



Indian Bank Trust For Rural Development (IBTRD)

C/o. Rural Banking Department, Corporate Office, Indian Bank
254 – 260 Avvai Shanmugham Salai, Royapettah, Chennai – 600 014

TENDER DOCUMENT

(CIVIL, ELECTRICAL & PLUMBING WORKS)

FOR THE PROPOSED CONSTRUCTION OF

INDIAN BANK (INDSETI)

AT VELLORE, TAMILNADU

VOLUME – II

PRICE BID

THIS DOCUMENT CONTAIN - 52 PAGES

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ISSUED TO:

ABSTRACT SUMMARY**CLIENT : INDIAN BANK SELF EMPLOYMENT TRAINING INSTITUTE (INDSETI)****PROJECT : PROPOSED CONSTRUCTION OF ADMINISTRATIVE AND HOSTEL BLOCK AT VELLORE.****SUBJECT : COST SUMMARY**

ITEM NO	DESCRIPTION		ESTIMATE AMOUNT (INR)	
I	Civil Works	(A)	Rs.	
II	Plumbing works	(B)	Rs.	
III	Electrical works	(C)	Rs.	
	SUB TOTAL in Rs :-		Rs.	
IV	(SGST 9%+CGST 9%)=18%		Rs.	
	GRAND TOTAL in Rs :- (Inclusive of Taxes)		Rs.	

Rupees _____
_____ only

PROJECT : PROPOSED CONSTRUCTION OF ADMINISTRATIVE AND HOSTEL BLOCK AT VELLORE, TAMILNADU.**SUBJECT: SCHEDULE OF QUANTITIES**

