Safety Equipment's like rubber mattings, shock treatment chart ,9ltrs fire buckets & Danger plates, First Aid Box etc.
- Emergency M.V. Panel
- Danger Plates shall be provided on HV & MV equipment's.

Transformer

- The oil filled transformer shall comply with Indian Standards IS2026-Part I to V as amended up to date.
- Transformer oil shall confirm to IS 335. Transformer oil to be supplied with initial fill of filtered oil.
- Continuous rating specified shall be irrespective of tapping position.
- Tap changing device shall be 'OFF LOAD Type' & provided on HV side, circuit type, hand operated with necessary indication for tap position and locking arrangement at any of the tap position with following steps: $\pm 2.5\%$ $\pm 5.0\%$ -7.5% -10%
- Transformer shall be suitable for a voltage ratio of 11 KV / 433 V
- Vector group should be dy 11.
- Transformer shall be Oil Immersed Natural Air Cooled (ONAN) type.
- Transformer shall be a single tank type with termination on bushing or cable end box as specified both on HV & MV side.
- Maximum allowable losses for 250 KVA oil filled distribution transformer shall not be more than 0.89% at 50% load & 1.27% at full load (i.e., 100% load)
- **Test at site:** In addition to all tests at manufacturer's premises, all test confirming to IS code shall be done before energization. The following tests are to be particularly done **before cable jointing**:
 - Insulation test between HV to Earth, HV to MV with 5000V Megger.
 - Insulation test between MV to Earth with 500V Megger
 - Di-electric strength test on oilAll test results are to be recorded & report to be submitted.

HIGH VOLTAGE PANEL

- The HV Panel shall be of indoor type having the incoming sectionalization and outgoing switch gears as per IS13118:1991 of VCB
- The degree of enclosure protection shall be IP-4X.



- The HV Panel board shall be metal clad, indoor floor mounting, free standing type, total enclosed, dust & vermin proof.
- The circuit breaker shall be continuous rated as specified with a minimum rated current of 630 Amp. With voltage rating and breaking capacity as specified.
- The HV switch board shall be single bus bar pattern.
- **Test at site:** In addition to all tests at manufacturer's premises, all test confirming to IS code shall be done before energization. The following tests are to be particularly done **before cable jointing**:
 - Operation checks & lubrication of all moving parts
 - Interlock functional checks
 - Continuity checks of wiring, fuses
 - Insulation tests
 - Trip tests & protection gear tests
 - The complete panel shall be tested with 500 V megger for insulation between poles and poles to earth. Insulation test of secondary of CTs & VTs to earth shall be conducted with 500 V Megger.
 - Any other tests as required by the Licencee / Inspector may be conducted.

DATA MANUALS AND DRAWINGS TO BE FURNISHED

1. After Award of Work

- (i) General arrangement of location drawing of the equipment complete with dimensions and clearances.
- (ii) General arrangement drawing of HV Panel, Transformer, MV Panels, Earthing, Cable route etc. including details of grouting of channels / bolts of various equipments.
- (iii) All panels' schematic & wiring diagram including control wiring.

2. BEFORE COMMENCEMENT OF INSTALLATION

- Triplicate copies of detailed installation, operation and maintenance manuals of manufacturers for all items of equipment together with all relevant data sheet, spare parts catalogues, repairs, assembly and adjustment procedure etc. shall be provided.

3. FINAL INSPECTION AND TESTING

- (i) All routine and site Test results should be obtained.
- (ii) The sub-station installation shall be got inspected from local licensee and or Chief Electrical Authority (CEA) and their clearance should be taken before energizing the sub-station.

4. DATE OF ACCEPTANCE

Taking over of the substation shall be reckoned after its trouble-free operation during the running of 15(fifteen) days.

5. GUARANTEED TECHNICAL DATA

Following technical particulars of substation shall be supplied.



