



PUBLIC TENDER

RAMAN RESEARCH INSTITUTE, BENGALURU
GOVERNMENT OF INDIA

NOTICE INVITING TENDER

Date: 13.07.2026

Tender Notice No. **RRI/EB/Civil/PT-10/2026-27** Dated: 08.07.2026

1. On Behalf of the Director, Raman Research Institute, sealed, item-rate tenders are invited for the following work.

Sl. No	Description	Details
1.	Title of work	Modification of LASE Lab at RRI Campus, Bengaluru.
2.	Estimated cost put to tender	RS. 31.15 Lakhs inclusive of prevailing GST
3.	Period of completion in months reckoned from fifteenth day from the date of issue of work order.	Three Months
4.	Cost of tender document (a) Original set	Rs.590/- inclusive of GST
5.	Period during which the request for tender document can be obtained.	13/07/2026 to 29/07/2026
6.	Last date and time for receipt of tenders.	29/07/2026 at 4.00PM
7.	Due date and time of opening of tenders.	30/07/2026 at 4.00PM
8.	Earnest money deposit (EMD)	Rs. 62,300/-





2. Eligibility Criteria for Issue of Tender Documents:

Tender documents will be issued only to those who satisfy the following eligibility criteria:

Sl. No	Eligibility Criteria	Documentary proof for the eligibility (Self attested copies to be submitted)
a.	Should have satisfactorily completed the works as mentioned below during the last Seven years. i. Three similar works each costing not less than <u>Rs. 12.46 Lakhs</u> (or) ii. Two similar works each costing not less than <u>Rs. 18.69 Lakhs</u> (or) iii. One similar work costing not less than <u>Rs. 24.92 Lakhs</u> .	i. Certified copy of Work Completion certificates along with work orders issued by the authority concerned to establish work experience. ii. Completion certificates for works issued by Private parties shall be supported by TDS (Tax Deducted at Source) certificates.
Note: Similar work shall mean General Civil Works.		
	ii. The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to last date of receipt of application for bids.	
b.	Should have had average annual financial turnover not less than <u>Rs. 9.34 Lakhs</u> of the work during the last three years ending 31st March of preceding year (2026).	Certified copy from chartered Accountant for the Annual financial turnover and balance sheet showing Profit & Loss.
c.	Should not have incurred any loss in more than two years during the last five years ending 31st March, 2026.	
d.	Should have a solvency of <u>Rs. 12.46 Lakhs</u> of the work	Certified copy of current solvency certificate from any Scheduled Bank.





3. Issue of tender documents on the basis of the documentary eligibility alone will not make a tenderer eligible for participating in the bidding. The documents furnished by the tenderers will be subjected to verification subsequently by Institute. If found not meeting the requirement, such offers will be rejected.
4. On request in writing, with requisite fee in the form of Demand Draft/ UPI transaction and eligibility documents specified above, tender documents along with all required documents can be obtained from **Estate Office, Raman Research Institute (RRI) (Sadashivanagar, Bengaluru-560080)**, Near Mekhri Circle, on any working day during the period mentioned in Para 1 above, except on Saturdays, Sundays and Public holidays or **download the softcopy from Central Public Procurement Portal (CPPP)/RRI website also & document fee in the form of Demand Draft to the address of RRI shall be submitted along with the technical bid.**
5. Tenders should be accompanied with Earnest Money Deposit for value specified in Para 1 above under sl.no.8, in the form of Deposit at Call receipt/ Term Deposit Receipt of any Scheduled Bank issued in favor of The Director, RRI (or) in the form of Bank guarantee issued by a scheduled bank. Earnest Money Deposit shall be valid for **120 days** from the due date of receipt of tenders.
6. The MSME units claiming exemption of EMD should submit MSME UDYOG AADHAAR MEMORANDUM or registration certificate issued by District Industries Centre (DIC) / Khadi & Industries board (KVIB) / Coir board / National Small Industries Corporation (NSIC) / Directorate of Handicrafts and handlooms or any other body specified by Ministry of MSME. The memorandum / certificate shall be valid as on due date / extended due date of the tender.
7. The MSME units claiming exemption of EMD should submit attested hard copy of MSME UDYOG AADHAAR MEMORANDUM or registration certificate as indicated in Para 6 above. If hardcopy is not received on or before due date and time of opening of the tender, the tender offer shall be summarily rejected.
8. Tenders should be submitted in three sealed cloths lined covers as below,
Cover i. Containing Technical Bid - This cover shall be super-scribed as "Technical Bid" and also the name of the work, NIT number and name of Tenderer. This cover should contain the full set of tender documents issued to the Tenderer (except the price bid - which should be in





Cover ii), duly filled in and signed. In case the Tenderer intends any observation / comments / remarks on Institutional conditions and specifications, the same shall be brought out in the technical bid or else a confirmation that the Tenderer agrees to the terms and conditions and specifications of the tender 'in Toto' shall be enclosed.

Earnest money Deposit in the prescribed form should accompany the Technical Bid Envelope. The Tenders without requisite EMD with full validity as specified in Para (5) above will be summarily rejected.

Cover ii. Containing Price Bid - This cover shall be super-scribed as 'Price Bid' and also the name of the work, NIT number and name of Tenderer. The Tenderers shall quote the rates in figures as well as in words tendered by them. All corrections shall be attested by the date and initials of the Tenderer. The rates shall be filled only on the price bid format furnished along with the tender document. Any conditions in the price bid will make the price bid invalid and liable for rejection.

Both the covers (Cover i & Cover ii) mentioned above shall be put in another sealed cloth lined cover i.e., Cover-iii, super-scribing the name of work, NIT number and Name of Tenderer. Tenders submitted in any other manner will be rejected.

Price bid shall not be put in the technical bid, in which case the entire tender is liable to be rejected.

9. Tender documents will be issued only in hard copy. Price shall be quoted only on the price schedule / bill of quantities forming part of the original set of tender documents issued by Institute and returned in original in cover (iii) specified in Para 8 above.
10. The tender accepting authority on behalf of The Director, RRI is not bound to accept the lowest or any other tender and reserves the authority to reject any or all the tenders received without assigning any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.
11. Tenderers shall sign all the pages of Technical & Commercial bid and Price bid without fail. The original full set of tender documents, duly filled in at required pages, along with drawings should be returned along with the tender. (If required, tenderers can obtain an additional set of tender documents for reference on payment as mentioned in Para 1).





12. Tenders will be received and opened at the Estate Office, Raman Research Institute on the stipulated date and time specified in Para 1 above. Delayed and late tenders will be summarily rejected.
Tenders will be opened in the presence of attending tenderers or their authorized representatives.
13. On the due date of opening, the **Cover-III** will be opened initially. Subsequently, on the same day **Cover-I**, i.e., technical bid, of those tenderers who have furnished valid EMD and requisite documents only will be opened. On opening of **Cover-I**, i.e., technical bid, further detailed scrutiny/evaluation will be carried out. During the evaluation of technical bids, the documents furnished by the tenderers will be scrutinized in detail. Any tender, found as not fulfilling the eligibility criteria will be rejected at this stage and such offers will not be considered for further processing. The tenders shall further evaluate based on the documents furnished and made qualified for further processing of the tenders. If required, their completed works will be inspected. The **Cover-II**, i.e., price bids of only those tenderers who have been qualified during the scrutiny and technical evaluation will be opened separately on a specified date (with due intimation to the qualified bidders) and further processed, as per tender procedure/ stipulations.
14. The Tenderer, whose offer is accepted, will be required to furnish performance guarantee of 5% (Five Percent) of the tendered amount within 15 days from the date of issue of letter of intent/ work order. This guarantee shall be in the form of Deposit at Call receipt/ Term Deposit Receipt of any Scheduled Bank issued in favor of Director, RRI (or) in the form of Bank guarantee issued by a scheduled bank in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period specified including the extended period if any, the Earnest Money deposited by the contractor will be forfeited and letter of intent/ work order cancelled automatically without any notice to the contractor. The Earnest Money deposited along with tender shall be refunded only after receiving the aforesaid performance guarantee.
15. The refund of EMD of unsuccessful tenderers will be made through cheque/electronic mode, within a month after the expiration of our bid validity period or any extension to it.





16. Intending tenderers may inspect the site before submitting the tenders, with the prior permission of Estates & Buildings Department, RRI. Interested tenderers may reach the Estate Office on Telephone No: 9480836088, Email: estate@rri.res.in
17. If the tenderer fails to complete the work in specified period Of Three months as specified in NIT under para no.1. The tenderer is liable to pay compensation for delay of work at the rate of 1% per every week of delay for the incomplete works (which will be levied). The Institute reserves the right not to accept the work in part or full. Exceptions: Force Majeure.
18. The tender accepting authority on behalf of The Director, RRI is not bound to accept the lowest or any other tender and reserves the authority to reject any or all the tenders received without assigning any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.
19. Additions and Alterations in the work: The Bill of quantities indicate approximate estimated quantities. If at any time after acceptance of the tender, Engineer-in-charge shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Engineer-in-charge shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever.
20. The Tenderer has no right to suggest alternate terms and Conditions.
21. The tender accepting authority on behalf of The Director, RRI also reserves the right to alter the scope/ or reduce quantum of work before issue of work order and the tenderer shall not have any claim what so ever on this account.
22. The tender accepting authority on behalf of Director, RRI reserves the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
23. Canvassing directly or indirectly, in connection with tender is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable for rejection.





24. The tender accepting authority reserves the option to give preferences to the offers in accordance with the policies of the Government from time to time.
25. The tenderer shall not be permitted to tender for works in the Institute responsible for award and execution of contracts for which his/her near relative is working. He/she shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted Officer in the Institute. Any breach of this condition by the contractor would render him liable for rejection of tender or cancellation of contract.
26. On award of work, the contractor shall not be permitted to sub-contract any portion of work, in full or even part, without the prior written consent by the Institute.
27. The tender should be valid for **minimum period of 120 days** from the due date of receipt of the tender specified in Para 1 above. If any tenderer withdraws the offer within the validity period or makes any modifications in the terms and conditions of the tender which are not acceptable to the Institute, the Institute shall without prejudice to any other right or remedy, be at liberty to forfeit 50% (Fifty Percent) of the Earnest Money Deposit absolutely. Further, the tenderer shall not be allowed to participate in the re-tendering process of the work.
28. On concluding the tender, an agreement shall be drawn with the successful tenderer on a stamp paper of Rs.500/-.

Administrative Officer
RAMAN RESEARCH INSTITUTE, BENGALURU





DATED: 13.07.2026

RAMAN RESEARCH INSTITUTE

C.V. Raman Avenue, Sadashivanagar, Bengaluru - 560080



Modification of LASE Lab at RRI Campus, Bengaluru

Item Rate Tender & Contract for works

NIT No: RRI/EB/Civil/PT-10/2026-27, Dated: 08.07.2026

TENDER DOCUMENT- PRICE BID

ESTATES AND BUILDINGS – 2026-27

IMPORTANT NOTE: THE PRICE BID SHALL BE SEPARATELY SUBMITTED IN COVER ii. AND SHALL NOT BE PUT ALONG WITH TECHNICAL BIDCOVER i. IN WHICH CASE THE ENTIRE TENDER IS SUMMARILY REJECTED.