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
A	CIVIL WORKS				
	Preparatory Works				
1	Clearing jungle including uprooting of trunk vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	756.0	sq.m		
	Earth Work				
2	Earthwork excavation for foundation (for narrow excavation) to full depth as per designed in all soils and sub soils except soft disintegrated rock not requiring blasting and hard rock requiring blasting and bailing water wherever necessary. Refilling the sides of foundation with excavated earth other than sand in layers of well rammed and compacted and depositing the surplus earth in places shown by Bank / Consultant with an initial lead of 10m and initial lift of 2m and clearing and leveling the site etc.complete complying with standard specification.	547.0	cu.m		
3	Providing Pre-constructional anti- termite treatment and creating a chemical barrier to the building by injecting chemical emulsion of required concentrations raft slab and beam, under Cellular raft slab, around the footings, column pits, trenches, pits, wall trenches, back fill, plinth filling, junction of wall and floor, side walls of foundation, external perimeter of building,surrounding of pipes expansion joints, etc. as per IS specification and as per the instructions of chemical manufacturer and all as directed.The treatment shall be carried out strictly in accordance with the technical specification and conforming to IS 6313 (PART-2) or equivalent BS specification.	416.0	sq.m		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
	1. The chemical to be used as insecticides for the treatment shall be Termitee oil 20% (or) 50% EC and the application shall be dilute one part of chemical 20% or 50% EC with 19 or 49 parts of water to get 1% emulsion and strictly in accordance with the manufacturer's specification.(or)2.The chemical to be used as insecticides for the treatment shall be IMIDACLOPRID 30.5% S C and the application shall be applied at 0.075% active ingredients concentration i.e. 2.1ml formulated product diluted 1 lit of water and strictly in accordance with the manufacturer's specification.				
4	Supplying and filling in foundations and basement with filling sand in layers not exceeding 15 cm.thick,well watered,rammed and consolidated etc.complete complying with standard specifications.	81.0	cu.m		
5	Plain Cement Concrete 1 : 4 :8 (one part of cement, four parts of sand and eight parts of hard broken stone) using 40 mm gauge hand broken hard broken granite stone jelly complying with standard specifications in foundations and basement.	79.0	cu.m		
6	Refilling the approved good quality earth in plinths, area development etc.wherever specified in layers is not exceeding 200 mm thick., with available earth at site.	280.0	cu.m		
7	Filling the site with approved earth / sand / STONE DUST /gravel brought from outside including cost of material, conveyance, loading , unloading, levelling the site etc. complete.	87.0	cu.m		
8	Supplying and erecting Centering and Shuttering for soffits including necessary supports and strutting upto 3 M height for plane surfaces as detailed below in all floors with all cross bracings using Mild Steel sheets of size 90 x 60 cm and 10 BG stiffened with welded Mild Steel angle of size 25mm x 25mm x 3 mm for boarding laid over silver oak joists of size 10cm x 6.50 cm spaced at about 90 cm centre to centre and supported by casurina props of 10cm to 13 cm dia spaced at not more than 75 cm centre to centre etc. complete complying with the standard specificalton.(Payment for centering shall be given after the concrete is laid).				
a.	Footing, Plinth Beam, etc.	296.0	sq.m		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
b.	Plain surfaces such as roof slab, floor slab, beams , lintels , loft, sill slab, staircase waist , portico slab and other similar works.	1399.0	sq.m		
c.	Square and rectangular columns and small quantities such as sunshades, parapet cum drops, window boxing , fin projections and other similar works.	594.0	sq.m		
9	Design Mix Concrete				
	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of 340KG/Cum for M25 grade Concrete using IS 456 : 2000 for reinforced cement concrete ratio with plasticiser using 20mm and down concrete structural elements under controlled water graded machine broken granite stone jelly excluding the cost of centering and shuttering and reinforcement but including curing, fixing, fan clamps etc., as per standard specification and as directed by the Bank / Consultant complete.				
a	Foundation & Basement	104.0	cu.m		
b	Ground Floor	94.0	cu.m		
c	First Floor	84.0	cu.m		
d	Terrace Floor	36.2	cu.m		
	Steel - Fe 500 D				
10	Supply, fabrication and placing of reinforcement steel of high yield strength ribbed TMT bars of various diameters and grade conforming to IS 1786 for reinforced concrete work. The work includes decoiling, straightening, cutting, bending, fabricating, and placing in position, at all levels including lead and lift, according to drawings, specifications etc. complete and supply & use of 18G black annealed binding wire double fold to tie the bars in position and providing precast cement/ PVC cover blocks for main reinforcement to ensure specified cover and complete., including all labour charges lead, Lift to the desired level etc as directed by Bank / Consultant.	51.0	mt		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
11	Brick work in following Cement Mortar 1:5 using best quality Country bricks of size 8"3/4 x 4 1/4" X2 3/4" for foundation and basement including curing etc., complete complying with standard specification including scaffolding curing cost of reinforcement etc. all complete as per specifications and drawings as directed by the Bank / Consultant.				
a	Foundation basement	67.5	cu.m		
b	Ground floor	107.0	cu.m		
c	First Floor	111.0	cu.m		
d	Terrace Floor	52.0	cu.m		
12	Brick partition walls of 11.50cm thickness using best quality Country bricks of size 8"3/4 x 4 1/4" X2 3/4" in Cement Mortar 1:3 (One Cement and Three Sand). supplying and laying 1no of 8 mm Dia Hoop iron reinforcement at every fourth layer including scaffolding, curing etc and complete as per specification and drawing directed by the engineer incharge. (Hoop iron reinforcement will be measured and paid for separately).				
a	Ground Floor	161.0	Sq.m		
b	First Floor	95.0	Sq.m		
13	Dadoing the brick walls with wire cut brick tiles 10mm thick with sunken pointing , laid over 10mm thick or more cement mortar (to make up required finished level) in mix 1:3, joints filled and finished neat with pigmented white cement including cutting, laying etc. complete. including clamp supporting and labour charges etc.,	180.0	Sq.m		
	PLASTERING WORK				
15	Providing and applying 10 mm thick Cement plaster in Cement mortar 1:3 (One part of Cement and Three parts of Sand), to finishing the exposed surfaces of R.C.C. items of works such as Roof (or) floor slabs , beams, and Sun shades etc.to correct plane and level including scaffolding, hacking of surface, chiselling the undulated surface wherever necessary and curing etc., all materials and labour complete in all respects including all lead, lift and descent and as directed by the Bank / Consultant. This rate includes the cost of providing Cement Mortar beadings for sun shades, steps, landing slabs, elevation etc. complete complying with standard specifications.	703.0	sq.m		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
16	Providing & applying 12 mm thick cement plaster in CM 1:5 (1 part of cement: 5 parts of sand) to walls internally in single coat at all levels to correct line and level including chicken wire mesh at all joints of brick and concrete surfaces with minimum overlap of 150 mm in all directions, scaffolding, rounding off or champhering of corners, offsets, fin/ bands, projections, etc. and cleaning of surface, raking out joints, roughening of surface, chiseling the undulated surface wherever necessary and curing, etc., all materials and labour complete in all respects including all lead, lift and descent and as directed.	1904.0	sq.m		
17	Providing & applying 20 mm thick cement plaster in CM 1:5 (1 part of cement: 5 parts of sand) to walls externally in single coat at all levels to correct line and level including scaffolding, rounding off or champhering of corners, offsets, fin/ bands, projections, etc. and cleaning of surface, raking out joints, roughening of surface, chiseling the undulated surface wherever necessary and curing, etc., all materials and labour complete in all respects including all lead, lift and descent and as directed.	1306.0	sq.m		
FLOORING AND DADDOING					
18	Paving the floor with best quality Verified Tiles of size 600 x 600 x 10mm of approved colour, shade and quality laid in cement mortar 1:3 (one cement and three sand) 20mm thick in all floors and the top pointed with the white cement mixed same colour pigments etc., complete as per specification and drawing directed by the engineer incharge. (The make and brand of the tiles should be got approved by Bank / Consultant before use on works).Basic Landing Cost- Rs.776/sq.m	499.0	sq.m		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
19	Flooring with following ceramic tiles of size 305 x 305 x 6 mm laid over 20 mm thick cement mortar 1:3 (One Cement and Three Sand) base mortar over the existing slab / floor including cutting the tiles to the required size with special cutter wherever necessary, laying in position and pointing with white cement mixed with colouring pigment at the rate of 0.3 Kg. / sq.m. etc., complete as per specification and drawing directed by the engineer incharge. (The make and brand of the tiles should be got approved by Bank / Consultant before use on works).Basic Landing cost-Rs.464/sq.m	96.0	sq.m		
20	Dadoing the walls with coloured glazed tiles approved size , quality and colour set in CM 1 : 2 - 10 mm thk. And pointed with suitable cement including finishing the joint and pointing flesh with walls and tile surface in all floors at the rate of 0.40 Kg /Sqm etc. complete.Basic Landing cost-Rs.318/sq.m	525.0	sq.m		
21	Providing and laying 18-20 mm thk. natural flamed finish granite for steps & Landing,Passage of approved size and pattern in CM 1:3 , including nosing where ever necessary as per drawings and specifications.complete as per specification and complete as per specification and drawing directed by the engineer incharge.	212.0	Sq.m		
22	Supply and fixing of polished granite slab ,18 mm thick (average), for flooring including fixing in position cutting , chipping the wall, masonry touch up works etc., complete as per specification and drawing directed by the engineer incharge. Basic Landing cost Rs.1355/sq.m	5.4	Sq.m		
23	Providing, fabricating and fixing M.S. grills Windows, and ventilator,gates, ladders, rail pipes, nosing angles, with M.S.lugs in staircase steps etc., made out of M.S rods, flats, angles, pipes, channels etc. including necessary fixtures complete as per specification and drawing directed by the engineer incharge.and as directed by Bank / Consultant.	2550.0	KG		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
24	S.S Handrail				
a	Providing and fixing stainless steel handrail 900mm high (as shown in drawing) made out of stainless steel conforming to SS 304 with 8% to 8.5% nickel using 50.8mm outer dia at top (with 1.6mm wall thickness) and 38.10mm (1.6mm wall thickness) stainless steel pipe placed vertically at 1m centre to centre and two horizontal SS pipe 25.40mm outer dia (with 1.2mm wall thickness) welded at a distance of 300mm using TIG welding process with 308L SS electrode (in station building all floor staircases) with necessary bends, flanges and base plates. Rate is inclusive of all materials, labours, lead, lift, etc. as directed by Bank / Consultant.	17.00	R.mt		
25	Door Frame: Supplying and fixing first quality teak wood frames for doors, windows, ventilators and other similar joinery works with the following sizes and sections including labour charges for wrought and put up in position and also for fixing hold fast in frames and masonry etc. complete in all floors.				
a	Teak wood Scantings up to 2M	0.40	Cu.m		
b	Teak wood Scantings over 2M and below 3M	1.30	Cu.m		
26	UPVC Window supplying and fixing UPVC (Un-PLASTICIZED Polyvinyl chloride) windows of casement type (open) from the profile the size of outer frame 60mmx58mm and shutter profile are reinforcement with gi/1mm 125GSM and 100% corrosion free, the profiles are multi chambered section with wall thick of 2mm. The EDPM rubber (black colour) covered with over all the edges of frame and shutter the shutter will be provided with Espag multi power points locks and also it operates as handle. The corners and joints should be welded and cleaned. Radiations free pin headed or plain glass 4mm thick should be provided to the shutter and it should not allow leakage of water even at most ranging storms and should have key lockable action, security protective hinges, strong locking systems and as per size for arresting noise and energy loss.	49.0	sq.m		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
	The connecting mechanism between sah and outer frame that enables opening of the window should be fixed to the wall with 100% packing with screws and silicon packing all round the frames The window should be got approved from the Bank / Consultant before use on work.				
27	UPVC VENTILATOR: Supplying and fixing UPVC (Un-PLASTICIZED Polyvinyl chloride) Louvered Ventilators of from the profile the size of outer frame 60x58mm and shutter profile the size of 60x78mm both profile size of 60x78mm both profiles are reinforced with GI/1MM 125GSM and 100% corrosion free , the profile are mulit chambered sections with wall thick of 2mm. The EPDM rubber (black colour) covered with all over he edges of frame and shutter . The corners and joints should be welded and cleaned. Radiation pin headed glass 4mm thick should be fixed to the wall with 100% packing with screws and silicon packing all aroundthe frame. The ventilator should be got approved from the Bank / Consultant before use on work.	14.8	sq.m		
28	Solid PVC door shutters Toilet door using 19 Gauge 19mm MS square tubes for styles and outer frames. 15mm MS square tubes for top, lock and bottom rails. The steel tubes shall be covered with 5mm thick solid PVC sheets. Shutter using 5mm thick solid PVC sheets for panelling shall rigidly fixed in position including necessary furniture and fittings. The over all size of styles shall be 50mm x 30mm. The over all size of top rail, Lock rail and bottom rail shall be 75mm x 30mm. The over all size of frames shall be 50mm x 45mm, with suitable rabate for housing the shutter.	23.0	sq.m		
29	Supply & Fixing of 32mm thk.Double leaf high density interior grade marine plywood shutters pasted both sides with 4mm thk.OST ply of approved design with 35x12mm T.W.lipping on all edges with necessary adhesives and CP screws complying with standard specification.The cost is inclusive of 1 no mortise lock ,handel,tower bolt , approved equivalent make SS bearing hinges of quivalent make of aproved make,2 no floor mounted SS door stoper ect.complete.	24.0	sq.m		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
30	Supply & Fixing of 32mm thk.single leaf high density interior grade marine plywood shutters pasted both sides with 4mm thk.OST ply of approved design with 35x12mm T.W.lipping on all edges with necessary adhesives and CP screws complying with standard specification. The cost is inclusive of 1 no mortise lock ,handel,tower bolt , approved equivalent make SS bearing hinges of equivalent make of aproved make,2 no floor mounted SS door stoper ect.complete.	58.0	sq.m		
31	Toilet Sunken using broken brick jelly 20 mm gauge The proportion of broken brick jelly to slaked lime being 1:3:6 (1part cement,3 part fine aggregate & 6 part broken brick jelly), well beaten by wooden beaters for giving required slope and thickness required etc complete complying with standard specifications and as directed by Bank / Consultant.				
a	First Floor	12.0	cu.m		
	PAINTING WORK				
32	Painting two coats of synthetic Enamel paint of approved colour and make over one coat of anti corrosive Zinchromite primer over new wood / steel work, suitably prepared for receiving the paint by surface scraping, rubbing applying filler etc. including cost of filler, primer, paint all complete as per drawings and specifications.	97.5	sq.m		
33	Providing and applying White washing Two coats with ceiling freshly burnt white shell lime in all floors including cost of lime . bule powder fevicol type gum, burshes, scaffolding charges ,ect., complete complying with standard specification and for all heights.	703.0	sq.m		
34	Providing and applying Emulsion paint finish of approved make & shade in two coats over a coat of approved primer and 2 coats of patty to give an even shade as per manufacturer's instruction to the internal plastered surfaces including preparation of surfaces, scaffolding etc. all complete as per drawings and specification for all heights.	1379.0	sq.m		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
35	Supplying and painting the walls with one coat of wall primer and two coats of Exterior emulsion (apex or equivalent) as instructed by the Bank / Consultant including preparation of surface curing, etc., complete in all floors complying with standard specifications (The colour and shade of the cement paint shall be got approved by the Bank / Consultant before use of work).	1297.0	sq.m		
36	Painting two coats of synthetic Enamel paint of approved colour and make over one coat of anti corrosive Zinchromite primer over new wood / steel work, suitably prepared for receiving the paint by surface scraping, rubbing applying filler etc. including cost of filler, primer, paint all complete as per drawings and specifications.	75.6	sq.m		
37	Weathering Course Concrete using best quality broken brick jelly of 20 mm uniform gauge in pure slaked lime (NO Sand to be used (over the RCC roof slab in the proportion of brick jelly to lime being 32 : 12 1/2 by volume laid over in single layer and consolidated to the required slope and finished thickness and beating the concrete with wooden beaters of approved pattern, keeping the surface constantly wet by sprinkling lime, jaggery water etc. complete complying with standard specifications and as directed.	40.0	cu.m		
38	Finishing the top of roof with one course of machine pressed tiles of size 230mm x 230mm x 20mm of approved quality set in Cement Mortar 1:3 (One Cement and Three Sand) 12mm thick mixed with water proofing compound conforming to ISS at 2% by weight of cement used and the joints pointed neatly to full depth of tiles with the same cement mortar mixed with red oxide and water proofing compound including curing etc., complete complying with standard specification and as directed by the Bank / Consultant.	719.0	sq.m		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
39	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C.,toilet and the like consisting of :i) 1st course of applying cement slurry @ 4.4 Kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. ii) 11nd course of 20mm cement plaster 1:3 (1 cement : 3 coarse sand)mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface.iii) 111rd course of applying blown or residual bitumen applied hot at 1.7Kg. per sqm of area. iv) 1Vth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg/sqm.)	128.0	sq.m		
	NAME BOARD				
40	Writing Name Boards for institution of INDIAN BANK SELF EMPLOYMENT TRAINING INSTITUTE VELLORE with the required size and other letters 5cm to 25cm as directed painting with two coats of superior quality of paint on both sides and then writing the letters at front face of the board with the above size of letters including scaffolding etc. complete as directed during execution.	2.00	Rmt		
	GAS CYLINDER ROOM				
41	ROOM size-outer to outer 2.0m1.0mx2.0m Rcc Roof with Earth work excavation p.c.c. 1:4:8 -0.1m thick,sand filling-.1m thick Brick jelly -0.1m thick and Brick Work 1:5(ONE CEMENT AND FIVE SAND) 0.230m thick wall and inner and outer plastering 1:3-12mm thick painting work with primer and exterior emulsion paint two coats roof slab and Grill gate with lock arrasngements including all labour charges etc., complete.	2.00	sq.m		
	UNDER GROUND SUMP BOQ				
42	Earthwork for foundations and depositing on bank with initial lead of 10 Mt. and initial lift of 2 Mt. in sand, silt or other loose soil, wet sand or silt not under water, light black cotton soil, sandy loam and ordinary soil including excavated earth. (SS 20 B)	27.00	cu.m		
a)	Above 1.5m depth	9.00	cum		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
43	Refilling the approved good quality earth in plinths, area development etc. wherever specified in layers of not exceeding 100 mm thick., with available earth at site.	9.00	cu.m		
44	Supplying and filling in foundation and basement with River sand in layers of not more than 10cm thick well watered, rammed and consolidated etc., complete as per standard specification.	2.27	cu.m		
45	Laying the Plain Cement concrete 1:4:8 (One cement four sand and eight broken Machine crushed stone jelly) using HBG Machine creased Machine crushed stone jelly of size 40mm gauge for founding and basement including de- watering if found necessary and laid in layers of not more than 15cms thick etc., complete complying with standard specification and as directed by the Bank / Consultant. The rates inclusive of Centering , shuttering, strutting, propping,removal of form work if it is required and all leads ,lifts and curing etc.. (Derived from SI No 120)	2.27	cu.m		
46	Supplying and Erecting centering for sides and soffits including necessary supports and strutting up to 3.29 M height for plane surfaces as detailed below in all floors with all cross bracings using Mild Steel sheets of size 90 x 60 cm and 10 BG stiffened with welded Mild Steel angle of size 25mm x 25mm x 3 mm for boarding laid over silver oak joists of size 10cm x 6.50 cm spaced at about 90 cm centre to centre and supported by casurina props of 10cm to 13 cm dia spaced at not more than 75 cm centre to centre etc. complete complying with the standard specification. (Payment for centering shall be given after the concrete is laid)	58.00	sq.m		
47	Supplying and placing of Ready Mix M25 grade - 340 KG/CUM minimum cement content of with OPC 53 Grade of Concrete confirming to IS 456/2000 for Reinforcement Cement Concrete for Raft slab Cover slab and wall concrete work Structural elements under controlled water cement ratio using 20mm and down graded machine broken granite stone jelly including transportation and pumping excluding cost of centering and shuttering and reinforcement but including curing, finishing etc as directed by Bank / Consultant.	12.00	cu.m		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
48	Providing, supply, mixing laying cement plastering 20mm thick with cement mortar 1:4 mixed with water proofing compound Conplast X421IC conforming to IS:2645, @ 150ml per bag of cement (normal setting integral water proofing compound) as specified by the manufacturer over PCC leveling course including preparation of surface, dewatering, finishing, curing etc. all complete as per manufacture's Specification and direction.	45.00	sq.m		
49	Supplying, laying and fixing in position ceramic tiles of approved size , quality and colour set k in CM 1:3 - 20 mm thk. Including cutting the tiles to the required size with special cutter where ever necessary and pointing the joints with coloured cement using 0.40 Kg / Sqm including finishing the flooring and pointing the joints flesh with tile surface etc. complete.	31.00	sq.m		
50	Supplying and fixing in position C.I.Manhole covers (heavy duty) mof various sizes of best approved quality and asper standard specifications etc., complete.0.6X0.6M Size etc., complete.	2.00	Nos		
51	PVC mould CI steps for sump	5.00	Nos		
52	Providing, machine mixing and laying on the P.C.C/ R.C.C. surface in approved panels of 25 mm thick granolithic flooring in cement concrete mix of 1:2:4 (1 Cement: 2 Sand: 4 Aggregate 10 to 12 mm thick) well vibrated,compacted including 45 X 3 mm glass dividing strip, fixed to correct level and finished smooth and cured by keeping surfaces well-covered and protected against excess of an type. (The contractor to provide for preparation of surface by cleaning, hacking and exposing aggregate to achieve the best bond and any curling, lifting or beybonding noticed shall be rectified by the contractor at his cost).	12.00	sq.m		
53	Carting away the surplus earth and debris to a lead of 5kgm.and dumping in the Land as directed during the execution.	27.00	cu.m		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
UNDER GROUND SEPTIC TANK					
54	Earthwork for foundations and depositing on bank with initial lead of 10 Mt. and initial lift of 2 Mt. in sand, silt or other loose soil, wet sand or silt not under water, light black cotton soil, sandy loam and ordinary soil including excavated earth. (SS 20 B)	27.00	cu.m		
b	Above 1.5m depth	9.00	cu.m		
55	Refilling the approved good quality earth in plinths, area development etc. wherever specified in layers of not exceeding 100 mm thick., with available earth at site.	9.00	cu.m		
56	Supplying and filling in foundation and basement with River sand in layers of not more than 10cm thick well watered, rammed and consolidated etc., complete as per standard specification.	2.27	cu.m		
57	Laying the Plain Cement concrete 1:4:8 (One cement four sand and eight broken Machine crushed stone jelly) using HBG Machine creased Machine crushed stone jelly of size 40mm gauge for founding and basement including de- watering if found necessary and laid in layers of not more than 15cms thick etc., complete complying with standard specification and as directed by the Bank / Consultant. The rates inclusive of Centering , shuttering, strutting, propping,removal of form work if it is required and all leads ,lifts and curing etc.. (Derived from S I No 120)	2.27	cu.m		
58	Supplying and Erecting centering for sides and soffits including necessary supports and strutting up to 3.29 M height for plane surfaces as detailed below in all floors with all cross bracings using Mild Steel sheets of size 90 x 60 cm and 10 BG stiffened with welded Mild Steel angle of size 25mm x 25mm x 3 mm for boarding laid over silver oak joists of size 10cm x 6.50 cm spaced at about 90 cm centre to centre and supported by casurina props of 10cm to 13 cm dia spaced at not more than 75 cm centre to centre etc. complete complying with the standard specification. (Payment for centering shall be given after the concrete is laid)	17.61	sq.m		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
59	Providing and constructing 110mm thick (Plus or minus 5mm) brick masonry in cement mortar 1:3 for Baffle walls using well burnt best quality bricks including supplying and laying 1 No 6mm dia MS bars at every fourth layer including scaffolding, curing, cost of reinforcement etc. all complete as per specifications and drawings as directed by the Bank / Consultant.	5.00	sq.m		
60	Providing and constructing 230 mm thick brick walls in CM 1:5 (one part of Cement, five parts of River sand) using Table moulded, Chamber burnt, Stock Bricks of size 9" x 4 1/2 " x 3" including curing, scaffolding ,materials, labours, tools & plant etc. complete.	4.99	cu.m		
61	Supplying and placing of Ready Mix M25 grade - 340 KG/CUM minimum cement content of with OPC 53 Grade of Concrete confirming to IS 456/2000 for Reinforcement Cement Concrete for Raft and cover slab Structural elements under controlled water cement ratio using 20mm and down graded machine broken granite stone jelly including transportation and pumping excluding cost of centering and shuttering and reinforcement but including curing, finishing etc as directed by Bank / Comnsultant.	5.00	cu.m		