Sl. No.	Details of Particulars	Remarks
	Transformers:	
1.1	Make	
1.2	Type	
	(a) Type of winding	
	(b) Type of enclosure	
1.3	Output in KVA (continuous rating)	
1.4	Frequency	
1.5	Voltage between phases (HV on no-load)	
1.6	Voltage between phases (LV on no-load)	
1.7	Impedance at normal voltage ratio at 75 deg. C	
1.8	Efficiency at unity power factor	
	(a) Full Load	
	(b) $\frac{3}{4}$ load	
	(c) $\frac{1}{2}$ load	
1.9	Iron losses at normal voltage ratio	
1.10	Copper losses at normal voltage ratio, at full load	
1.11	Regulation at unity power factor at 75 deg. C	
1.12	Reactance at normal voltage and ratio	
1.13	Resistance of HV winding at 75 deg. C	
1.14	Regulation at 0.8 PF at 75 deg. C	
1.15	Resistance of MV winding at 75 deg. C	
1.16	Over Load: The transformers are capable of carrying overload as follows:	
	Percentage Load	When starting Cold (in hours)
		After Running continuously (in hours)
	(a) 25%	
	(b) 50%	
	(c) 100%	

- 1.17 Over all dimensions of the transformer.
- 1.18 CPRI Type test certificates be enclosed for all type tests applicable as per I.S.
- L.T. Panel:**
- 2.1 Make
- 2.2 Thickness of the sheet metal
- 2.3 Size of the bus bars
- 2.4 Material of bus bars – copper/aluminium
- 2.5 Bus bar insulation
- 2.6 Over all dimension
- 2.7 Degree of protection
- Bus Trunking:**
- 3.1 Name of manufacturer
- 3.2 CPRI certificate No. & validity
- 3.3 Thickness of the sheet metal
- 3.4 Size of the bus bars
- 3.5 Material of bus bars - copper / aluminium
- 3.6 Bus bar insulation
- 3.7 General arrangement indication spacing of bus bars insulators.
- 3.8 No. of flexible/ expansion joints
- 3.9 Details of flexible joints
- HT Panel:**
- 4.1 Make
- 4.2 Type
- 4.3 Rated currentAmps.
- 4.4 Over all dimensions & weight.
- 4.5 Breaking current KA..... MVA at 11000 Volts.



DIESEL GENERATING SET (DG SET)

GENERAL

1. DG Set are required to be supplied with acoustic enclosure as per CPCB norms.
2. Associated AMF Panel / Electrical panel of the DG Set can be located inside the acoustic enclosure.
3. DG Set should be tested for Noise and Emission norms / standards as per CPCB
4. Genset should not be installed on loose sand or clay.
5. Genset/ Engine Control Panel should be visible from outside the enclosure.
6. Sufficient space should be available around the Genset for inspection and service.
7. Four numbers earth sets for each DG SET are required-2 for Neutral & 2 for Body.

ACOUSTIC ENCLOSURE

1. The enclosure shall be fabricated out the CRCA Sheet of thickness not less than 1.6mm on the outside cover with inside cover having not less than 0.6 mm thick perforated power coated CRCA sheet.
2. The hinged doors shall be fabricated not less than 16 SWG (1.6mm) thick CRCA Sheet & will be made air tight with neoprene rubber gasket and heavy-duty locks.
3. All sheet metal parts should be processed through seven (7)-tank process
4. The enclosure should be powder coated
5. The enclosure should accommodate fuel tank, batteries, AMF Panel
6. The enclosure should be provided with high enclosure temperature safety device
7. The complete enclosure shall be of modular construction.
8. Forced ventilation should be as per OEM design.
9. Temperature rise inside the enclosure should not be more than 5 degree Celsius for maximum ambient temperature above 40 degree Celsius & it should be below 10 degree Celsius for ambient below 40 degree Celsius.
10. The Acoustic enclosure shall be designed & manufactured confirming to relevant standards suitable for outdoor installation exposed to weather condition, and to limit overall noise level to 75dB(A) at a distance of 1 meter from the enclosure as per CPCB Norms under free field condition.