RAMAN RESEARCH INSTITUTE

C.V. Raman Avenue, Sadashivanagar, Bengaluru – 560080

NAME OF WORK: **Modification of LASE Lab at RRI Campus,
Bengaluru**

TENDER DOCUMENT- PRICE BID

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PRICE BID

SCHEDULE OF QUANTITIES



Name of Work: Modification to LASE Lab at RRI Campus, Bengaluru

SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	EARTH WORK & ANTI-TERMITE TREATMENT WORKS				
1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed, all complete as per drawings , specifications and direction of Engineer in charge.				
a	In All kind of soil	CUM	15.00		
	Rate in words:				
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, for all leads & lifts, all complete as per specification and direction of Engineer-In-Charge.	CUM	15.00		
	Rate in words:				
3	Providing and injecting chemical emulsion for pre-constructional Anti-termite treatment and creating a chemical barrier on top surface of plinth filling, all along inner edge of peripheral and inner walls/plinth etc., on top of Damp Proof Course (DPC) or on masonry at the level of plinth filling as per IS: 6313 (part-II) using chemicals like Chloropyripis emulsifiable (IS: 8944) 20EC mixed with water in 1:19 ratio (i.e., 1 litre of Chemical to 19 litres of water). The emulsion is spread at 5 lit/sqm on top surface of plinth filling, top of Damp proof course and at 1 lit/linear meter along the junction of wall and floor, all as per specifications and directions of Engineer-in-charge. (Plinth area of the building at Ground floor only shall be measured).	SQM	20.00		
	Rate in words:				
	PLAIN CONCRETE CEMENT WORKS				
4	Providing and laying in position cement concrete of specified grade at all levels and locations excluding the cost of centering and shuttering for work all complete as per specification and direction of Engineer-In-Charge.				



SL. NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
a	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	CUM	3.00		
	Rate in words:				
b	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	CUM	1.00		
	Rate in words:				
c	Providing and laying damp-proof course 40 mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (Zone-III) : 4 graded stone aggregate 12.5mm nominal size) all complete as per specification and direction of Engineer-In-Charge.	SQM	10.00		
	Rate in words:				
	REINFORCED CEMENT CONCRETE				
5	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using Ordinary Portland Cement (OPC) and having cement content as per approved design mix, manufactured in fully automatic batching plant as per approved mix design of specified grade and transported to site of work in transit mixer for all leads, having continuous agitated mixer, including pumping of concrete from transit mixer to site of laying, including the cost of finishing and admixtures in recommended proportions as per IS : 9103 to accelerate/retard setting of concrete, improve workability without impairing strength and durability, but excluding the cost of centering, shuttering & reinforcement, all complete as per specification and direction of the Engineer - in - charge. (Note :- Minimum Cement content in this item is 330 kg/cum. Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 1.10 times of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement. However, no amount shall be payable on account of increase in quantity of admixture to be used due to use of cement in excess than minimum cement content).				
	a) All works upto Plinth Level.	CUM	6.00		
	Rate in words:				
	b) All works above plinth level upto floor V level.	CUM	10.00		
	Rate in words:				



SL. NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
6	Providing and Fixing Centering & Shuttering in straight or curvilinear or circular works and including strutting, propping, tie bolt, spring coil and plastic cone etc. wherever needed and removal of form work, all complete as per specifications, drawings and direction of Engineer in-Charge, for following structural elements. The rates shall be applicable at all heights and locations.				
	a) Columns, pillars, piers, abutments, posts and struts.	SQM	65.00		
	Rate in words:				
	b) lintel beams, plinth beams, girders, bressumers and cantilevers.	SQM	25.00		
	Rate in words:				
	c) foundations, footings, bases for columns.	SQM	15.00		
	Rate in words:				
	d) Suspended floors, roofs, landings, balconies and access platform.	SQM	8.00		
	Rate in words:				
	e) Extra for additional height in centering, shuttering for suspended floors, roofs, landings, beams and balconies wherever required with adequate bracing, propping etc. including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured).	SQM	10.00		
	Rate in words:				
	REINFORCEMENT STEEL WORKS				
7	Supply and fixing of steel reinforcement (Fe 500D , TMT bars) for R.C.C. work including supply, straightening, cutting, bending, placing in position and binding , all complete as per specification and direction of Engineer-In-Charge.	MT	2.00		
	Rate in words:				



SL. NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
8	Drilling suitable holes in reinforced or plain cement concrete with power driven drill machine to a minimum depth of 100 mm upto 200 mm in RCC beams, lintels, columns and slabs to introduce steel bars for sunshades/balconies including fixing the steel bars in position using epoxy resin anchor grout of approved make but excluding the cost of reinforcement, all complete as per direction of Engineer-In-Charge.				
	12mm dia	Nos	320.00		
	Rate in words:				
	MASONRY WORKS				
9	Providing & laying Half brick masonry with common burnt clay Non modular bricks of class designation 7.5 in superstructure above plinth level up to floor V level in Cement mortar 1:4 (1 Cement : 4 coarse sand) all complete as per specification and direction of Engineer-In-Charge.	SQM	5.00		
	Rate in words:				
10	Providing & laying Brick work with common burnt clay Non modular bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in Cement mortar 1:4 (1 Cement : 4 coarse sand) all complete as per specification and direction of Engineer-In-Charge.	CUM	5.00		
	Rate in words:				
11	Providing and construction Solid Cement Concrete Block masonry in cement mortar 1:6 (Cement : fine aggregate as per IS: 2116) using factory made, load bearing, approved quality, Grade C (4.0), as per IS: 2185 (Part 1), density of blocks not less than 1800kg/cum, minimum average compressive strength of units 4.0N/mm ² at 28 days and minimum strength of individual unit is 3.2N/mm ² , set to level plumb including setting in position, providing scaffolding, curing, raking out joints wherever necessary etc., complete with all leads and all as per specification and direction of Engineer-in-charge in SUPERSTRUCTURE UPTO FLOOR FIVE LEVEL.				
	For 200mm thick walls using (400x200x200)mm size blocks {Using fine aggregate (Crushed stone sand produced by crushed hard stone / rock as per IS: 2116)}.	Cum	5.00		
	Rate in words:				



SL. NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	FLOORING WORKS				
12	Providing and laying 600 micron guage HDPE sheet below Grade slab, to the required levels, including supply,loading and unloading, storing, transportation, laying, hot seam welding of joints with sufficient 200mm over laps, sealing of junctions, all leads and lifts, etc.,complete.	SQM	20.00		
	Rate in words:				
13	62 mm thick cement concrete flooring with concrete hardener topping, under layer 50 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate, 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacture's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.				
	a) Deck Area & AHU.	SQM	30.00		
	Rate in words:				
14	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20 mm 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.				
	a) Size of Tile 600x600 mm	SQM	7.00		
	Rate in words:				
15	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete.	SQM	1.00		
	a) Size of Tile 600x600 mm				
	Rate in words:				



SL. NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	PLASTERING WORK				
16	Providing and applying 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) to concrete ceiling bottom surfaces with cement mortar at all levels including all labour, scaffolding, material, plant and machinery, all complete as per specifications and direction of Engineer in Charge.	SQM	15.00		
	Rate in words:				
17	Plastering 12mm thick with cement mortar specified below, finished smooth with cement, including scaffolding, curing, etc.; complete for INTERNAL SURFACES of walls, beam, ribs, sills, jambs, ceiling, etc.; complete all as per specifications UPTO FLOOR FIVE LEVEL, mix specified is for cement : fine aggregate as per IS: 1542.				
	With CM 1:6 (Cement: Fine aggregate (Crushed stone sand produced by crushed hard stone / rock as per IS: 1542)).	SQM	25.00		
	Rate in words:				
18	Providing & applying plaster to wall with 15 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) on external surfaces with finished smooth, including scaffolding, curing, etc. upto 10 m height from Ground level, all complete as per specifications and direction of Engineer in Charge.	SQM	70.00		
	Rate in words:				
19	Providing & applying plaster to wall with 18 mm thick cement plaster in two coats under layer 12mm thick cement plaster 1:5 (1 cement: 5 coarse sand) and top layer 6mm thick cement plaster 1:3 (1 cement : 3 coarse sand) finished rough with sponge. on external wall surfaces, including scaffolding, curing, etc. upto 10 m height from Ground level, complete all as per specifications and direction of Engineer in Charge.	SQM	50.00		
	Rate in words:				
20	Providing and applying neat cement punning to plastered / concrete surfaces, at all levels including all labour, scaffolding, material, plant and machinery. as per direction of Engineer in charge.	SQM	85.00		
	Rate in words:				



SL. NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
21	Providing and fixing 60 mm thick glazed fire resistant door shutters of 120 minutes Fire rating conforming to IS:3614 (Part II) or EN1634-1:1999, tested and certified as per laboratory approved by Engineer-in-Charge, with suitable mounting on door frame, consisting of vertical styles, top rail & side rail 60 mm x 60 mm wide and bottom rail of 110 mm x 60 mm made out of 1.6 mm thick G.I. sheet (zinc coating not less than 120 gm/sqm) duly filled mineral wool insulation having density minimum 96 kg/cum and fixing with necessary stainless steel ball bearing hinges of size 100x89x3 mm of approved make, including applying a coat of approved fire resistant primer or powder coating not less than 30 micron etc all complete as per direction of Engineer-in-Charge (panelling to be paid for separately).	SQM	6.00		
	Rate in words:				
22	Providing and fixing non load bearing fixed frame for fire resistant glazed partition for 120 minutes fire rating, made out to a profile of dimension 60 mm x 70 mm of 1.6 mm thick galvanised steel sheet as per test evidence suitable for fixing fire rated glass for 120 minutes of both integrity & radiation control (EW120) & minimum 20 minutes of insulation (EI20).The profile has to be fixed to the supporting construction by means of anchor fasteners of size M10 x 80, every 150 mm from the edges and every 500 mm (approx) c/c. Linear measurement of frame shall be measured for payment. The frame shall be filled with mineral wool insulation of density minimum 96kg/ cum and finished with a approved fire resistant primer or powder coating of not less than 30 micron in desired shade as per NBC 2016, IS 16231 (Part 3):2016 and directions of Engineer - in- Charge.	RMT	15.00		
	Rate in words:				
	STRUCTURAL STEEL WORKS				



SL. NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Unless otherwise specified the rates quoted for all shall include the cost of the following :- Preparation of shop drawing & getting approved from Structural designer a) Receiving all materials unloading and storing at fabrication yard outside the site premises. No Fabrication Yard at Site for Structural Steel. b) Straightening, cutting, fabricating, conveying to work site, hoisting and fixing in position, transportation to site from fabrication yard and shifting and movement within site premises. c) The cost of all materials and labour. d) Work at all heights, levels and situations. e) Providing necessary scaffolding, staging, platforms, ladders etc. and removing. f) Hire charges for necessary hoisting equipments like crane, chain pulley blocks, derricks, winches, screw jacks, hooks, wire ropes etc.				
	g) All necessary fixtures like bolts, washers and nuts. h) Approved quality welding, electrodes like "Phillips" "Advani" "Likon" or "Ador" make or approved equivalent. i) Welding at all heights, levels, conditions and situations. j) Cost of safety belts, goggles, helmets and other necessary safety equipments. k) Preparing the surfaces for painting and also for welding, with one coat of rust convertor to be applied l) Painting with zinc chromate primer before erection & after completion of works final paint with two coats of enamel paint as approved Paint shall be IGBC certified w.r.t				
	Low VOC content (Painting with two coats : 100 - 150 Micron) If the steel section observes any defects, such as scalling, corrosion etc contractor needs to rectilfy the same with shot blasting copper slag SA 2.5. as surface preparation with no additional cost, Engineer Incharge decision shall be final in this regards m) All the dimension shall be checked with full scale layout n) All weld shall be minimum 8mm thick or thickness of member plate / member thickness which ever is less, unless mentioned otherwise o) MIG welding to be used (Arc Welding is an exception to be used only for tacking)				



SL. NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
23	Supplying and fixing in position structural steel work welded in built up sections/framed work including cutting, hoisting, and applying a priming coat of approved steel primer, all complete as per drawings and directions of Engineer in Charge.				
a)	In stringers, treads, landings etc. of stair cases including use of chequered plate wherever required, all complete.	Kgs	2400.00		
	Rate in words:				
b)	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	Kgs	900.00		
	Rate in words:				
24	Providing and fixing roofing consist of 0.8 mm thick galvanized steel deck sheet conforming to IS 277:1992 used as permanent shuttering over which MS wire mesh 3 mm laid at 100x100 mm grid including edge trim covered with concrete. This metal deck will be supported on structural steel beam with shear studs. (Structural steel like Beam, column, joists etc. & concrete of different grade as per design will be paid separately).	SQM	10.00		
	Rate in words:				
25	TERRACE WATERPROOFING				
	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: (a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment.				