62	Providing, supply, mixing laying cement plastering 20mm thick with cement mortar 1:4 mixed with water proofing compound Conplast X421IC conforming to IS:2645, @ 150ml per bag of cement (normal setting integral water proofing compound) as specified by the manufacturer over PCC leveling course including preparation of surface, dewatering, finishing, curing etc. all complete as per manufacture's Specification and direction etc.,	62.00	sq.m		
63	Supplying and fixing in position C.I.Manhole covers (heavy duty) mof various sizes of best approved quality and as per standard specificationsetc., complete.0.6X0.6M Size etc., complete.	2.00	Nos		
64	PVC mould CI steps for sump	5.00	Nos		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
65	Providing, machine mixing and laying on the P.C.C/ R.C.C. surface in approved panels of 25 mm thick granolithic flooring in cement concrete mix of 1:2:4 (1 Cement: 2 Sand: 4 Aggregate 10 to 12 mm thick) well vibrated, compacted including 45 X 3 mm glass dividing strip, fixed to correct level and finished smooth and cured by keeping surfaces well-covered and protected against excess of an type. (The contractor to provide for preparation of surface by cleaning, hacking and exposing aggregate to achieve the best bond and any curling, lifting or beybonding noticed shall be rectified by the contractor at his cost).	13.50	sq.m		
66	Carting away the surplus earth and debris to a lead of 5kgm. and dumping in the Land as directed during the execution.	27.00	cu.m		
	SUB TOTAL OF CIVIL WORKS (A)				
B	PLUMBING & SANITARY WORKS				
	PART - A SANITARY FITTINGS				
67	Supplying and fixing white colour glazed Indian water closet , Orissa pattern, with dual flush (3 & 6 lit) PVC cistern mounted on wall, Parryware or equivalent, with PVC, P or S trap having 110mm dia outlet and 50mm deepwater seal, embedding trap and water closet in cement concrete in 1:4:8 mix.	8.0	Each		
68	Supplying and fixing in position white glazed European water closet with P or S trap and double flapped seat cover, 10 liter capacity low level flushing tank including all internal fittings on CI brackets, 12mm brass nipple, chromium plated brown headed stop cock, 12mm nylon connection connecting with walls and floors same to the original condition etc., complete complying with standard specification and as directed by the Bank / Consultant.	7.0	Each		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
69	Providing and keeping in stores, shifting to the place of installation, fixing, testing and commissioning of WHITE coloured vitreous china under counter Regular rectangular WASH BASIN with brackets / G.I. rag bolts and nuts painted, 32mm dia brass C.P. waste coupling, (heavy) 32mm dia brass C.P. bottle trap, 15mm dia brass C.P. Angle stop cock with flange, 15mm dia brass C.P. cold water connecting pipe, etc., The work shall include,required extension nipples, cutting / chasing and making good the walls and floors - toilets.	14.0	Each		
70	Supplying and fixing in position 15 mm dia Brass Chromium Plated Two way bib cock tap with health faucet with 1Meter length flexible hose with necessary CP fixing nuts of approved make conforming to IS specification and quality including cost of shellac, thread, cutting and threading wherever necessary etc., complete complying with standard specification and as directed by the Departmental officers. (Taps should be got approved by the Bank / Consultant before use on the works)	7.0	Each		
71	Providing and keeping in stores, shifting to the place of installation, fixing, testing and commissioning of WHITE coloured vitreous china under counter Urinal with brackets / G.I. rag bolts and nuts painted, 32mm dia brass C.P. waste coupling, (heavy) 32mm dia brass C.P. bottle trap, 15mm dia brass C.P. Angle stop cock with flange, 15mm dia brass C.P. cold water connecting pipe, etc., The work shall include,required extension nipples, cutting / chasing and making good the walls and floors - toilets.	3.0	Each		
72	Supplying and fixing best approved best quality brass CP soap tray of size 150 x 100mmx50mm depth including cost of teak wood plugs, brass screws, etc., complete complying with standard specifications. (The soap tray should be got approved by Bank / Consultant before use on works).	3.0	Each		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
73	Supplying and fixing Chromium plated towel rail of approved make & brand 600 mm long and 20mm dia with chromium plated concealed brackets including cost of teak wood plug and CP Screws etc., Complete complying with standard specification and as directed by the Departmental officers.	3.0	Each		
74	Providing and keeping in stores, shifting to the place of installation, fixing, testing and commissioning of stainless steel sink with single bowl with drain board supported by C.I./M.S. painted white brackets, C.P. cast brass bottle trap with extension piece, rubber adaptor, wall flange, union, C.P. brass chain rubber plug, including cutting and making good the wall/floors wherever required.	1.0	Each		
PART -II SOIL WASTE AND VENT PIPE LINES					
75	Supply and fixing in position best quality PVC IS 4985 - CLASS- III - 6 Kg/Sqcm -Soil/ waste pipes of various size with approved quality and variety of various size confirming having ISI mark and providing leak proof joints including fixing to the wall with special PVC /MS clamps, etc., and making connection to all sanitary fittings, wherever necessary and making chipping good portion to the original condition, complying with standard specification etc., complete.				
a	40mm dia. 6kg class PVC pipes.	20.0	Rmt		
b	50mm dia. 6kg class PVC pipes.	3.0	Rmt		
c	75mm dia. 6kg class PVC pipes.	128.4	Rmt		
d	110mm dia. 6kg class pipes.	90.0	Rmt		
76	Supplying and fixing in position cost iron Nahini / Floor trap with Stainless steel grating / PVC nahini / Floor Trap with PVC Grating type of size 100 x 75 / 75 x 50 mm with best quality gratings of approved brand fixed over a bed of brick jelly lime concrete 1:2;5(One lime two sand and five aggregate) brick jelly 40mm and finishing with cm 1:3(One cement and three sand) including dismantling masonry wherever found necessary and making good to the original condition and giving connections to the cast iron pipe etc, complete complying with standard specifcation and as directed by the Bank / Consultant.	34.0	Each		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
77	Supply and fixing in position best quality PVC IS 4985 - CLASS-II - 6 Kg/Sqcm -Rain water pipes of various size having ISI mark and providing leak proof joints with such as Bend, Tee Junction, door etc., of approved quality including fixing, Scaffolding to the wall with special PVC /MS clamps, etc., and making connection to all sanitary fittings, wherever necessary and making chipping good to the original condition, complying with standard specification etc., complete.				
a	75mm dia. 6kg class PVC pipes.	3.6	Rmt		
b	110mm dia. 6kg class pipes.	36.0	Rmt		
78	Supplying and fixing in position of the following dia PVC rain water gratings for rain water pipes ,of approved quality and variety of various size confirming to ISS and including necessary cutting and fixing and giving connection to PVC pipes etc., complete complying with standard specification and as directed by the Bank / Consultant.				
a	75mm dia. 6kg class PVC pipes.	1.0	Rmt		
b	100mm dia. 6kg class pipes.	5.0	Rmt		
79	Supplying and fixing in position of the following dia PVC specials such as PVC vent Cowl etc., of approved quality and variety of various size confirming to ISS amend providing leak proof joint etc., including necessary cutting and fixing and giving connection to PVC pipes etc., complete complying with standard specification and as directed by the Bank / Consultant.				
a	75mm dia. 6kg class PVC pipes.	6.0	Rmt		
b	110mm dia. 6kg class pipes.	5.0	Rmt		
PART-III - EXTERNAL DRAINAGE					
80	Supply and fixing in position best quality PVC IS 4985 - CLASS- III - 6 Kg/Sqcm -Soil/ waste pipes of various size with approved quality and variety of various size confirming having ISI mark and providing leak proof joints including erection of below ground with excavation and refilling etc., and making connection to Manholes / Gully trap, wherever necessary and making chipping good portion to the original condition, complying with standard specification etc., complete.				
a	160mm dia. 6kg class III-pipes.	60.0	Rmt		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
81	Supplying and fixing in position 150 x 100mm "P" or "S" stoneware gully trap 'A' grade with CI double gratings of size 150 x 150mm and 230 x 230mm at bottom and top respectively with necessary earth work excavation laid over a bed of brick jelly cement concrete 1:3:6 (One cement, Three sand and Six broken brick jelly) 150mm thick using 40mm size broken brick jelly including necessary brick work and plastering including dismantling masonry wherever necessary and re-doing the damaged portions to the original conditions using cement concrete 1:3:6 using 20mm stone jelly for fixing the gully trap and giving connections to stoneware sewer line etc., complete complying with standard specifications. [Earth work excavation, brick work, plastering shall be measured and paid separately]. The stoneware gully trap should be got approved by the Bank / Consultant before use on works.	5.0	Each		
82	Supplying and Erection and construction of sewer chambers of required internal dimensions 600x600 upto 0.6 mtr.depth with 230mm brick masonry in C.M.1:5 thk of masonry over bed of 1:2:4 R.C.C. 200 mm thk bove 100 mm thk P.C.C.1:3:6 Cement concrete foundations over sand bed of 100mm thk channelling in 1:2:4 cement concrete, plastering in 1:3 cement mortar for internal and external surface finished with floating coat of neat cement, the work including excavation for required depth of gully trap and refilling and making good in the surface with SFRC cover and frame 600x600mm (clear opening)complete complying with standard specifications etc.,	6.0	Each		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
83	Construction of rain water recharge well of 1200mm dia and depth upto 1500mm, in addition 110 dia special blue slotted pipe for bore well. pipe should be laid from bottom of ring well centre to below 1500mm as shown in the drawings, including all types of excavation, occur for pipe, filling of rain water harvesting materials with construction of R.C.C. ring and top 100mm RCC SLAB WITH 450X450mm perforated SFRC manhole and 230mm brick wall in 2'height with below 300mm lengthx100mm thk P.C.C. as per the structural filling the filter media as per drawing...	3.0	Each		
PART IV- WATER SUPPLY SYSTEM					
INTERNAL CONCEALED WORKS					
84	Providing, supplying & laying of Chlorinated Poly Vinyl Chloride (CPVC-SDR-11) Pipes conforming to IS 15778 having thermal stability cold water with brass and CPVC fittings like Elbow, Brass Tee, Brass Elbow, Offsets, Tee with clamps @1.00 meters spacing, with jointing of pipes with one step CPVC solvent cement with including Scaffolding & cutting of chase including testing of the joints complete and making good the walls etc. Rate is inclusive of all material labour, transportation, tools & tackles taxes, levies GST etc all complete as per as per specifications, Concealed work including chase cutting)complete complying with standard specification and as directed by the Bank / Consultant.				
a	25 mm nominal (OD) pipes	103.2	M		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
85	EXPOSED PLUMBING WORKS				
	Providing, supplying & laying of Chlorinated Poly Vinyl Chloride (CPVC-SDR-11) Pipes conforming to IS 15778 having thermal stability cold water with brass and CPVC fittings like Elbow, Brass Tee, Brass Elbow, Offsets, Tee with clamps @1.00 meters spacing, with jointing of pipes with one step CPVC solvent cement with including Scaffolding & cutting of chase including testing of the joints complete and making good the walls etc. Rate is inclusive of all material labour, transportation, tools & tackles taxes, levies GST etc all complete as per as per specifications, Exposed work including chase cutting, bracket fixing)complete complying with standard specification and as directed by the Bank / Consultant.				
a	20mm nominal(OD) pipes	QRO	M		
b	25mm nominal(OD) pipes	18.0	M		
c	32mm nominal(OD) pipes	14.4	M		
d	40mm nominal(OD) pipes	55.8	M		
e	50mm nominal(OD) pipes	QRO	M		
	PART- V - EXTERNAL PLUMBING WORKS				
86	Providing, supplying & laying of Chlorinated Poly Vinyl Chloride (CPVC-SDR-11) Pipes conforming to IS 15778 having thermal stability cold Metro water with brass and CPVC fittings like Elbow, Brass Tee, Brass Elbow, Offsets, Tee with clamps @1.00 meters spacing, with jointing of pipes with one step CPVC solvent cement with including cutting of chase including testing of the joints complete and making good the walls etc. Rate is inclusive of all material labour, transportation, tools & tackles taxes, levies GST etc all complete as per as per specifications, Concealed work including chase cutting)complete complying with standard specification and as directed by the Bank / Consultant.				
a	25 mm nominal (OD) pipes	16.2	M		
b	32 mm nominal (OD) pipes	33.0	M		
c	110 mm nominal (OD) pipes	12.0	M		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
87	Providing, supplying & laying of Chlorinated Poly Vinyl Chloride (CPVC-SPEAR) ball valve with and CPVC fittings with jointing of pipes with one step CPVC solvent cement with including cutting of chase in cluding testing of the joint complete and making good the walls etc., Rate is inclusive of all material,tools,and tackels taxes,levels GST etc., all complete with standard specifications and at directed by the Bank / Consultant for both internal and external water supply arrangements etc.,				
a	20 mm nominal (OD) pipes	1.0	Each		
b	32 mm nominal (OD) pipes	1.0	Each		
c	40 mm nominal (OD) pipes	1.0	Each		
88	Providing, supplying & laying of Gunmetal type NRV - pressure rating less tahn 16 Kg/Sqcm and IS778 with 2 Nos of MTA with jointing material like shellac, thread including testing of the joints complete and making good the walls etc. Rate is inclusive of all material labour, transportation, tools & tackles taxes, levies GST etc all complete as per as per specifications, complete complying with standard specification and as directed by the Bank / Consultant.				
a	20 DIA	1.0	Each		
b	25 DIA	1.0	Each		
c	32 DIA	1.0	Each		
89	PART- VI - WATER PUMPS				
a	Supply, Erection testing and commissioning of Submersible type water pumps 3HP -30Mtrs head with required electrical starter, foundation with control valves and float switches for water pumping from UG sump to OHT Tank [For Raw water]	1.0	Each		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
b	BORE WELL :Providing boring using hand bore set 150mm dia upto hard formation and boring 100mm dia below this inrock formation including hire charges of Machine bore set and its accessories labour charges and transport charges for drillings preparing the site etc. providing and erecting 110mm dia (O.D.) P.V.C.pipe plain (wall thickness 4.5mm and slotted) upto water column and providing and filling the gap alround the 110mm dia PVC pipe with pebbles including clearing and developing the entire column by using compressor for a minimum time of 12 hours providing danger lights during night time etc and necessary safety measures complete as directed during execution upto 150m depth below ground level	200.0	Rmt		
	SUB TOTAL OF PLUMBING & SANITARY WORKS (B)				
C	ELECTRICAL WORKS				
	LT Electrical Installation Works				
90	Metering Panel - CT Meter.				
	Fabrication, Supply, Erection, Testing and Commissioning of CPRI certified Indoor panel board made up of 2mm thickness powder coated CRCA sheet steel with 50x6mm cu bus bar provision for all Phases and Neutral, door with industrial lock, main 3 Nos of 300A I/C Fuse carrier with netural Link, 1 Sets -250A, CT with provision for EB Meter,Outgoing feeders,1 Nos -250A, 4P, MCCB, 1 set -Indicating lamps (R, Y, B), 1-Set of terminal blocks,1-Set of control fuses,The above panel board is to be erected with anchor fastners, bolt and nuts with suitable angles and channels of size 75 x 40mm (Drawing to be approved by the Engineer-in-charge before fabrication.)	1.0	each		
91	CT Metercontrol.				
	Supplying,erecting,connecting & commissioning 250 AMPS TPN MCCB metal sheet enclosure with necessary Interconnections, cable box, brackets, Screws,bolts,nuts, etc. for CT METER OUTGOING CONTROL	1.0	each		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
92	Main Power panel.				
	Fabrication, Supply, Erection, Testing and Commissioning of CPRI certified Indoor panel board made up of 2mm thickness powder coated CRCA sheet steel with cu bus bar provision (Ph-40x8mm for all phases Ne-40x6mm & E-40x6mm) with heat shrinkable insulation and SMC supports, door with industrial lock, Incomer 250A 4P MCCB-1No. Out going: 9nos. of 63Amps 4P MCCB, 1set Metering Compartment consisting of 1no Digital multifunctional meter Accuracy class 1.0 with 3nos of CTs 250/ 5 amps ratio and RYB cluster type indication lamps with control fuses with provision for locking the indoor panel board complete etc., as per IS standard .The above panel board is to be erected with anchor fasteners, bolt and nuts with suitable angles and channels of size 75 x 40mm (Drawing to be approved by the Engineer-in-charge before fabrication.)	1.0	each		
93	Distribution Board				
a	Supply and fixing of 12 wayTPN MCB distribution board complete with the following and necessary neutral link, earth connector link etc. with bus bar and double door arrangements on surface / in flush with wall and making good of the concealed portion with earth connection Incoming: 1 No. 40A 10KA 4 pole 30mA-RCCB-1 NO. Outgoing: 36 Nos. 6/10A 10KA SP MCB FOR LDB	2.0	each		
b	Supply and fixing of 12 wayTPN MCB distribution board complete with the following and necessary neutral link, earth connector link etc. with bus bar and double door arrangements on surface / in flush with wall and making good of the concealed portion with earth connection Incoming: 1 No. 63A 10KA 4 pole 100mA-RCCB-1 NO. Outgoing: 36 Nos. 6/10A 10KA SP MCB FORPDB	1.0	each		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
c	Supply and fixing of 8 way TPN MCB distribution board complete with the following and necessary neutral link, earth connector link etc. with bus bar and double door arrangements on surface / in flush with wall and making good of the concealed portion with earth connection Incoming: 1 No. 63A 10KA 4 pole 100mA-RCCB-1 NO. Outgoing: 36 Nos. 6/10A 10KA SP MCB FOR PDB	1.0	each		
d	Supply and fixing of 4 way vertical type TPN MCB DB sheet steel enclosure with bus and neutral link and earth link and with 1 no. 63A/100 A 4 pole MCB type as incoming and 4 nos. 63 TP MCB as outgoing with busbar and double door arrangements in flush with wall/ on surface and making good of the concealed portion with earth connection - For providing power supply to the lift motor	1.0	each		
e	Supply and fixing of 12 way spn MCB distribution board complete with the following and necessary neutral link, earth connector link etc. with bus bar and double door arrangements on surface / in flush with wall and making good of the concealed portion with earth connection Incoming: 1 No. 63A 10KA DP pole MCB -1 NO. Outgoing: 10 Nos. 6/10A 10KA SP MCB FOR UPSDB	1.0	each		
94	Earthing				
a	Supplying, installing and connecting a 2.5 Mtr. long 40 mm. dia G.I. Pipe with holes drilled diametrically opposite to each other once every 150 mm. in an earth pit of 380 x 380 x 3500 mm. Filled with salt and charcoal mixed with sand in alternate layers 150 mm. each upto a height of 3000 mm. from bottom. The pipe shall have provision for watering through a funnel. It shall also have provision for connecting 50 x 6 mm. G.I. Flat on two sides. A masonry structure shall be constructed to a depth of 450 mm. and a heavy duty CI Cover shall be used to cover the pit. The cost of digging and back filling shall also be included. Sand, salt and charcoal are in the Contractor's scope.	2.0	each		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
b	Supplying, installing and connecting a Copper plate of size 600mm.x 600 mm.x 3 mm. at a depth of 3000 mm. in an earth pit of 700 x 700 x 3500 mm. filled with salt and charcoal mixed with sand in alternate layers 150 mm. each upto a height of 3000 mm. from bottom. Two copper flats of 25 x 6mm. shall be braced to this copper plate throughout the overlapping length with the copper plate and brought to the surface of the earthpit. This copper flat shall have provision for connecting wires of flats as the case may be. A suitable size of 40 mm. dia GI Pipe shall be provided upto the bottom of the earth pit. This GI Pipe shall have provision for watering through a funnel. A masonry structure shall be constructed to a depth of 450mm. and a heavy duty CI Cover shall be used to cover the pit. The cost of digging and back filling shall also be included. Sand, salt and charcoal are in the Contractor's scope.	2.0	each		
c	Supply and run of 2 of No.8 tin coated GI wire for guarding with cradle with No 8.SWG GI wire at equal interval of 1.5 Metre	70.0	mtr		
d	Providing and fixing 25mm x 3mm copper strip on surface or in recess for connections as required	50.0	mtr		
95	LT ,1100V GRADE PVC / XLPE Armoured UnderGrounds Cables.				
a	Supply and fixing of 3.5 X 120Sqmm PVC armoured LT UG cable in a trench to be excavated at a depth of 0.75metre putting 0.15 mt.Layer of sand and covering the cable completely with bricks and sand and refilling the earth to make good.	50.0	mtr		
b	Supply and fixing of 3.5 X 25Sqmm PVC armoured LT UG cable in a trench to be excavated at a depth of 0.75metre putting 0.15 mt.Layer of sand and covering the cable completely with bricks and sand and refilling the earth to make good.	25.0	mtr		
c	Supply and fixing of 4C X 10 Sqmm PVC armoured LT UG cable in a trench to be excavated at a depth of 0.75metre putting 0.15 mt.Layer of sand and covering the cable completely with bricks and sand and refilling the earth to make good.	50.0	mtr		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
96	CABLE GLANDS				
a	Supply and fixing of brass cable gland for 3 1/2 X 120 Sqmm PVC armoured LT UG cable with earth connection.	4.0	each		
b	Supply and fixing of brass cable gland for 3.5 x 25 sqmm aluminium cable XLPE armoured LTUG cable with earth connection.	4.0	each		
c	Supply and fixing of brass cable gland for 4 x10sqmm aluminium cable XLPE armoured LTUG cable with earth connection.	4.0	each		
97	 cable end termination				
a	Supply and providing cable end termination of 3 1/2 X 120 Sqmm PVC LTUG Aluminium armoured cable with necessary Aluminium cable sockets by crimping etc, with electrical connection complete	4.0	each		
b	Supply and providing cable end termination of 3 1/2 X 25 Sqmm PVC LTUG Aluminium armoured cable with necessary Aluminium cable sockets by etc, with electrical connection complete.	4.0	each		
c	Supply and providing cable end termination of 4 X 10 Sqmm PVC LTUG Aluminium armoured cable with necessary Aluminium cable sockets by etc, with electrical connection complete.	4.0	each		
98	WIRING SYSTEM				
a	Supply and run of 4 of 10(140/0.3) Sqmm & 2 of 4 (56/0.3) PVC insulated SC unsheathed Cu. conductor of 1100V grade in suitable PVC rigid pipe concealed in Wall and ceiling with continuous earth wire connection by 14 SWG TC wire and making good of the concealed portion with suitable colour POWER DB	45.0	mtr		
b	Supply and run of 4 of 6(84/0.3) Sqmm & 2 of 4 (56/0.3) PVC insulated SC unsheathed Cu. conductor of 1100V grade in suitable PVC rigid pipe concealed in Wall and ceiling with continuous earth wire connection by 14 SWG TC wire and making good of the concealed portion with suitable colour	45.0	mtr		
c	Supply and run of 3 of 6 Sqmm (84/0.3) PVC insulated SC unsheathed Cu. conductor of 1100V grade in suitable PVC rigid pipe concealed in Wall and ceiling with continuous earth wire connection by 14 SWG TC wire and making good of the concealed portion with suitable colour for UPS DB	25.0	mtr		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
d	Supply and Run of 3 of 2.5(36/0.3) sq.mm PVC Insulated SC Unsheathed CU.Conductor of 1100V Grade in Suitable PVC Rigid Pipe On Wall and Ceilling With Continous Earth Wire Connection Wire With Painting For Suitable Colour. (Light Point Mains Wiring)	875.0	mtr		
e	Wiring, Connecting, Testing & Commissioning with 3 X 1.5sqmm PVC insulated single core unsheathed copper conductor cable of 1100 V grade in suitable PVC rigid pipe concealed in wall and ceilling with PVC accessories, including supply and fixing of modular 6A one way switch along with moulded front plate in G.I anodised manufacturer's mounting box fixed flush with the wall complete with all accessories as required for Light Points.(Length of the points will be 5 to 8 mts.)	156.0	point		
f	Wiring, Connecting, Testing & Commissioning with 3 X 1.5sqmm PVC insulated single core unsheathed copper conductor cable of 1100 V grade in suitable PVC rigid pipe concealed in wall and ceilling with PVC accessories, including supply and fixing of 2 Nos. modular 6A two way switch along with moulded front plate in G.I anodised manufacturer's mounting box fixed flush with the wall complete with all accessories as required as per the site condition.	6.0	point		
g	Wiring, Connecting, Testing & Commissioning with 3 X 1.5sqmm PVC insulated single core unsheathed copper conductor cable of 1100 V grade in suitable PVC rigid pipe concealed in wall and ceilling with PVC accessories, including supply and fixing of modular 6A one way switch, one step type fan regulator along with moulded front plate in G.I anodised manufacturer's mounting box fixed flush with the wall complete with all accessories as required for Fan Points.(Length of the points will be 5 to 8 mts.)	50.0	point		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
h	Wiring, Connecting, Testing & Commissioning with 3 X 1.5sqmm PVC insulated single core unsheathed copper conductor cable of 1100 V grade in suitable PVC rigid pipe concealed in wall and ceiling with PVC accessories, including supply and fixing of modular 6aAmps Switch & 5 Pin socket . Push along with moulded front plate in G.I anodised manufacturer's mounting box fixed flush with the wall complete with all accessories as required.SD-36	40.0	point		
i	Supply Wiring, run, Connecting, Testing & Commissioning of 3 runs of 1.5 sq.mm PVC Insulated SC Unsheathed CU.Conductor of 1100V Grade in Suitable PVC Rigid Pipe On Wall and Ceiling With Continous Earth Wire Connection Wire With Painting For Suitable Colour.(Light Point to Light point looping and Primary point	200.0	point		
	Switch & Sockets Wiring				
j	Supply Wiring, run Connecting, Testing & Commissioning of 2 of 4 sq.mm PVC Insulated SC Unsheathed CU.Conductor of 1100V Grade in Suitable PVC Rigid Pipe Concealed in Wall and Ceiling With Continous Earth Wire Connection of 2.5 Sq.mm PVC insulated Sc CU.Conductor and making Good of the Concealed Portions With Suitable Colour. (Rawpower 6 / 16Amps Socket & Split Ac unit Point Wiring). (Rawpower 6 / 16Amps Socket & Split Ac unit Point Wiring 1.5TR UNIT.)	550.0	mtr		
k	Supply Wiring, run Connecting, Testing & Commissioning of 2 of 6 sq.mm PVC Insulated SC Unsheathed CU.Conductor of 1100V Grade in Suitable PVC Rigid Pipe Concealed in Wall and Ceiling With Continous Earth Wire Connection of 2.5 Sq.mm PVC insulated Sc CU.Conductor and making Good of the Concealed Portions With Suitable Colour. (Rawpower 6 / 16Amps Socket & Split Ac unit Point Wiring). Split Ac unit Point Wiring-2TR UNIT.)	QRO	mtr		
l	Supply and Run of 3 of 2.5(36/0.3) sq.mm PVC Insulated SC Unsheathed CU.Conductor of 1100V Grade in Suitable PVC Rigid Pipe On Wall and Ceiling With Continous Earth Wire Connection Wire With Painting For Suitable Colour.	350.0			
99	Sockets				