DIESEL ENGINE

1. The diesel engine shall be of standard design of the original manufacturers.
2. The engine shall confirm to IS: 10000/ ISO: 3046/BS 649/BS 5514 amended up to date.
3. It should be four (4) stroke cycles, water cooled, naturally aspirated / turbo charged (as per manufacturer standard).
4. Diesel Engine developing suitable BHP for giving a power rating as per ISO 8528-Part-1 in KVA at the load terminals of alternator at 1500 RPM at actual site conditions.
5. The engine shall be capable for delivering specific Prime Power Rating at variable loads for PF of 0.8 lag with 10% overload available in excess of specified output for one hour in every 12 hours.
6. The average load factor of the engine over period of 24 hours shall be 0.85(85%) for prime power output.
7. Necessary certificate along with compliance of NOISE & EMISSION NORMS as per latest CPCB guidelines for DG Set capacity should be furnished from the manufacturers along with the technical bid
8. The engine shall be fitted with all associated accessories as per manufacturer design.
9. Recommended minimum capacity of daily service tank of 120 litres fuel capacity for 62.5 KVA DG set.
10. **GOVERNOR:** Mechanical governor of class A2
11. Frequency Variation: Within a band of 1% of rated frequency



12. **Fuel System:** Comprise Engine driven Pump, Replaceable element of fuel filter, fuel tank complete with necessary support, gauges, connecting pipes etc.
13. **LUBRICATING OIL SYSTEM:** Priming pump to keep bearing primed
14. **STARTING SYSTEM:** Comprise of necessary set of heavy-duty batteries 12/24 V DC (as per manufacturer design), suitable starter Motor, and axial type gear to match with the toothed ring on the fly wheel
15. **BATTERY CHARGER:** Suitable to charge required number of batteries at 12 / 24 V complete with transformer, rectifier, charge rate selector switch, indicating voltmeter & ammeter etc. Connections between the battery charger & batteries shall be provided with copper conductor leads with lugs
16. **EXHAUST SYSTEM**
 - Exhaust system should create minimum back pressure.
 - Number of bends should be kept minimum
 - Pipe sleeve of larger dia. should be used while passing the exhaust pipe through concrete wall and gap should be filled with felt lining.
 - Exhaust piping inside the Acoustic Enclosure should be lagged with asbestos rope along with aluminium sheet cladding / insulated to avoid heat input to the room.
 - Exhaust flexible shall its free length when it is installed.
 - 'Schedule B' MS Pipes and long bend/elbow should be used.
17. **AIR SYSTEM:** Genset should be supplied with Medium Duty /Heavy Duty Air Cleaner as per OEM
18. **COOLING SYSTEM:**
 - Designed for ambient temperature of 40 degree Celsius
 - Coolant should be used mixed with additive (in suitable proportion) as per OEM
 - Radiator fan flow should be free from any obstruction.
19. **ALTERNATOR**
 - Self-excited, screen protected, self-regulated, brushless Alternator
 - Alternator should be able to deliver output rating at actual site condition.
20. **FOUNDATION**
 - A PCC (1:2:4, M-20 GRADE) foundation of weight 2.5 times the operating weight of the Genset with enclosure or as recommended by the Genset manufacturer OEM whichever is higher, is required to be provided.
 - 300 mm of this foundation height should be above the ground level.
 - The length and breadth of foundation should be at least 250 mm more on all sides than the size of acoustic enclosure.
 - Genset should be mounted on AVMs inside the enclosure.

INSPECTION AND TESTING

- DG Set will be tested on load of unity power factor for rated KW rating
- During testing, each DG set shall be operated for a period of 12 hours on the rated KW rating including one hour on 10% overload after continuous run of 12 hours and log of all relevant parameters will be maintained.
- Any defects/abnormality noticed during testing shall be rectified.
- Testing will be declared successful only when no abnormality/ failure is noticed during testing.
- After this the DG Set will be made available for beneficial use.
- Approval / clearance of the complete installation shall be obtained from CPCB/ State Pollution Control Boards/ Local Bodies/Central Electricity Authority (CEA) / Other licensing authorities wherever required.