SL. NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	(b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs (c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge.				
	(d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement : 4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. (e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. "All above operations to be done in order and as directed and specified by the Engineer-in-Charge":				
	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	SQM	7.00		
	Rate in words:				
	PAINTING WORKS				
26	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour with 2 coats.	SQM	90.00		
	Rate in words:				
27	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade.				
	New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm).	SQM	30.00		
	Rate in words:				



SL. NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	ROOF & WALL SHEETING WORKS				
28	Providing and fixing in position, 130 mm thick factory made Expanded Polystyrene Core (EPS Core) wall panels consisting of EPS core sandwiched between two Engineered sheets of welded wire fabric mesh duly finished with shortcrete materials on outer faces. The fabric mesh shall be made of 3 mm dia zinc coated G.I. wire mesh with 50 mm pitch in both the directions and on both faces of the wall and connected by GI wire of 3 mm dia at alternate row by welding. The EPS core shall consist of 60 mm thick EPS of density not less than 16 kg/ cum. Both the outer faces of the panel shall be finished by applying the layer of 35 mm thick cement mortar 1:3 {1 cement: 3 coarse sand (not having more than 40% stone chips of size upto 6 mm)} with the help of shotcreting/guniting equipment etc at a pressure not less than 1 bar (100KN/m ²) and both surfaces finished with trowel. Fixing operations of wall panels shall be completed in all respect as per drawings and specifications and under the overall direction of the Engineer-in-charge.				
	a) For Roof System	SQM	21.00		
	Rate in words:				
	b) For Wall partitions (Same as above with Top sheet without Crest)	SQM	54.00		
	Rate in words:				
29	Providing and fixing precoated galvanised steel sheet roofing accessories of total coated thickness 0.50 mm (base metal of minimum 0.45 mm thickness with total coating thickness of 0.05 mm) with Zinc coating 120 gram per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete.				
	Gutter (600 mm over all girth)	RMT	5.00		
	Rate in words:				
	MISCELLANEOUS WORKS				
30	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
	In cement mortar	CUM	15.00		
	Rate in words:				



SL. NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
31	Dismantling steel work manually/ by mechanical means in built up sections without dismembering and stacking within 50 metres lead as per direction of Engineer-in-charge.	Kgs	500.00		
	Rate in words:				
32	Dismantling wood work of sectional area 40sqcm and above wrought FRAMED & fixed in frames, other frames and trusses, including stacking the materials within 50m lead.	Cum	8.00		
	Rate in words:				
33	Dismantling doors, windows and clearstory windows (steel or wood) shutters including chowkhats, architrave, holdfasts, etc.; complete and stacking within 50m lead.				
	of area 3sqm and below.	Each	10.00		
	Rate in words:				
34	Dismantling ALUMINIUM / GYPSUM PARTITIONS, DOORS, WINDOWS, FIXED GLAZING AND FALSE CEILING including disposal of unserviceable material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	Sqm	15.00		
	Rate in words:				
35	Providing and injecting approved grout in proportion recommended by the manufacturer into cracks/honey-comb area of concrete/masonry by suitable gun/pump at required pressure including cutting of nipples after curing etc. complete as per directions of Engineer-in-Charge.				
	Stirrer mixed SBR Polymer (of approved make) modified Cement slurry made with Shrinkage Compensating Cement in concrete/RCC work.	Kgs	500.00		
	Rate in words:				
36	Providing and anchoring in position high strength anchor bolts of grade 5.8 and specified dia and standard lengths including necessary drilling up to 150mm depth (min), anchoring and grouting with necessary equipments etc., complete as per specifications of agency approved by Consultants (HILTY or equivalent).				
	16mm dia (heavy duty)	Nos	40.00		
	Rate in words:				



SL. NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
37	Providing and supplying aluminium extruded tubular and other aluminium sections in structural glazing works, as per the architectural drawings and approved shop drawings , the aluminium quality as per grade 6063 T5 or T6 as per BS 1474, including super durable powder coating of 60-80 microns conforming to AAMA 2604 of required colour and shade as approved by the Engineer-in-Charge. (The item includes cost of material such as cleats, sleeves, fasteners screws etc as desired. necessary for fabrication of extruded aluminium frame work. Nothing extra shall be paid on this account).	Kgs	645.84		
	Rate in words:				
38	Designing, fabricating, testing, protection, installing and fixing in position semi (grid) unitized system of structural/ curtain wall glazing (with open joints) including the backend structural steel framework wherever required (structural steel shall be paid separately in respective items) for linear as well as curvilinear portions of the building for all heights and all levels, including :				
	a) Structural analysis & design and preparation of shop drawings for the specified design loads conforming to IS 875 Part III for Basic Wind Speed of 55 m/s, Risk Coefficient of 1.08 and Importance factor of 1.15 (the system must passed the proof test at 1.5 times design wind pressure without any failure) and lateral forces as per IS 1893 (The system shall be designed for one higher seismic in which the site location falls and with Importance factor of 1.5), including functional design of the aluminium sections for fixing glazing panels of various thicknesses, aluminium cleats, sleeves and splice plates etc. gaskets, screws, toggles, nuts, bolts, clamps etc., structural and weather silicone sealants, flashings, fire stop (barrier)-cum-smoke seals, microwave cured EPDM gaskets for water tightness, pressure equalization & drainage and protection against fire hazard including:				



SL. NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	b) Fabricating and supplying serrated M.S. hot dip galvanized / Aluminium alloy of 6005 T5 brackets of required sizes, sections and profiles etc. to accommodate 3 Dimensional movement for achieving perfect verticality and fixing structural glazing system rigidly to the RCC/ masonry/structural steel framework of building structure using stainless steel anchor fasteners/ bolts, nylon separator to prevent bimetallic contacts with nuts and washers etc. of stainless steel grade 316, of the required capacity and in required numbers.				
	c) Providing and filling, two part pump filled, structural silicone sealant and one part weather silicone sealant compatible with the structural silicone sealant of required bite size in a clean and controlled factory / work shop environment , including double sided spacer tape, setting blocks and backer rod, all of approved grade, brand and manufacture, as per the approved sealant design, within and all around the perimeter for holding glass				
	d) Providing and fixing in position flashings of solid aluminium sheet 1 mm thick and of sizes, shapes and profiles, as required as per the site conditions, to seal the gap between the building structure and all its interfaces with curtain glazing to make it watertight.				
	e) Making provision for drainage of moisture/ water that enters the curtain glazing system to make it watertight, by incorporating principles of pressure equalization, providing suitable gutter profiles at bottom (if required), making necessary holes of required sizes and of required numbers etc. complete. This item includes cost of all inputs of designing, labour for fabricating and installation of aluminium grid, installation of glazed units, T&P, scaffolding and other incidental charges including wastages etc., enabling temporary structures and services, cranes or cradles etc. as described above and as specified. The item includes the cost of getting all the structural and functional design including shop drawings checked by a structural designer, dully approved by Engineer-in-charge.				



SL. NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	The item also includes the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working structural glazing as specified, cleaning and protection till the handing over of the building for occupation. In the end, the Contractor shall provide a water tight structural glazing having all the performance characteristics etc. all complete as required, as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineer in-Charge.				
	Note:- 1. The cost of providing extruded aluminium frames, shadow boxes, extruded aluminium section capping for fixing in the grooves of the curtain glazing and vermin proof stainless steel wire mesh shall be paid for separately under relevant items under this subhead. However, for the purpose of payment, only the actual area of structural/curtain wall glazing (including width of grooves) on the external face shall be measured in sqm. up to two decimal places.	SQM	30.00		
	Rate in words:				
39	Providing, assembling and supplying vision insulated glass panels (IGUs) comprising of hermetically-sealed 6-12-6 mm insulated glass (double glazed) vision panel units of size and shape as required and specified, comprising of an outer toughened/heat strengthened(as approved) glass 6mm thick, of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade, an inner toughened/heat strengthened(as approved) clear float glass 6mm thick, spacer tube 12mm wide, desiccants, including primary seal and secondary seal (structural silicone sealant) etc. all complete for the required performances, as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer-in-Charge. The IGUs shall be assembled in the factory/ workshop of the glass processor. (Payment for fixing of IGU Panels in the curtain glazing is included in cost of item No.1.18.2 above). For payment, only the actual area of glass on face # 1 of the glass panels (excluding the areas of the grooves and weather silicone sealant) provided and fixed in position, shall be measured in sqm. (To be fixed on extruded aluminium sections. and cost of aluminium sections to be paid in relevant item).				



SL. NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	High performance Colored toughened / heat strengthened(as approved) glass 6mm thick clear substrate with double silver reflective soft coating on face-2 surface, + 12mm Air gap + 6mm clear toughened / heat strengthened(as approved) Glass of approved make having properties as visible Light transmittance (VLT) of more than or equal to 40%, Light reflection internal 12%, light reflection external 23 %, SHGC less than 0.25 and U value of less than OR equal to 1.80 W/m ² degree K etc. The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement. Approval of better property glass shall not be payable extra.	SQM	25.00		
	Rate in words:				
40	Extra for openable side / top hung vision glass panels (double/ single glass units) including providing and supplying at site all accessories and hardware for the openable panels as specified and of the approved make such as heavy duty stainless steel friction hinges, min 4 - point cremone locking sets with stainless steel plates, handles, buffers etc. including necessary stainless steel screws/ fasteners, nuts, bolts, washers etc. all complete as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer in-Charge.	SQM	5.00		
	Rate in words:				
	Total				
	Add GST @ 18%				
	Grand Total				

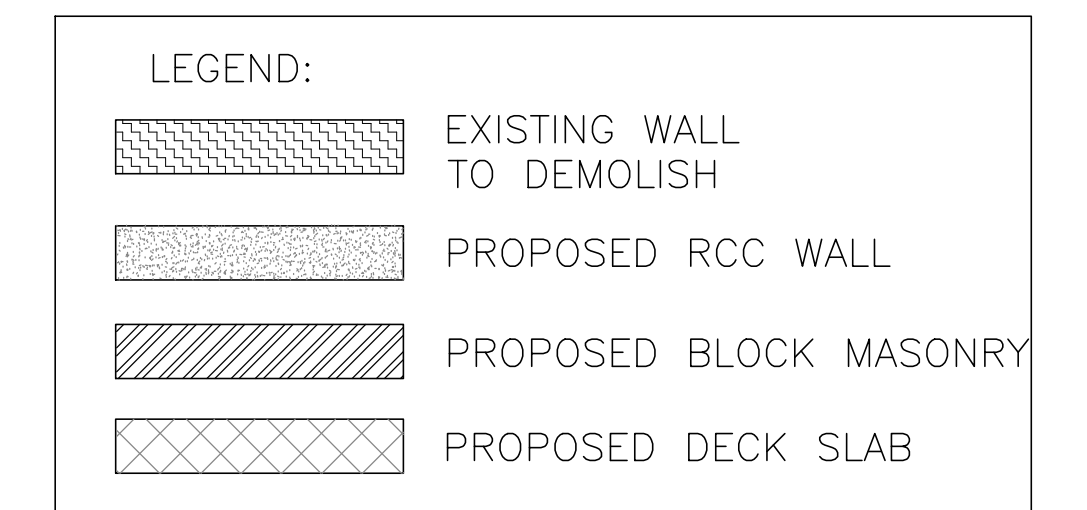
Amount in words:

Total Amount in words:		
Number of corrections:		Signature of tenderer:
Number of overwritings:		
Number of additions:		

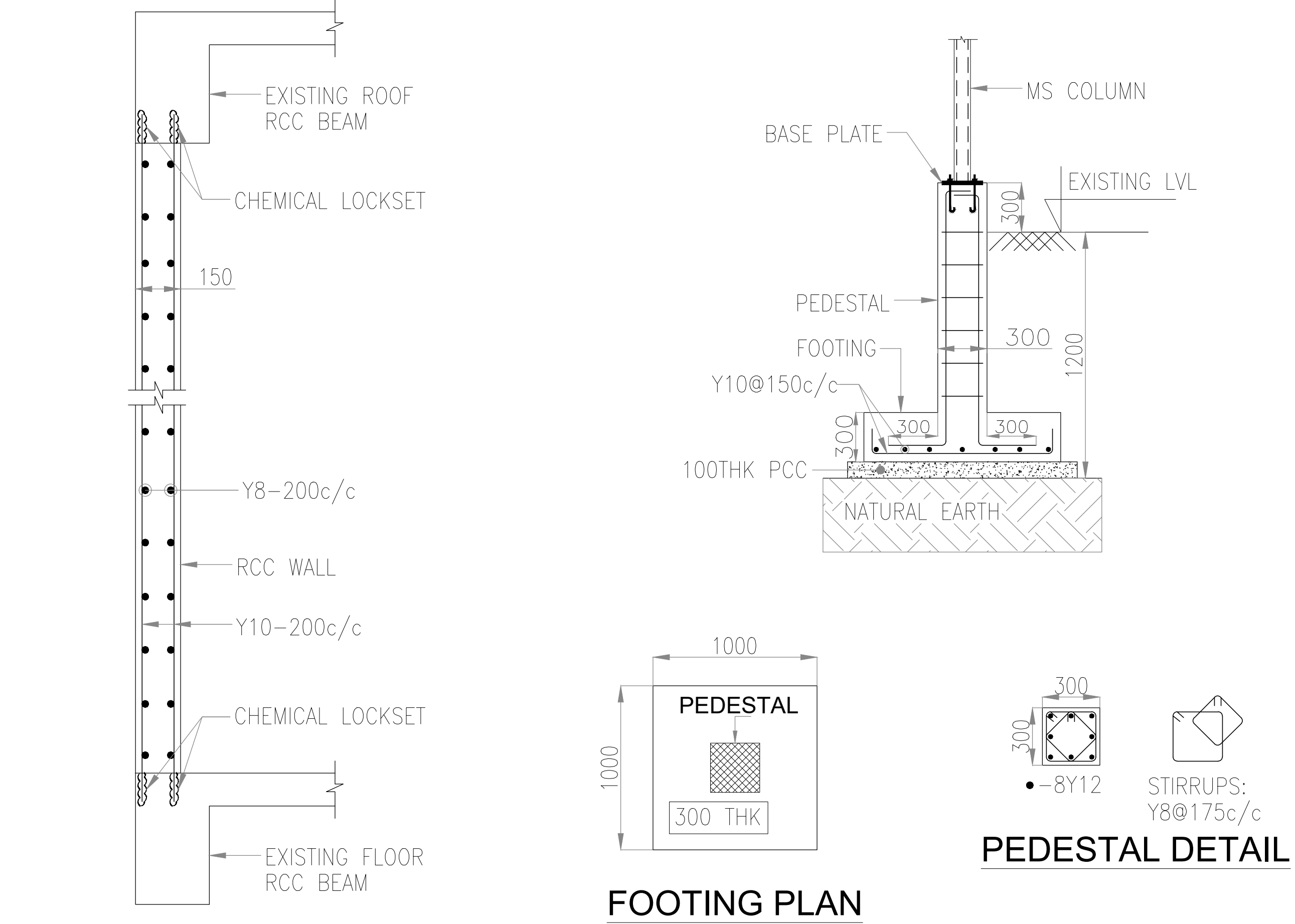
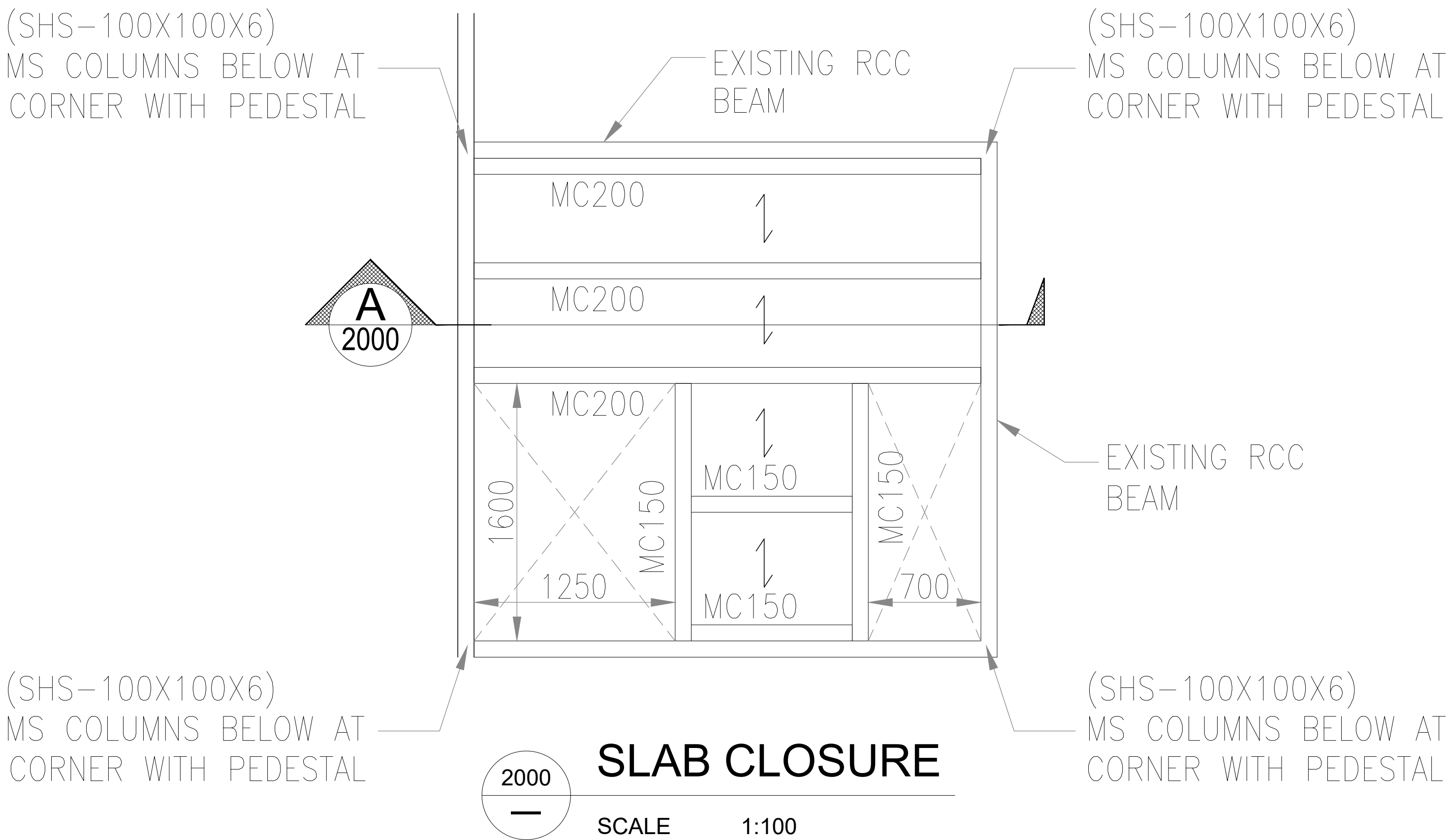
Seal & Signature of Contractor