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
a	Supply and fixing of 6Amps 3 pin and 2 pin combined modular type switch conscealed in manufacturer's GI mounting box in flush with wall.	47.0	each		
b	Supply and fixing of 3x6Amps 3pin and 2 pin combined modular type switch and Socket conscealed in manufacturer's GI mounting box in flush with wall earth connection. (for Computer Plug Socket)	30.0	each		
c	Supply and fixing of 15A 3pin & 2 pin combined flush type wall socket with 16A modular type switch conscealed in switch along with moulded front plate in G.I anodised manufaturer's mounting box fixed flush with the wall complete with all accessories as required as per the site condition.	20.0	each		
d	Supply and fixing of 20 A 3pin & 2 pin combined flush type wall socket with 20A modular type switch with Indicator conscealed in switch along with moulded front plate in G.I anodised manufaturer's mounting box fixed flush with the wall complete with all accessories as required as per the site condition. FOR AC	17.0	each		
e	Supply and fixing of 32 A 3pin & 2 pin combined flush type wall socket with 32A modular type switch with Indicator conscealed in switch along with moulded front plate in G.I anodised manufaturer's mounting box fixed flush with the wall complete with all accessories as required as per the site condition.	QRO	each		
100	Fittings				
a	Supply and fixing of surface mounted LED BOX TYPE LIGHT lighting luminaire with central assembly with T.W round blocks on wall (or) ceiling with 2X T8 -18 W led tube with PVC unsheathed leads from terminals to the fitting DINNING HALL/CLASS ROOM	16.0	each		
b	Supply and Fixing of Surface mounted type down lighter complete with accessories including supply and fixing of 30W LED ELSM30QS FOR CORRIDER AREA.	17.0	each		
c	Supply and Fixing of Surfacemounted type down lighter complete with accessories including supply and fixing of 6WLED ELSM6QR FOR TOILET	22.0	each		