GUARANTEED TECHNICAL DATA: Following technical particulars of Diesel Generating Set shall be supplied.



SCHEDULE OF TECHNICAL PARTICULARS OF DEA SET

I. Engine

1. Make
2. Model/ISS reference
3. No. of cylinders
4. Rated R.P.M.
5. Method of Starting
6. Aspiration Method
7. BHP
8. Specific Fuel oil consumption (gm/BHP/hr.)
9. Lub. Oil recommended
10. Lub. Oil pressure
11. Qty. of lub. oil required
12. Time required for starting
13. Lub. oil sump capacity
14. Nos. of exhaust pipe required.
15. Dia. of exhaust pipe
16. Whether meets CPCB norms for Emission
17. Fuel Consumption at full load
18. Any other data.

II. Alternator

1. Make
2. Enclosure Details
3. Full Load output in KVA
4. Full Load output in KW at 0.8 PF
5. Designed over load capacity at max. ambient temp.
6. Efficiency at full load
7. Class of Insulation of rotor
8. Class of Insulation stator

III. General:

1. Overall Length of DG set L x W x H
2. Over all Weight of DG set



3. Noise Level of DG Set at one Metre
with Acoustic Enclosure

IV. AMF Panels

1. Make
2. Type (Floor/Wall mounted)
3. Overall dimensions (L x B x H)
4. Finish

V. Generator Control Panel:

1. Make

VI. Acoustic Enclosure:

1. Make
2. Size
3. Details of Acoustic lining Material & Make



FIRE FIGHTING SYSTEM (FIRST AID HOSE REEL WITH TERRACE PUMP)

1. Following number of First Aid Hose Reel Downcomer to be provided in EMRS:
A) School Block: 4 Nos. for G+1 configuration & 2 Nos. for G+2 configuration
B) Hostel Block: 2 Nos. for both Boys & Girls in each phase
2. The suction pipelines of pump shall be 100 mm from terrace tank and delivery pipelines shall be 80mm and 65 mm dia. for downcomer as per BOQ.
3. One number terrace fire pump of school & one terrace fire pump of that hostel which is away from school block are fed from emergency MV Panel in substation.
4. PUMP Motor & the entire metal work above ground level shall be painted with red colour shade no 536 of IS: 5.
5. All down comer pipes shall be interconnected at the terrace level. In case terrace are not interconnected, all building will be treated as individual building.
6. Terrace pump to be installed near terrace tank.
7. The tank shall be at higher level to provide positive suction to the pump.
8. No separate pump house is required for terrace pump. However suitable enclosure for protection of pump is to be provided.
9. The pump may be located near beam so that the load is not transferred to slab.
10. First Aid Hose Reel shall be as per IS-884. The coupling, branch pipe and nozzles shall be as per IS: 8090.
11. First Aid Hose Reel: Length of pipe shall be such that nozzle of the hose can be taken into every room and within 6 m of any part of the rooms keeping in view layout and obstruction.
12. Typical Plan of First Aid Hose Reel System is enclosed.

FINAL INSPECTION AND TESTING

- The inspection of installation will be carried out by the authorised representative of Engineer-in charge & test result will be recorded.

CCTV

1. The DVR & monitor shall be placed in Server room /Principal room of School Block, Warden rooms of Hostels and in Electrical panel room/ dining hall of Kitchen block.
2. The cameras shall be provided in corridor of School, hostel & in dining hall in kitchen block.

STREET LIGHT (EXTERNAL LIGHT)

1. Outdoor fitting shall have suitable IP (IP 65 OR IP66) Protection.
2. There should not be any exposed wiring in outdoor fittings.
3. Solar PV System for outdoor fitting should be installed such that a minimum of 33% of the total number or 15 % of the total connected load of outdoor lighting fixtures (whichever is higher) should be powered by solar energy.


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