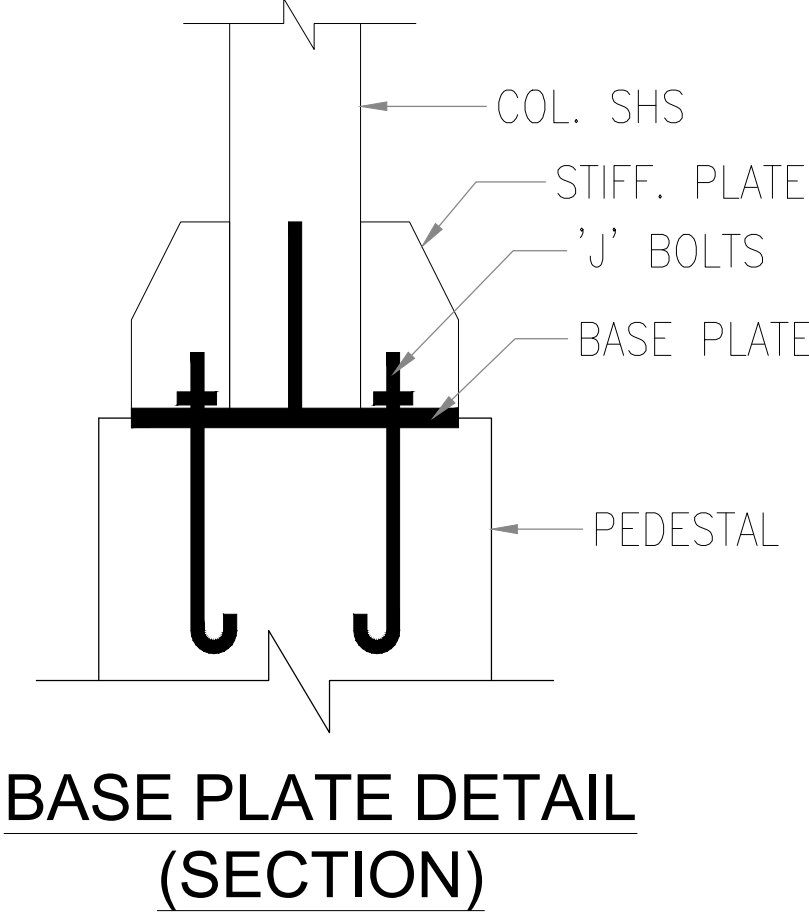
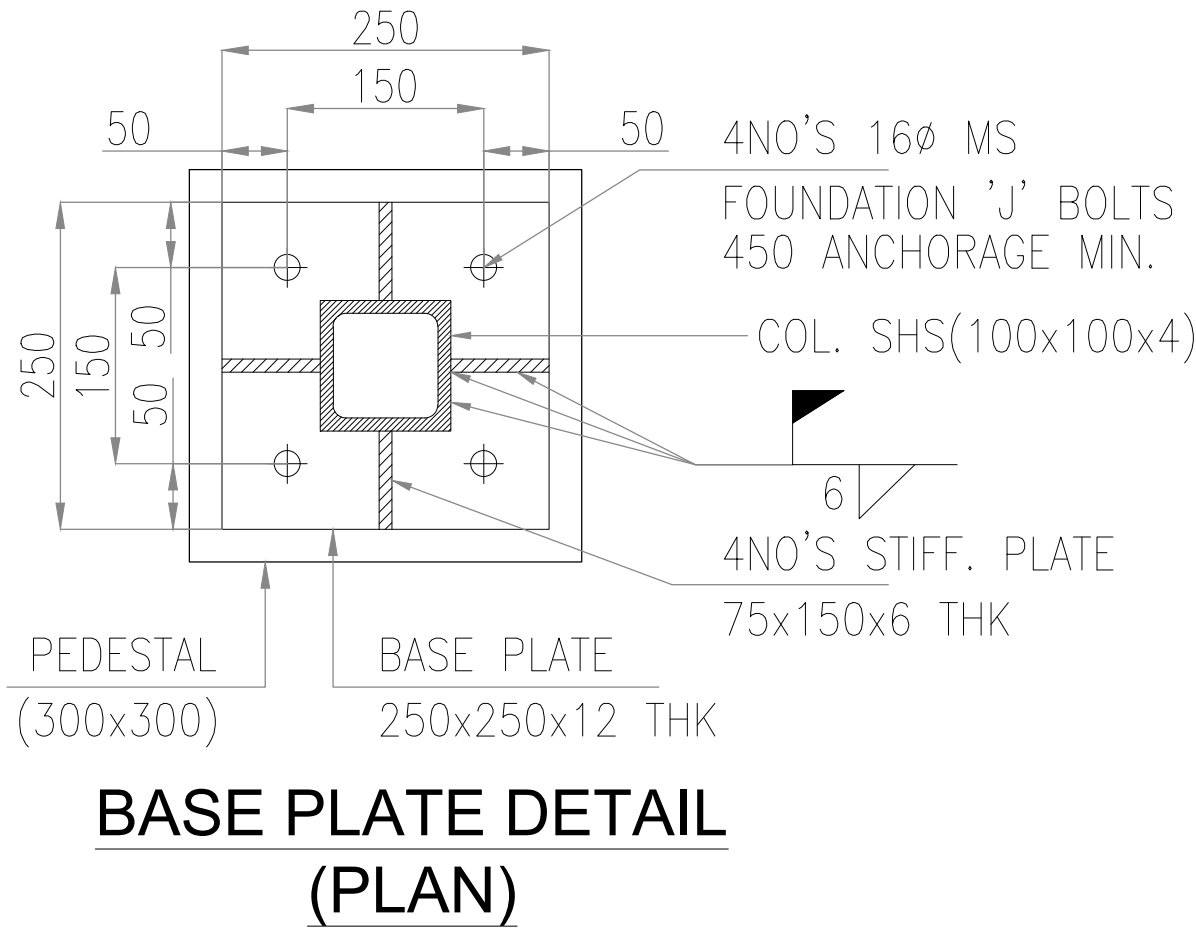
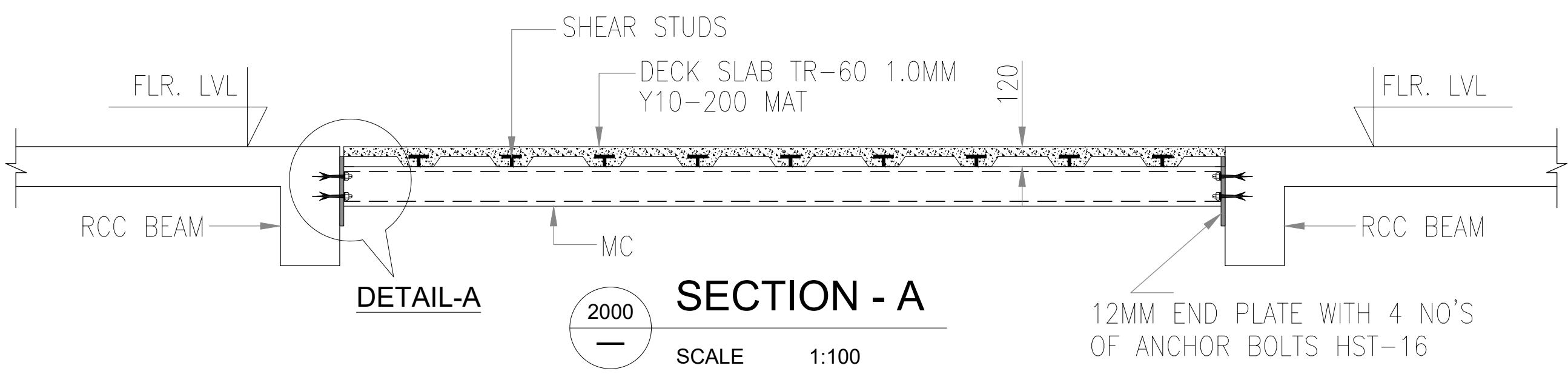
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SG2	1350X(3300 AS PER SITE)	—		REFER PLAN	GLAZING	
SG3	1675X(3300 AS PER SITE)	—		REFER PLAN	GLAZING	



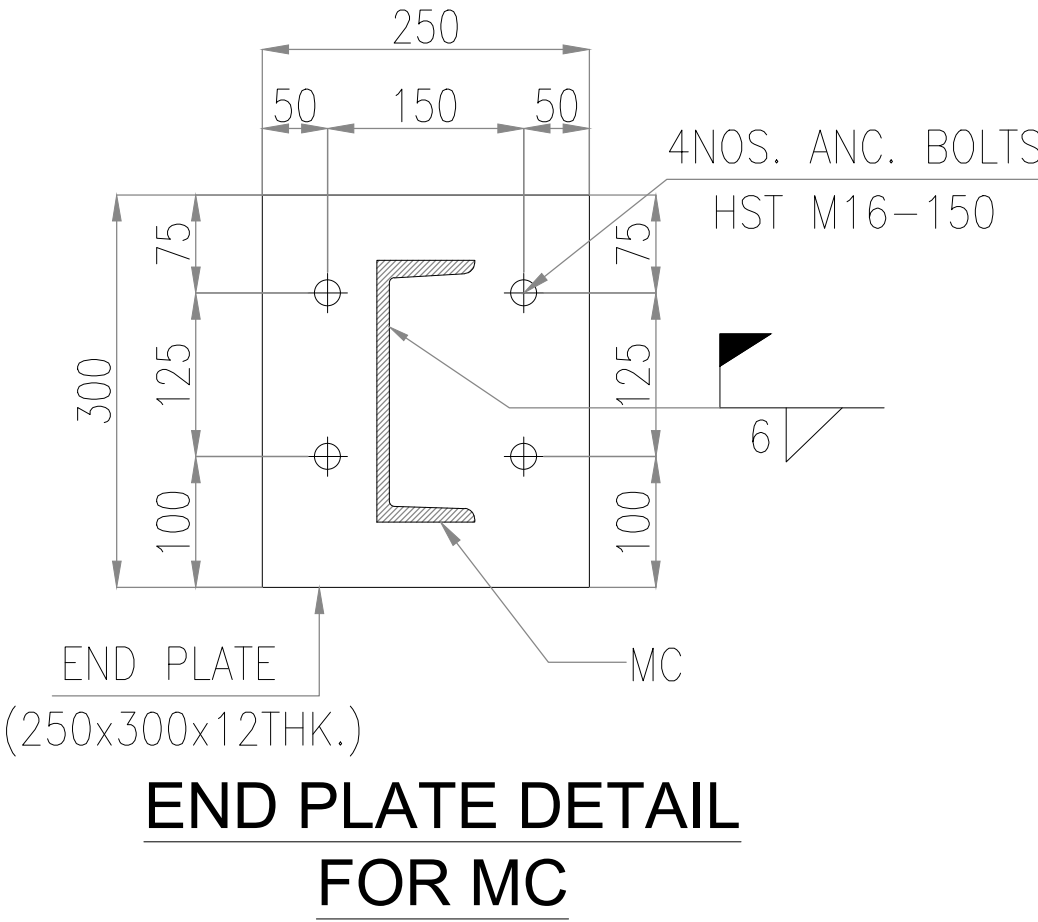
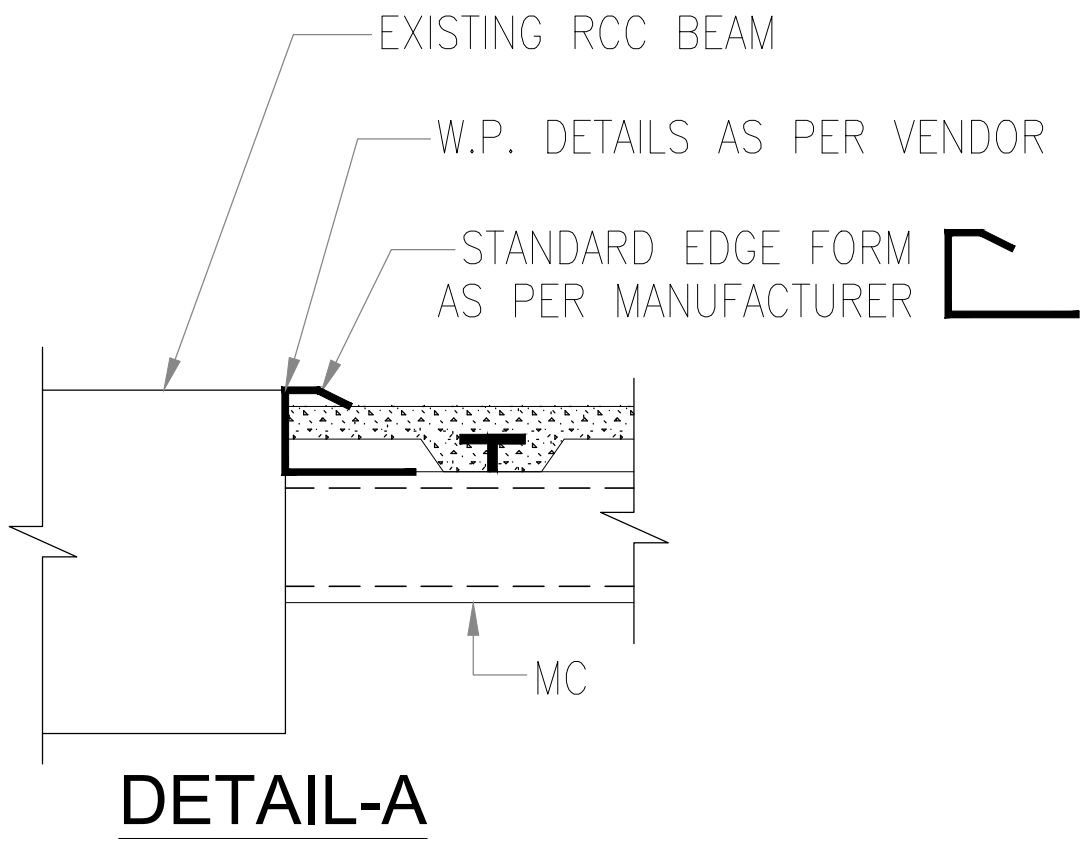
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				