SUBJECT: SCHEDULE OF QUANTITIES

SL. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE PER UNIT (in Fig & in Words)	AMOUNT in Rs.
d	Supply and fixing of single T 8 -16 W led tube light fitting on the wall complete with electronic choke with T.W round blocks on wall (or) ceiling with T8 -16 W led tube with PVC unsheathed leads from terminals to the fitting	41.0	each		
e	Supply and fixing of 4 feet 36 W ELB2T8 led tube light fitting on the wall complete with electronic choke with T.W round blocks on wall (or) ceiling with 40w led tube with PVC unsheathed leads from terminals to the fitting FOR KITCHEN	12.0	each		
f	Supply and Fixing of Surface mounted type down lighter complete with accessories including supply and fixing 30W LED lamp.	24.0	each		
g	Supply and fixing of recessed/surface mounted direct - indirect lighting luminaire with central assembly having special end caps and deffused lighting suitable for 36W LED lamps in flush with false ceiling with necessary internal connections	20.0	each		
h	Supply and fixing of 1200 mm (48") AC ceiling fan complete with stepped electronic 300 W regulator and 300mm down rod on the exising clamp .- SD110	51.0	each		
i	Supply and fixing of 300 mm light duty exhaust fan on the existing hole with necessary internalconnections	6.0	each		
101	Telephone/TV System				
a	Supply,Installation and erection of 20 Pair MDF Panel With Disconnection Module Housed in an Engineering MS box with Door Lock & Key.	1.0	each		
b	Supply,laying testing and commissioning of 1R 0.5mm2pair PVC insulated telephone cable with rigid PVC conduit Pipe open / concealed type and with all necessities.	275.0	mtr		
c	Supply fixing testing and commissioning of Telephone Outlets with Suitable MS back Box and RJ11 Telephone Socket with GI anodised enclosure Front Plate.	15.0	each		
102	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
a	20MM	150.0	mtr		
b	25MM	150.0	mtr		
	SUB TOTAL OF ELECTRICAL WORKS (C)				