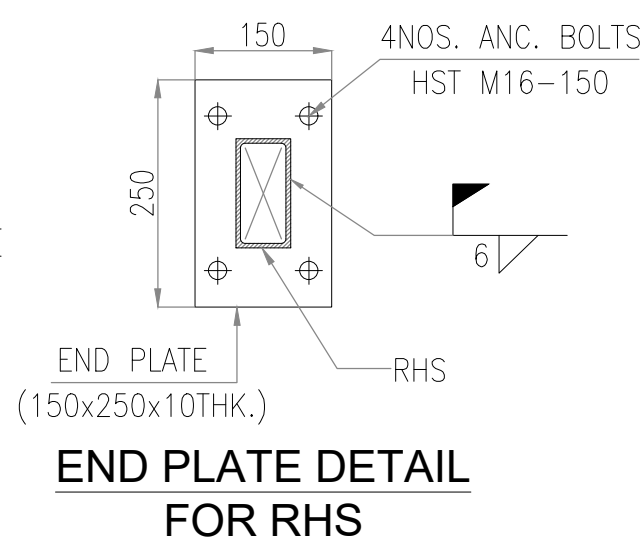
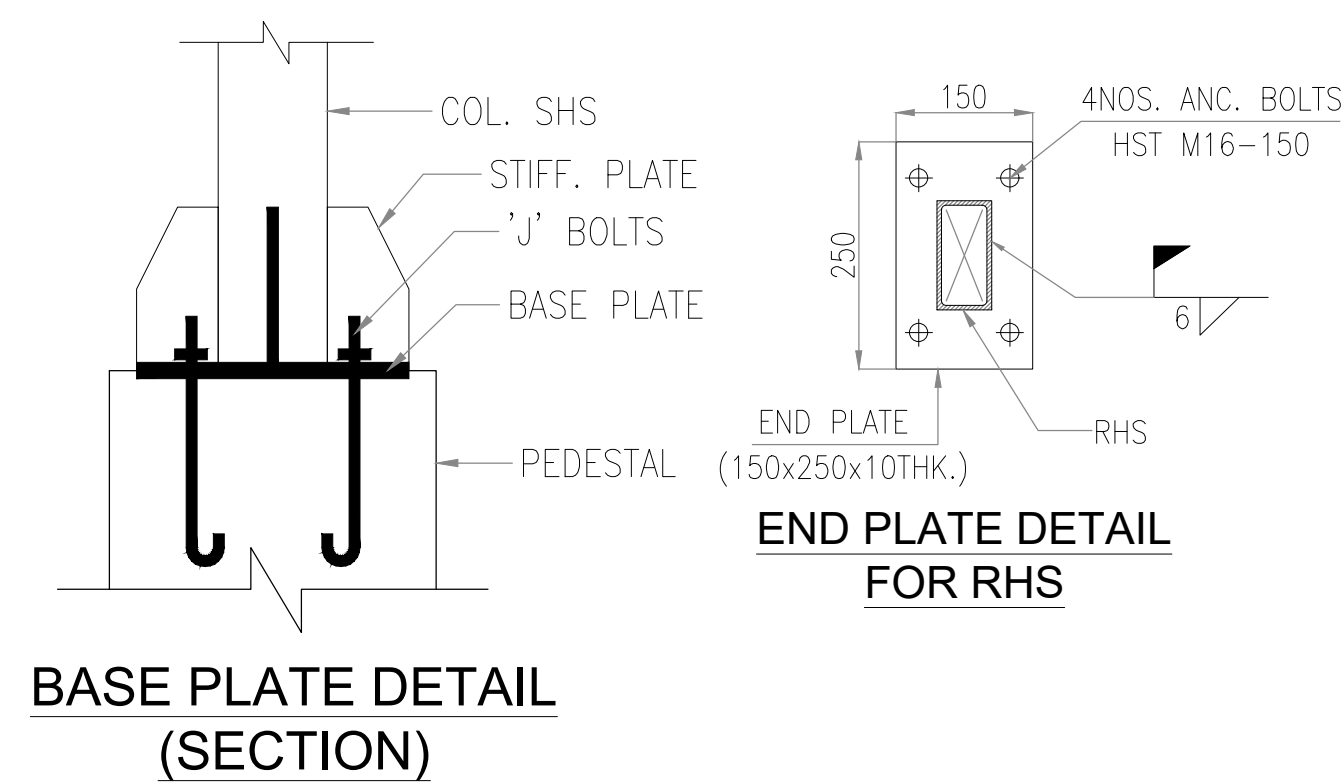
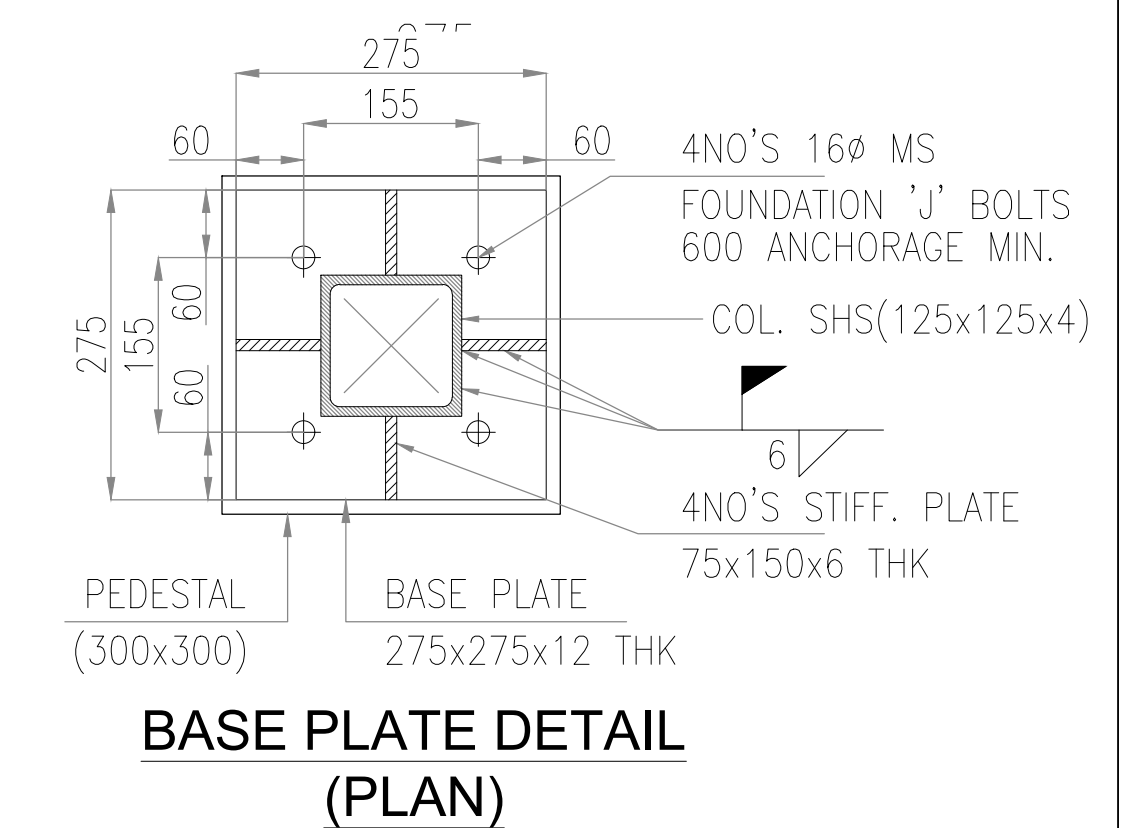
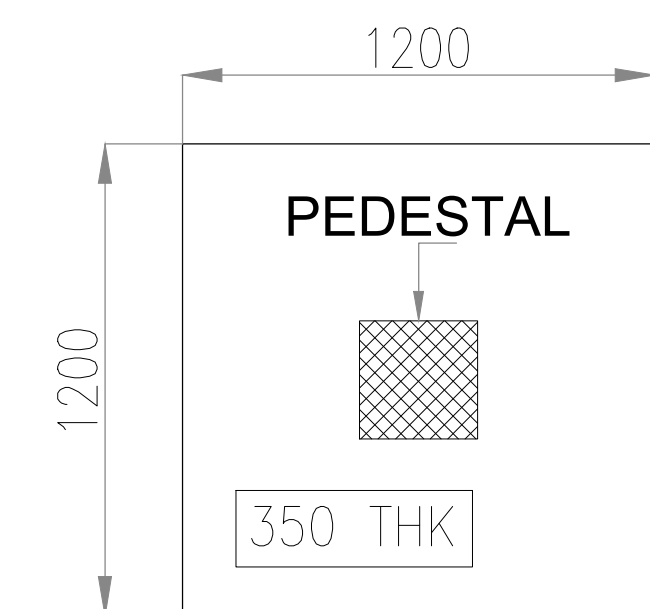
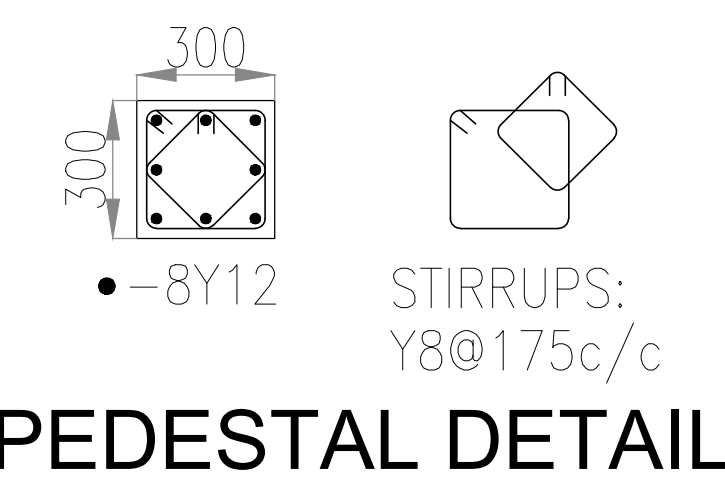
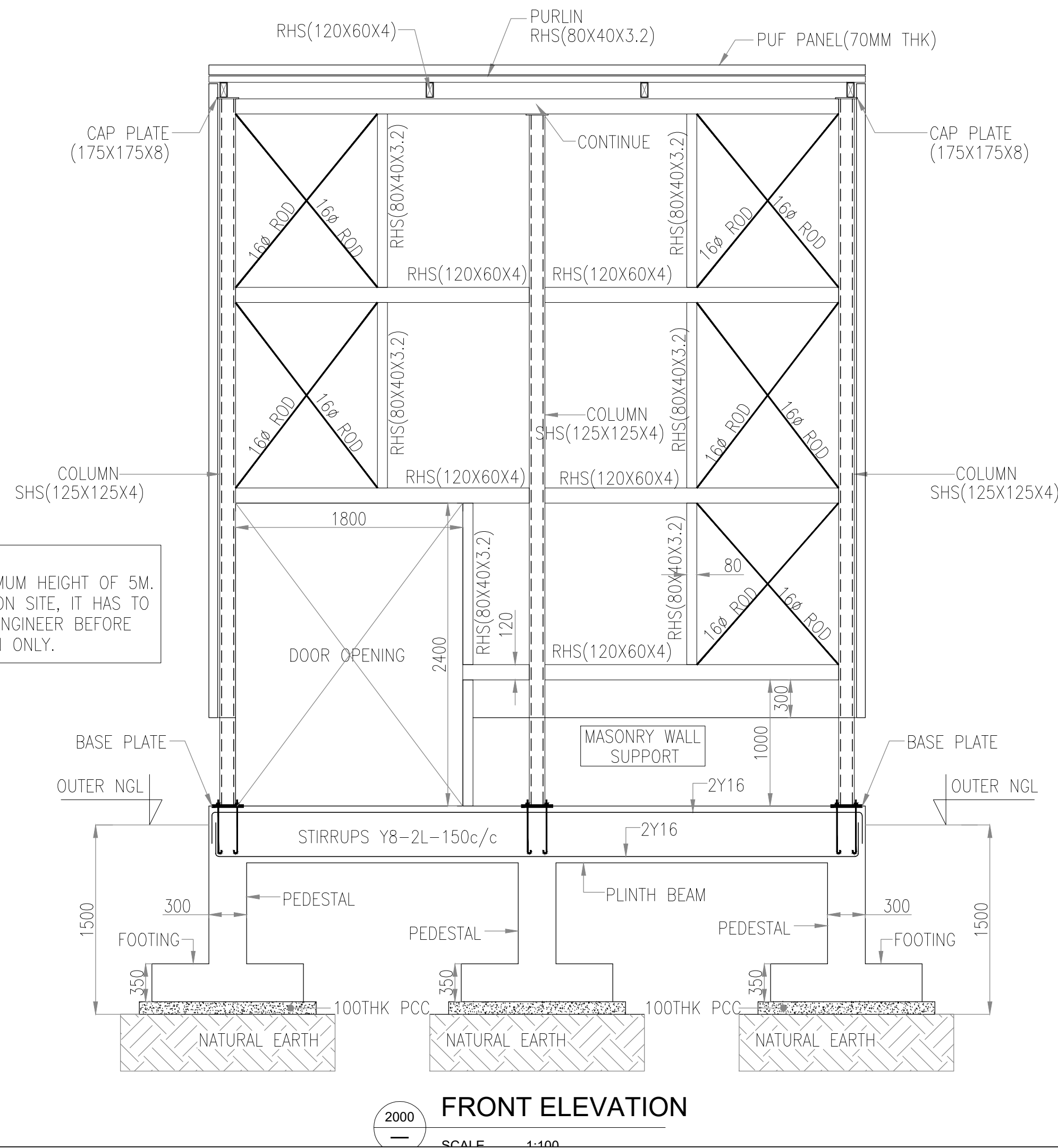
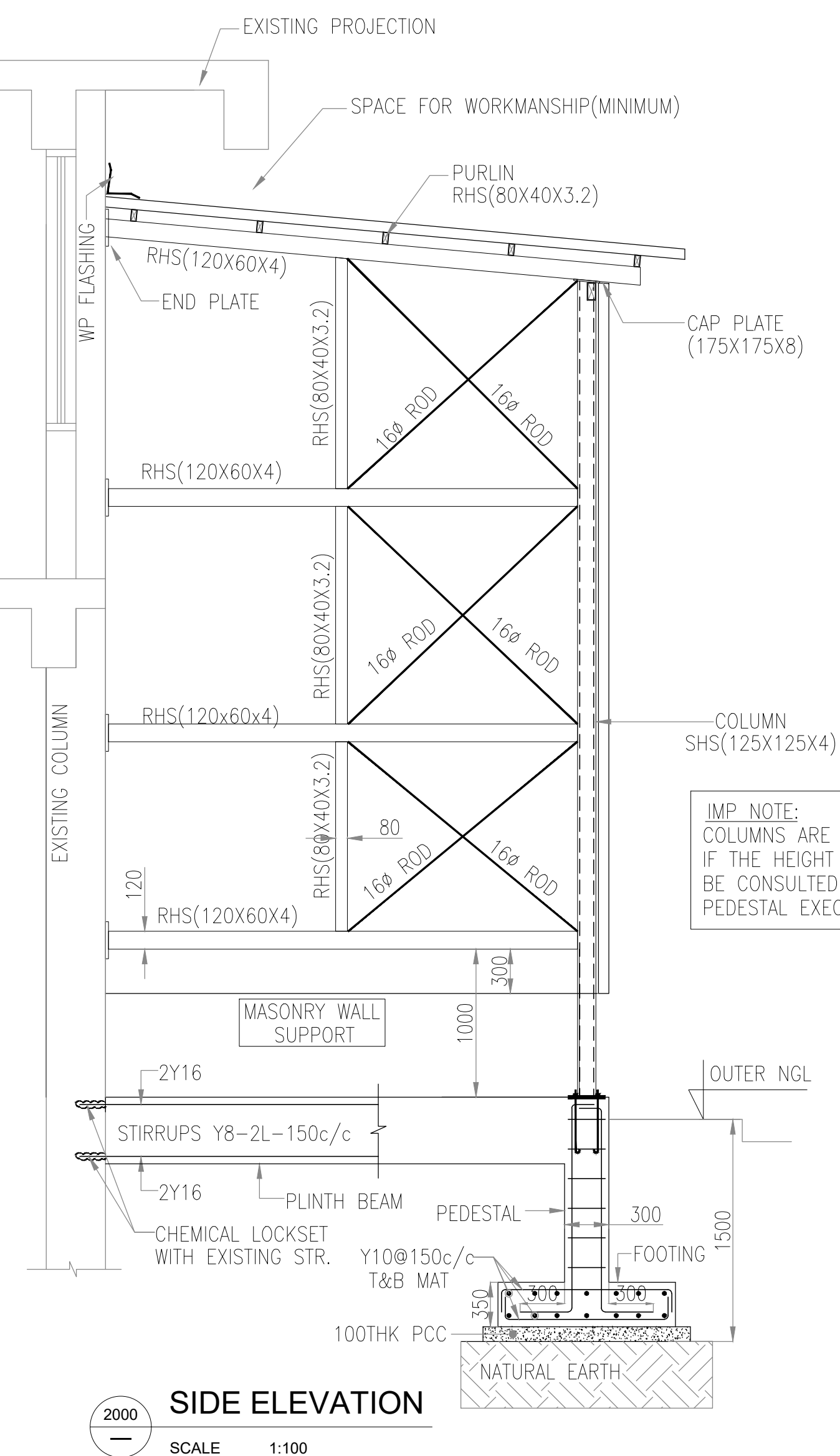
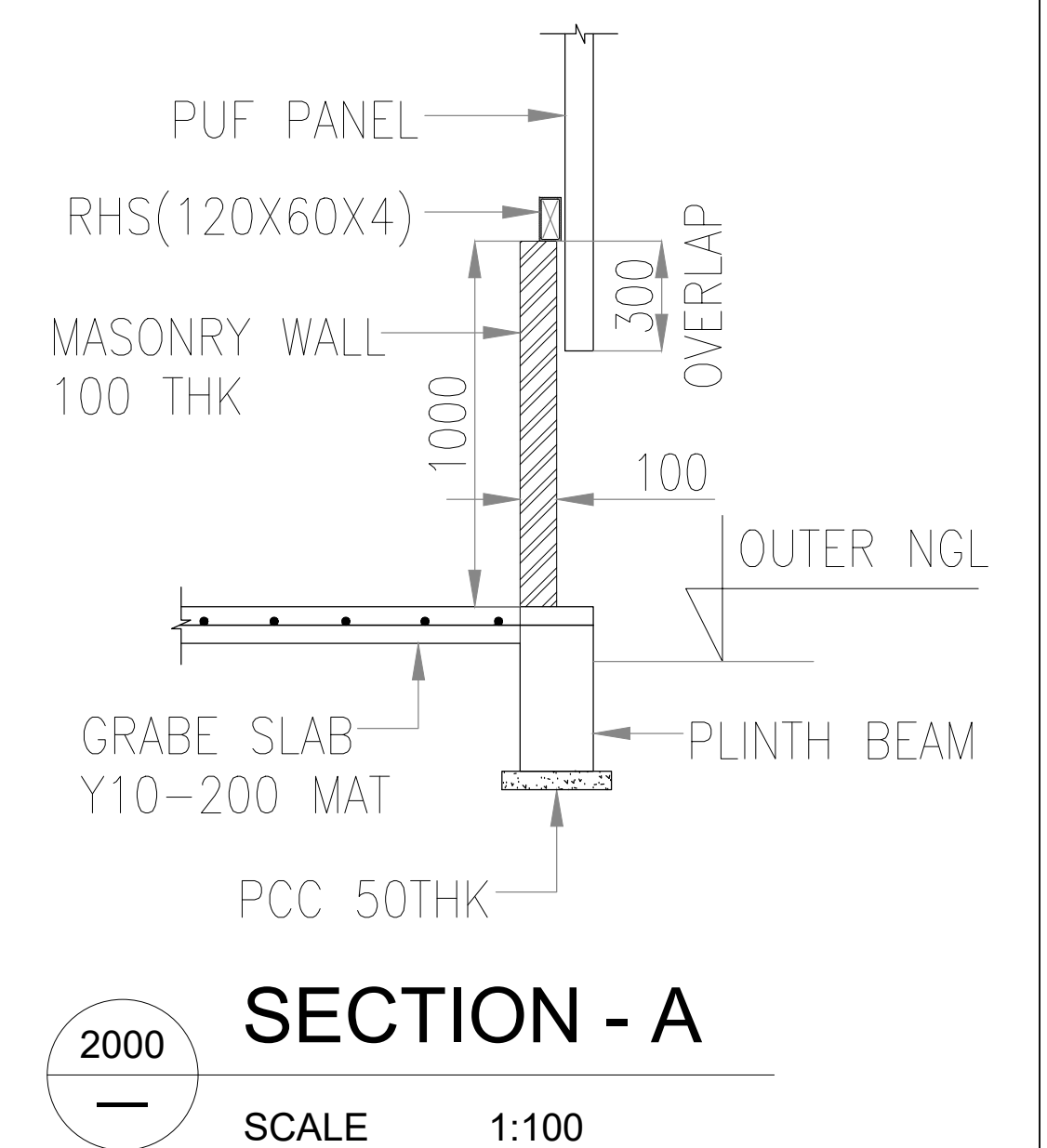
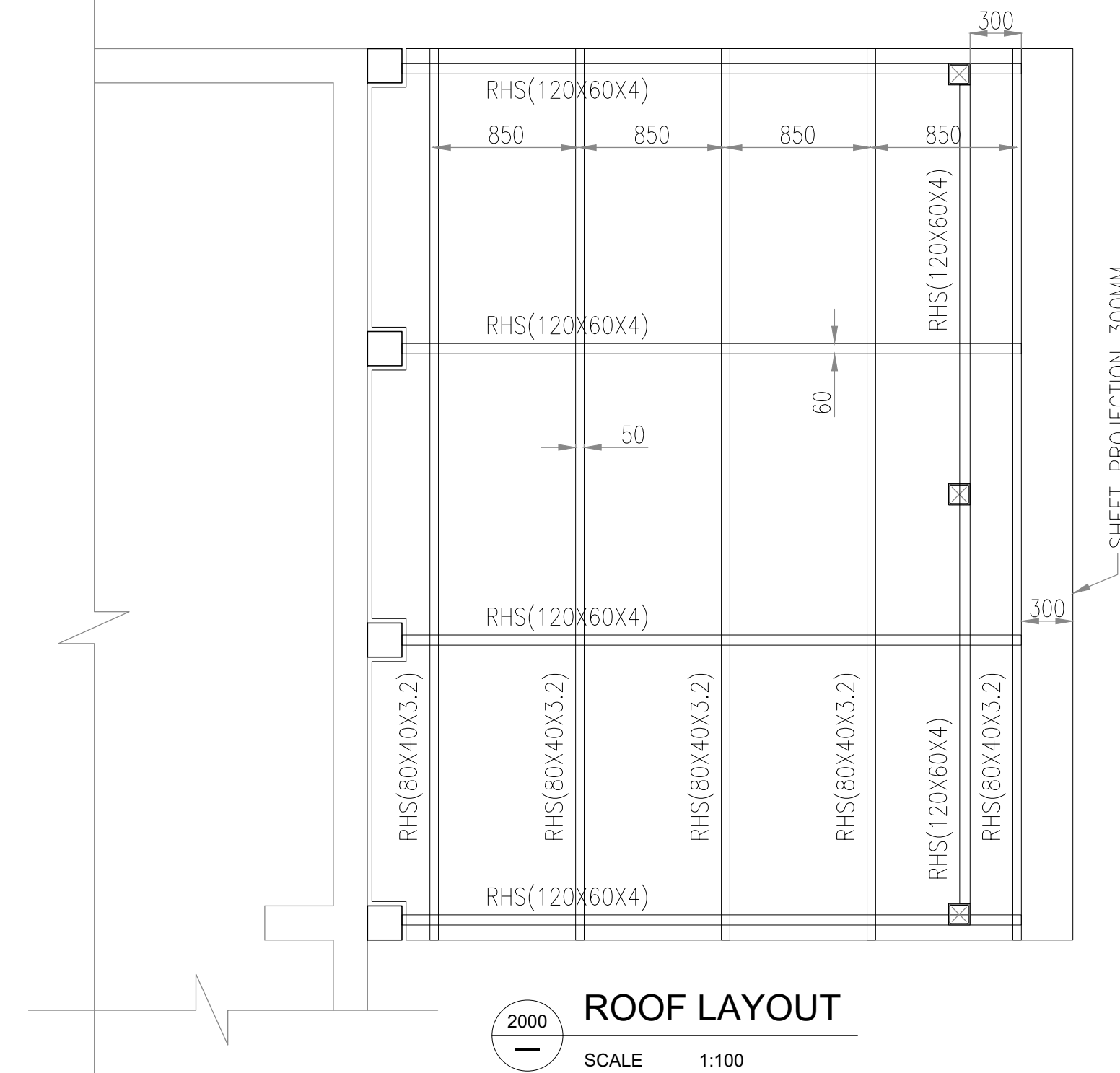
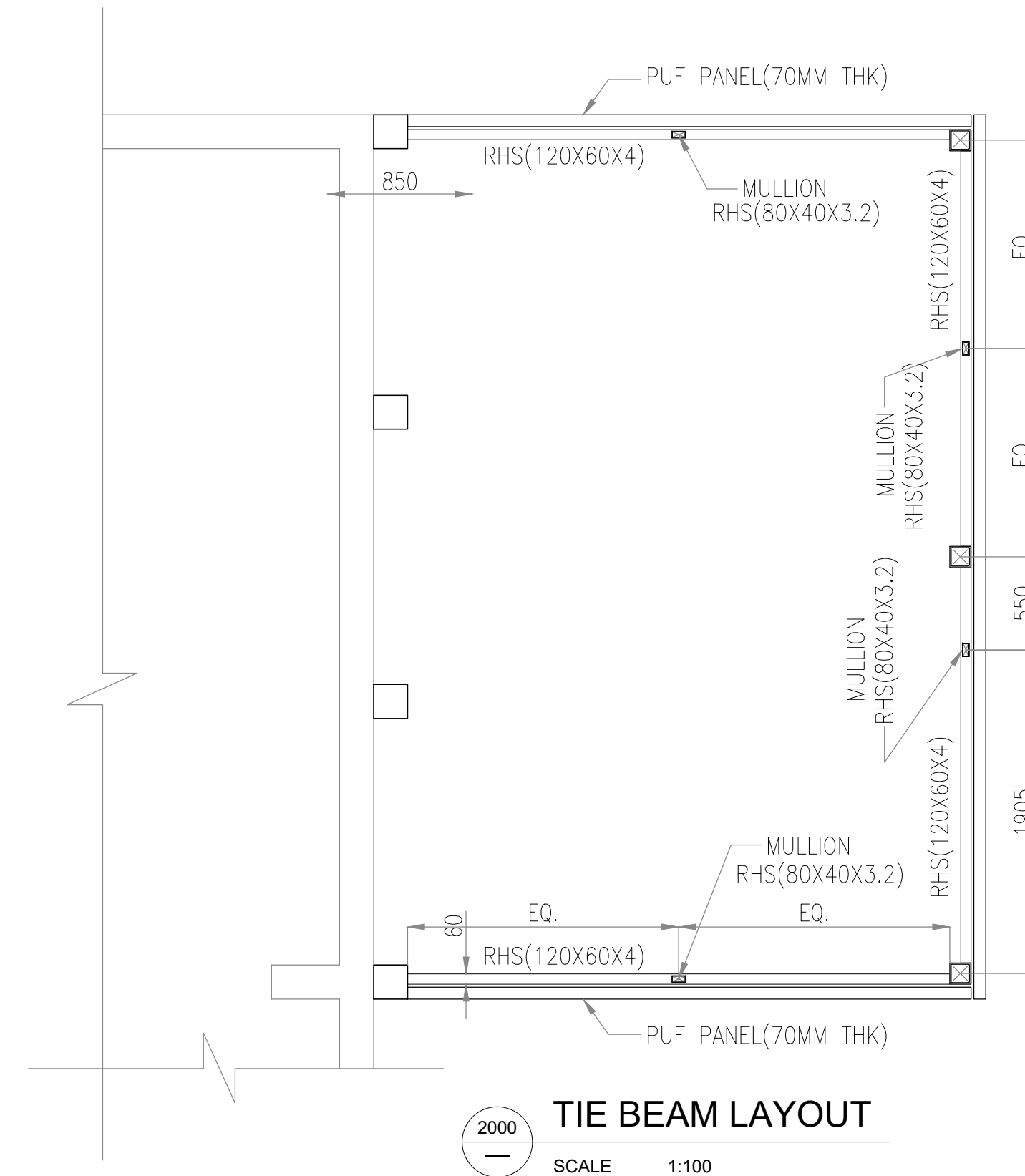
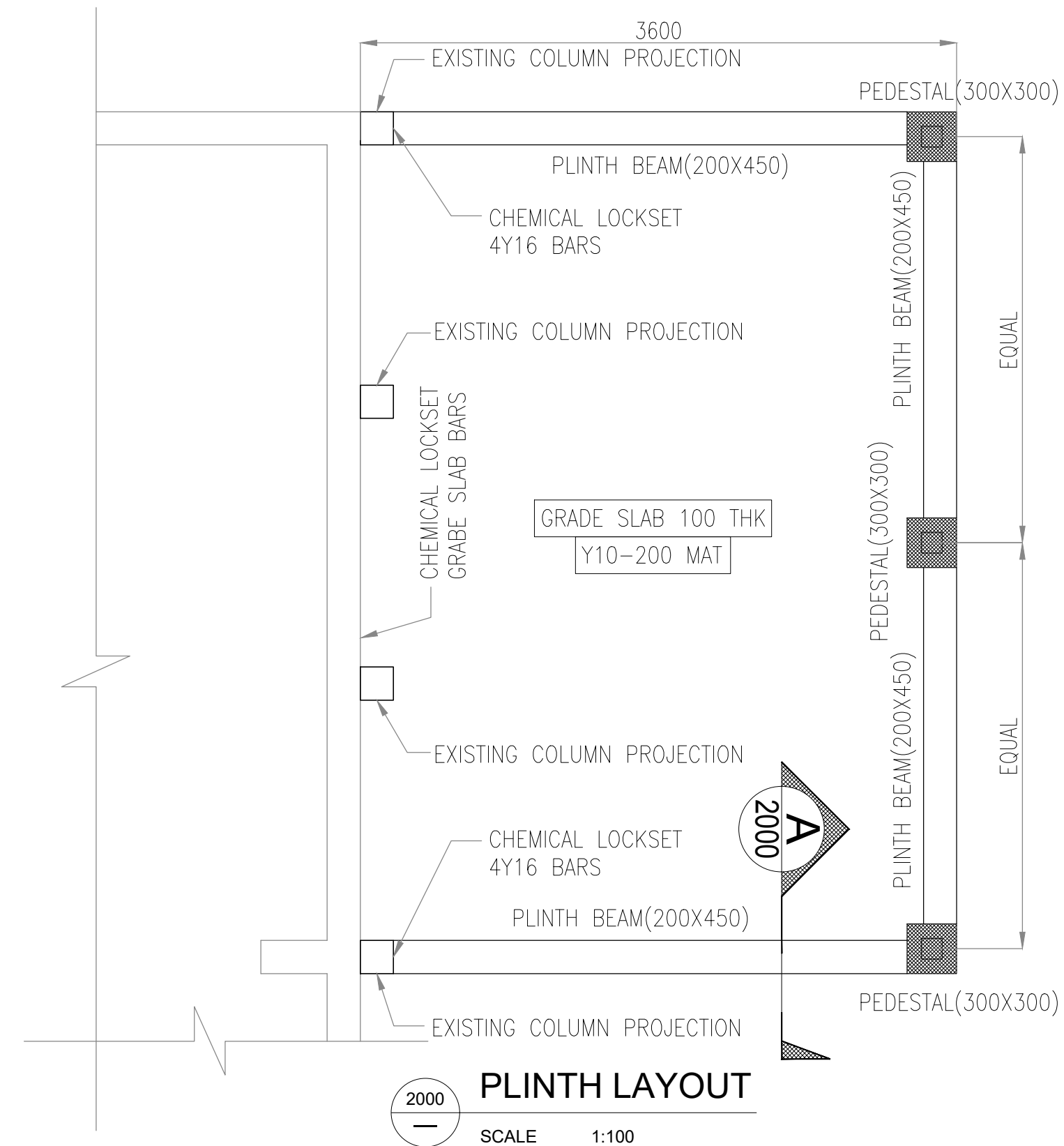
RCC WALL DETAILS