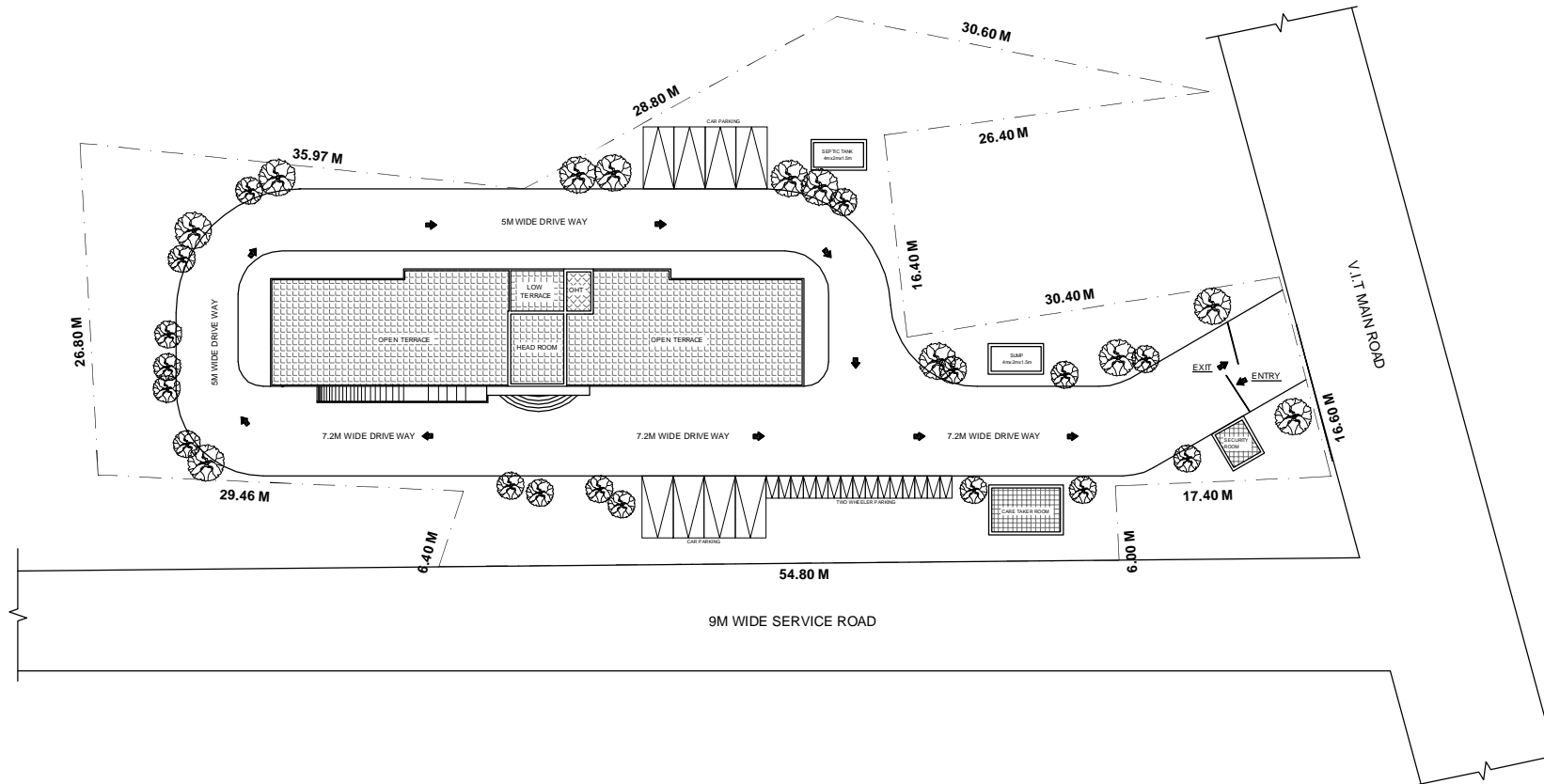
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LEGEND :

230MM ,115MM THK BRICK WORK
R.C.C COLUMN

NORTH POINT :



CLIENT:

INDIAN BANK SELF EMPLOYMENT
TRAINING INSTITUTE (INDSETI)

PROJECT :

PROPOSED ACADEMIC AND HOSTEL
BUILDING FOR INDSETI AT VELLORE.

DRAWING TITLE :

SITE PLAN

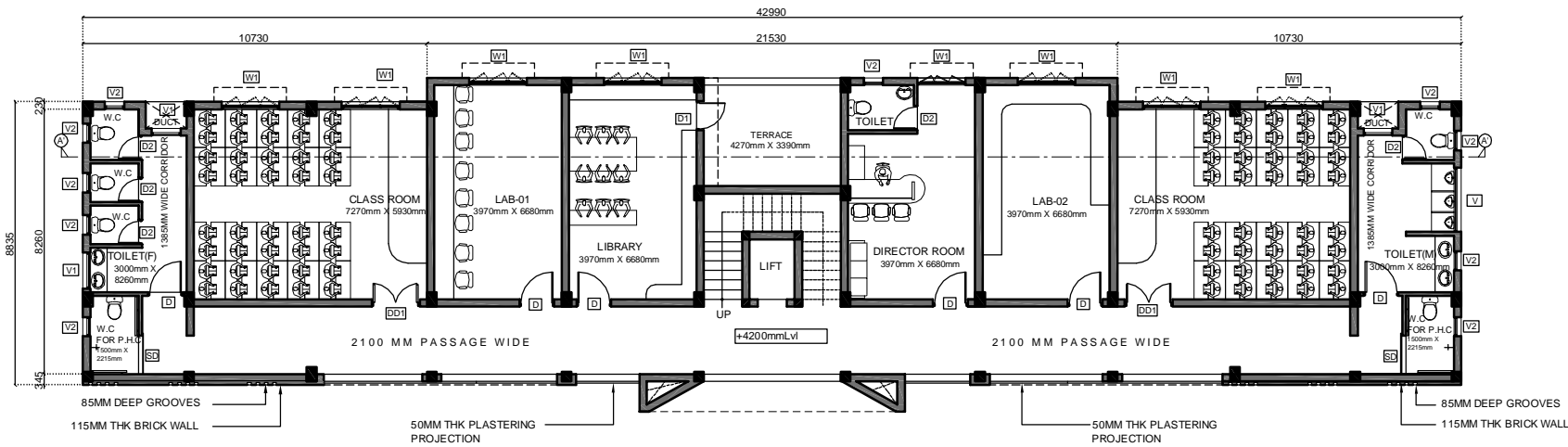
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☒ TENDER DRAWING ☐ AS BUILT DRAWING

SCALE : N.T.S. DATE : 21/11/2018 REV NO.:
DRAWN BY : Divya CHECKED BY : M.S. 00
JOB NO : 1720/16 DWG NO : ARCH - TR - 35

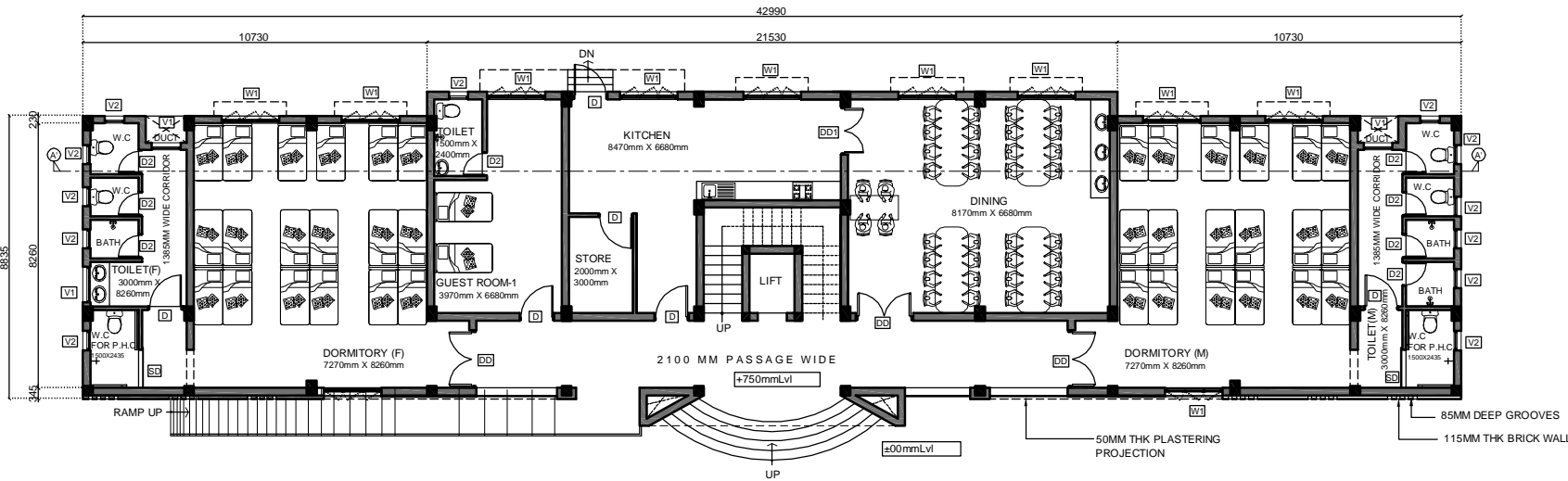
ARCHITECT :

NANDA & ASSOCIATES
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JANAKIRAM COLONY., ARUMBAKKAM., CHENNAI - 600 106.
TELEPHONE:044-23637420, E-mail:nandaarchitects@gmail.com



FIRST FLOOR PLAN



GROUND FLOOR PLAN

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LEGEND :

- 230MM ,115MM THK BRICK WORK
- R.C.C COLUMN

NORTH POINT :



SCHEDULE OF JOINERY

S.NO.	SYMBOL	DESCRIPTION	SIZE
1	DD1	FLUSH DOOR	1800X2100
2	DD	FLUSH DOOR	1500X2100
3	D	FLUSH DOOR	1050X2100
4	D1	FLUSH DOOR	900X2100
5	D2	PVC DOOR	750X2100
6	SD	FLUSH DOOR	1200X2100
7	W1	WINDOW	1800X1350
8	V	VENTILATOR	2000X600
9	V1	VENTILATOR	900X600
10	V2	VENTILATOR	600X600

CLIENT:

INDIAN BANK SELF EMPLOYMENT
TRAINING INSTITUTE (INSETI)

PROJECT :

PROPOSED ACADEMIC AND HOSTEL
BUILDING FOR INSETI AT VELLORE.

DRAWING TITLE:

SCHEME

- ☐ SCHEMATIC DRAWING
- ☐ WORKING DRAWING
- ☒ TENDER DRAWING
- ☐ AS BUILT DRAWING

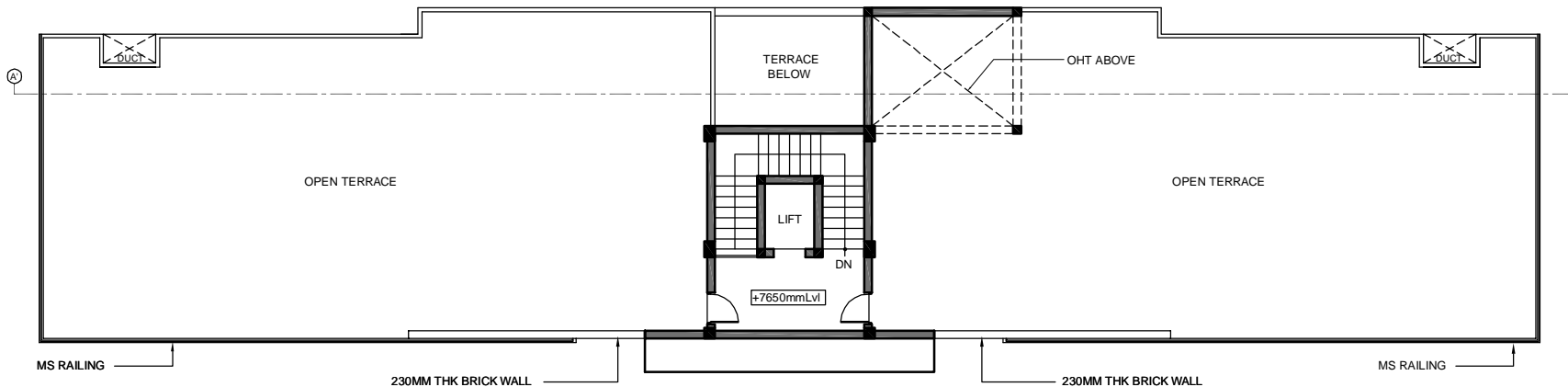
SCALE : N.T.S DATE : 21/11/2018 REV NO: 00
DRAWN BY : Divya CHECKED BY : M.S

JOB NO : 1720/16 DWG NO : ARCH - TR - 36

ARCHITECT :

NANDA & ASSOCIATES
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TERRACE FLOOR PLAN

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LEGEND :

230MM ,115MM THK BRICK WORK
R.C.C COLUMN

NORTH POINT :



SCHEDULE OF JOINERY

S.NO.	SYMBOL	DESCRIPTION	SIZE
1	DD1	FLUSH DOOR	1800X2100
2	DD	FLUSH DOOR	1500X2100
3	D	FLUSH DOOR	1050X2100
4	D1	FLUSH DOOR	900X2100
5	D2	PVC DOOR	750X2100
6	SD	FLUSH DOOR	1200X2100
7	W1	WINDOW	1800X1350
8	V	VENTILATOR	2000X600
9	V1	VENTILATOR	900X600
10	V2	VENTILATOR	600X600

CLIENT:

INDIAN BANK SELF EMPLOYMENT
TRAINING INSTITUTE (INDSETI)

PROJECT :

PROPOSED ACADEMIC AND HOSTEL
BUILDING FOR INDSETI AT VELLORE.

DRAWING TITLE :

SCHEME

☐ SCHEMATIC DRAWING ☐ WORKING DRAWING

☒ TENDER DRAWING ☐ AS BUILT DRAWING

SCALE : N.T.S DATE : 21/11/2018 REV NO:

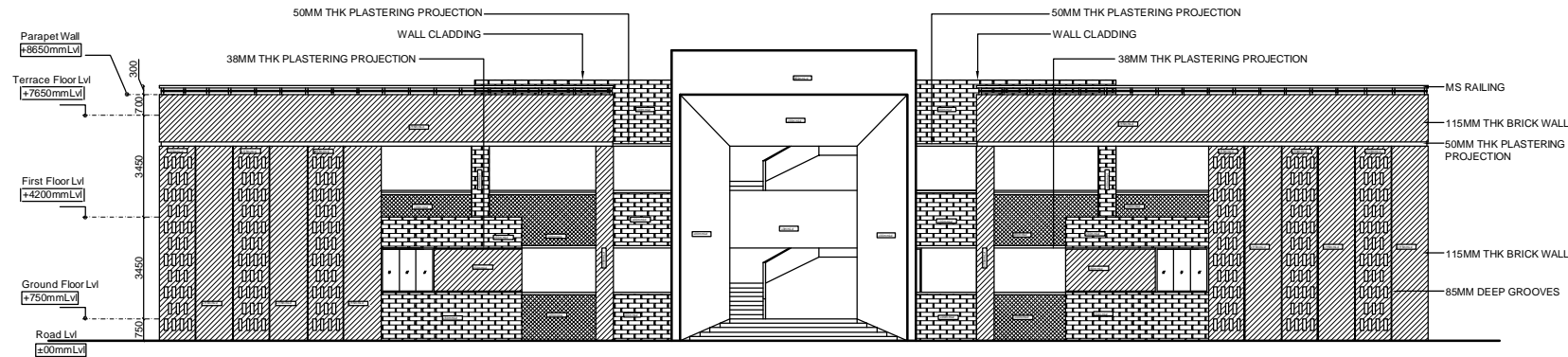
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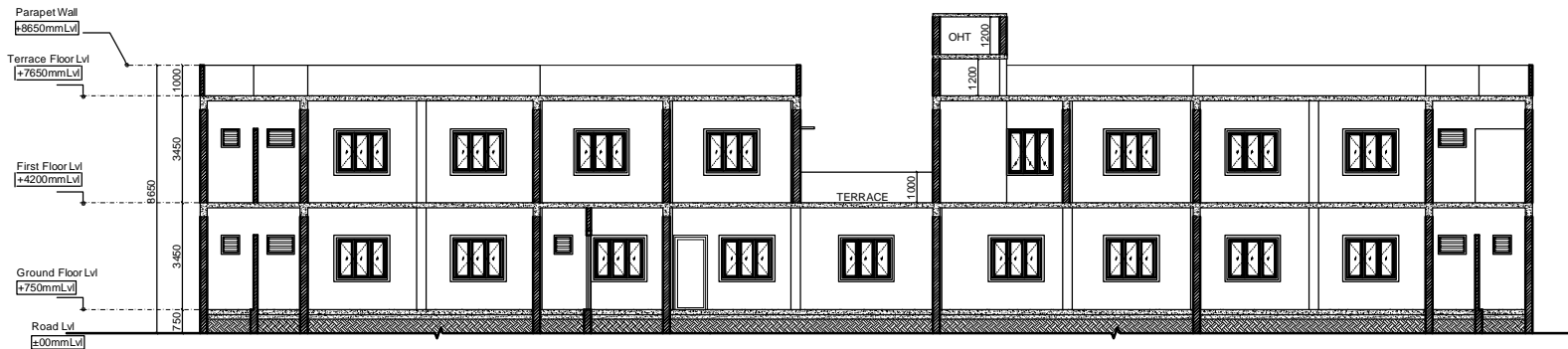
ARCHITECT :

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JANAKIRAM COLONY., ARUMBAKKAM., CHENNAI - 600 106.
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EAST SIDE ELEVATION

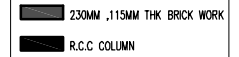


SECTION - A-A'

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LEGEND :



NORTH POINT :



CLIENT:

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TRAINING INSTITUTE (INDSETI)

PROJECT :

PROPOSED ACADEMIC AND HOSTEL
BUILDING FOR INDSETI AT VELLORE.

DRAWING TITLE :

SECTION & ELEVATION

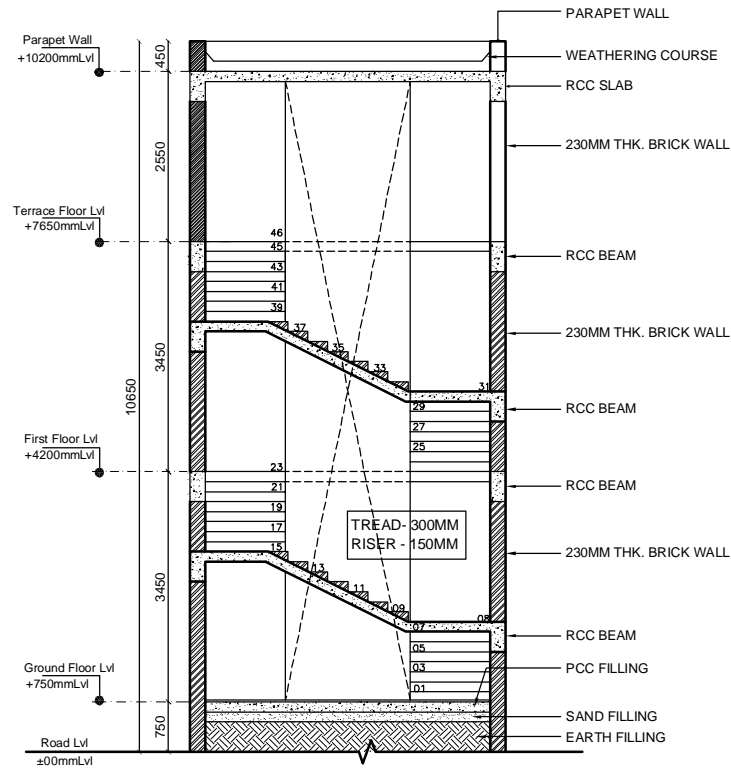
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SCALE : N.T.S	DATE : 19/11/2018	REV NO:
DRAWN BY : Divya	CHECKED BY : M.S	00
JOB NO : 1720/16	DWG NO : ARCH - TR - 38	

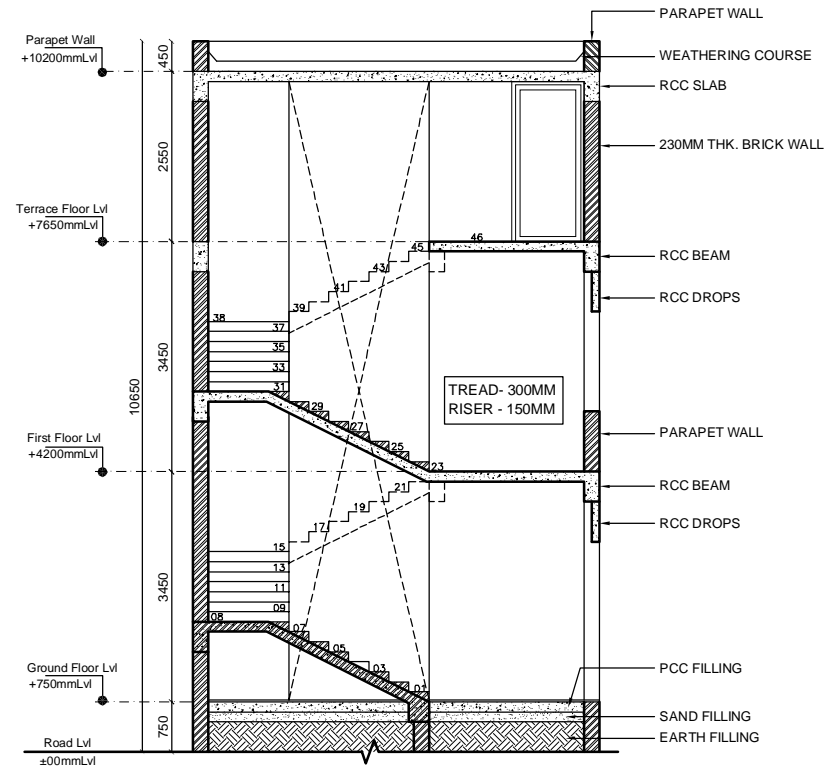
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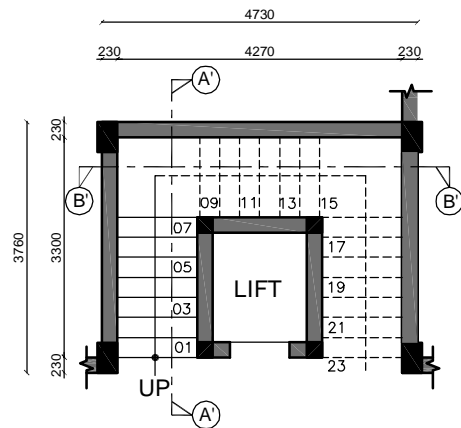
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JANAKIRAM COLONY., ARUMBAKKAM., CHENNAI - 600 106.
TELEPHONE:044-23637420,E-mail:nandaarchitects@gmail.com