- GENERAL NOTES:**
- DIMENSIONS TO BE READ & NOT TO BE MEASURED.
 - ALL DIMENSIONS & LEVELS HAS TO BE VERIFIED BY CONTRACTOR & SHOP DRAWINGS TO BE PRODUCED BY CONTRACTOR AND APPROVED BEFORE EXECUTION.
 - GRADE OF TUBE SECTIONS - Yst310
 - GR OF PLATES, ANGLES, I-BEAM, CHANNEL - Fe250
 - ALL WELDS 6MM - AWS CLASS - E7018/E6013.
 - FOUNDATION BOLTS Gr-4.6
 - GRADE OF CONCRETE - M25
 - GRADE OF REBAR STEEL - Fe500



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/R0	30-04-26	FOR GFC	BKR	OMR
REV.NO.	DATE	DESCRIPTION FOR REVISION	DRAWN BY	CHECKED BY
PURPOSE:VA				
OWNER				
RAMAN RESEARCH INSTITUTE BANGALORE				
PROJECT				
LASE-LAB BANGALORE				
TITLE				NORTH
CUTOUT SLAB CLOSURE AND RC WALL DETAILS				
DEALT OMR	VA-JOB NO			REVISION
SCALE 1:75	DATE 30-04-26	DRAWING NO LA-S-2001	R0	
VA		Venkataramanan Associates		10/2, O'Shaughnessy Road, Langford Gardens, Bangalore - 560025 India



- GENERAL NOTES:
1. DIMENSIONS TO BE READ & NOT TO BE MEASURED.
 2. ALL DIMENSIONS & LEVELS HAS TO BE VERIFIED BY CONTRACTOR & SHOP DRAWINGS TO BE PRODUCED BY CONTRACTOR AND APPROVED BEFORE EXECUTION.
 3. GRADE OF TUBE SECTIONS – Yst310
 4. GR OF PLATES, ANGLES, I-BEAM, CHANNEL – Fe250
 5. ALL WELDS 6MM – AWS CLASS – E7018/E6013.
 6. FOUNDATION BOLTS Gr-4.6
 7. GRADE OF CONCRETE – M25
 8. GRADE OF REBAR STEEL – Fe500

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△ R0	30-04-26	FOR GFC	BKR	OMR
REV.NO.	DATE	DESCRIPTION FOR REVISION	DRAWN BY	CHECKED BY
PURPOSE:VA				
OWNER				
 RAMAN RESEARCH INSTITUTE BANGALORE				
PROJECT				
LASE-LAB BANGALORE				
TITLE			NORTH	
AHU ROOM DETAILS				
DEALT OMR		VA-JOB NO		REVISION
SCALE 1:75		DATE 30-04-26		R0
		DRAWING NO LA-S-2002		
		Venkataramanan Associates 10/2, O'Shaughnessy Road, Langford Gardens, Bangalore - 560025 India		