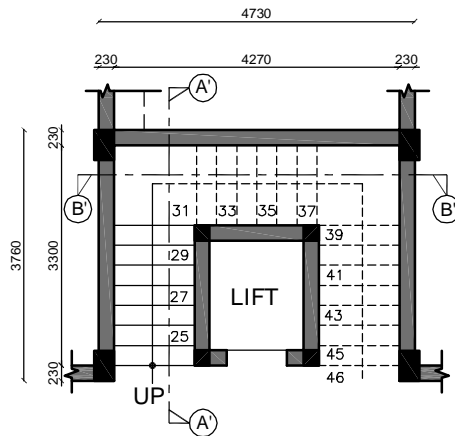
SECTION - B'B'



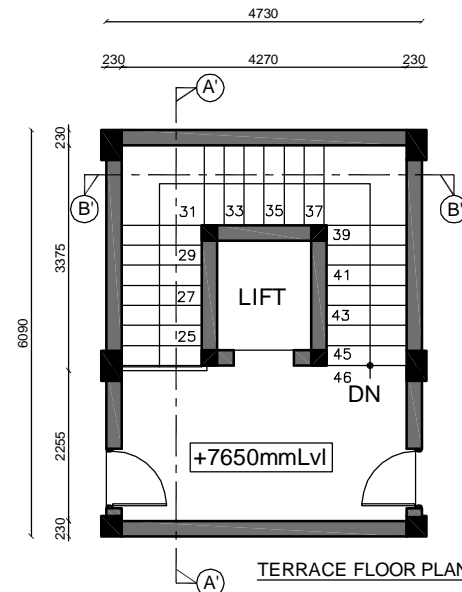
SECTION - A'A'



GROUND FLOOR PLAN



FIRST FLOOR PLAN



TERRACE FLOOR PLAN

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LEGEND :

230MM, 115MM THK BRICK WORK
R.C.C COLUMN

NORTH POINT :



CLIENT:

INDIAN BANK SELF EMPLOYMENT
TRAINING INSTITUTE (INDSETI)

PROJECT :

PROPOSED ACADEMIC AND HOSTEL
BUILDING FOR INDSETI AT VELLORE.

DRAWING TITLE:

STAIRCASE DETAIL

☐ SCHEMATIC DRAWING ☐ WORKING DRAWING

☒ TENDER DRAWING ☐ AS BUILT DRAWING

SCALE : N.T.S. DATE : 19/11/2018 REV NO: 00

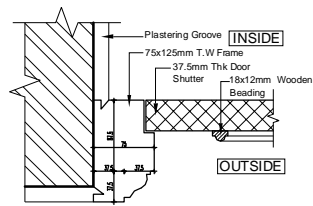
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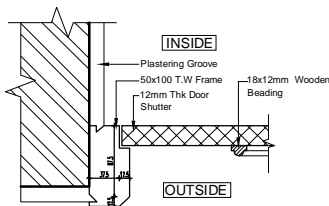
ARCHITECT :

NANDA & ASSOCIATES
ARCHITECTS

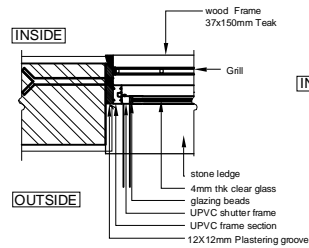
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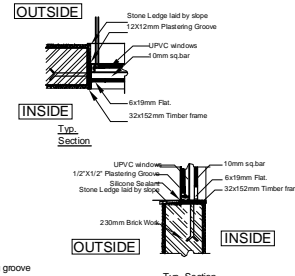
75X125MM DOOR FRAME DETAIL



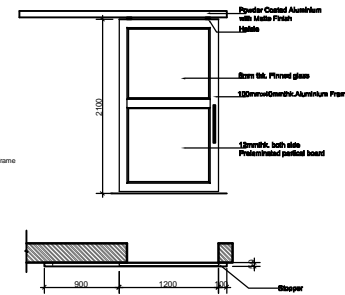
50X100MM DOOR FRAME DETAIL



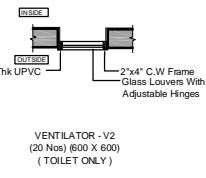
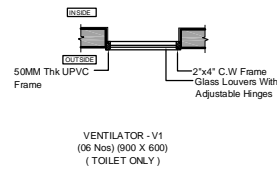
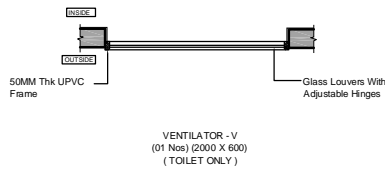
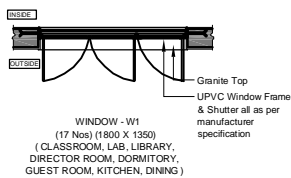
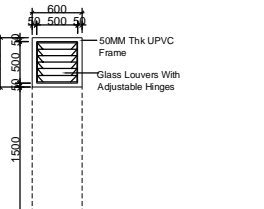
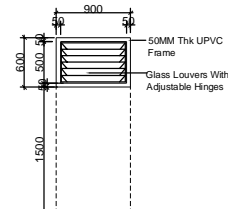
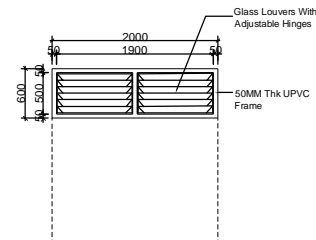
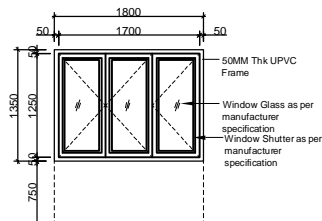
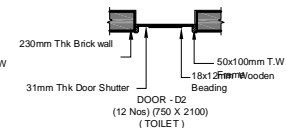
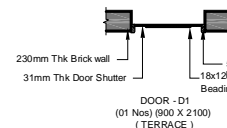
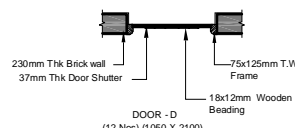
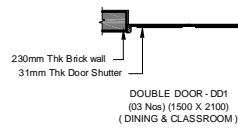
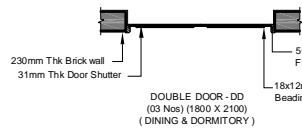
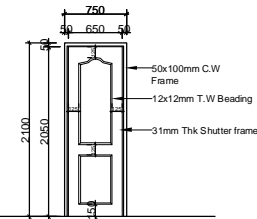
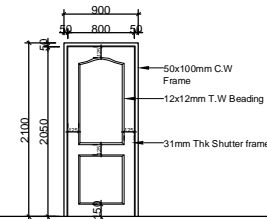
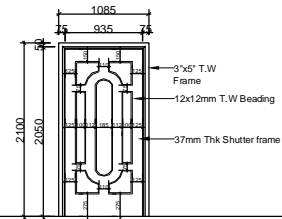
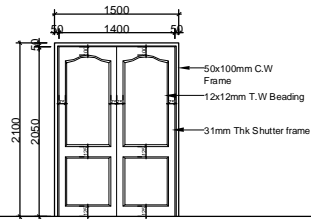
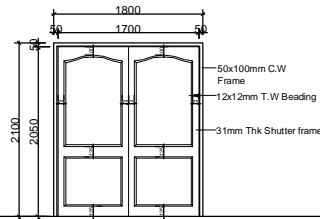
WINDOW FRAME DETAIL



TYPICAL FOR ALL WINDOWS
UPVC window & grill fixing details @ sub frame



SLIDING DOOR - (01 Nos) (900 X 2100)
(TERRACE)



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LEGEND :

230MM ,115MM THK BRICK WORK
R.C.C COLUMN

NORTH POINT :



CLIENT:

INDIAN BANK SELF EMPLOYMENT
TRAINING INSTITUTE (INDSETI)

PROJECT :

PROPOSED ACADEMIC AND HOSTEL
BUILDING FOR INDSETI AT VELLORE.

DRAWING TITLE:

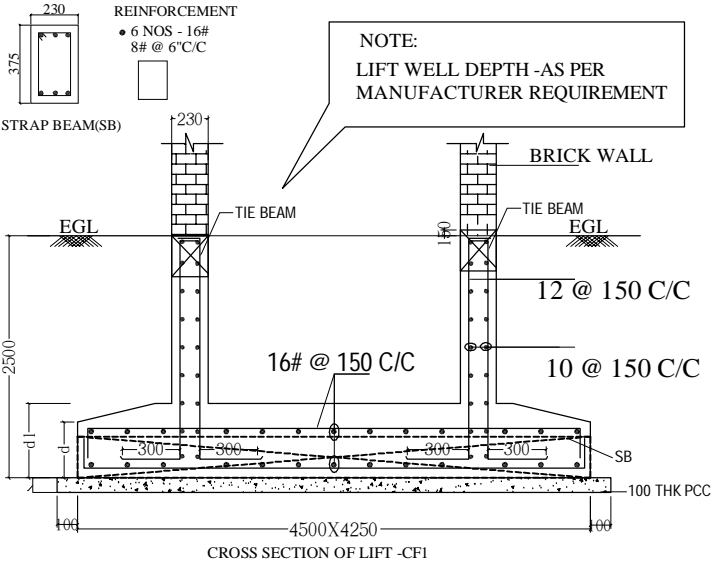
JOINERY DETAIL

☐ SCHEMATIC DRAWING ☐ WORKING DRAWING
☒ TENDER DRAWING ☐ AS BUILT DRAWING











SCALE : N.T.S DATE : 19/11/2018 REV NO.:
DRAWN BY : Divya CHECKED BY : M.S 00
JOB NO : 1720/16 DWG NO : ARCH - TR - 40

ARCHITECT :

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TELEPHONE:044-23637420,E-mail:nandaarchitects@gmail.com



SCHEDULE OF FOOTINGS								
S. NO.	NAME OF FOOTING	SIZE	d	d1	D	REINFORCEMENT		REMARKS NOS.
		L x L x L				Lx SHORTER DIRECTION	Lz LONGER DIRECTION	
		SHORTER DIRECTION L LONGER DIRECTION L						
1	F1	1500 x1500	250	450	2500	12# @ 150 C/C	12# @ 150 C/C	06
2	F2	1800 x 1800	250	500	2500	12# @ 125 C/C	12# @ 125 C/C	12
3	F3	2100 x 2100	250	550	2500	12# @ 125 C/C	12# @ 150 C/C	06
4	F4	2400 x 2400	250	600	2500	16# @ 150 C/C	16# @ 150 C/C	04
5	F5	2700 x2700	300	650	2500	16# @ 125 C/C	16# @ 125 C/C	04
6	CF1	REFER PLAN	250	550	2500	16# @ 150 C/C	16# @ 150 C/C	01

SLNO	NAME OF COLUMN	SIZE OF THE COLUMN	SECTION	SHAPE OF TIES	REIN-FORCEMENT	STIRRUPS		REMARKS (NOS)
						NEAR SUPPORT (H/4)	MIDDLE SPAN (H/2)	
1	C1	230 X 375			8 NOS-16#	8# @ 100 C/C	8# @ 150 C/C	04
2	C2	230 X 450			8 NOS-20#	8# @ 100 C/C	8# @ 150 C/C	14
3	C3	300 X 450			4 NOS-25# + 4 NOS-20#	8# @ 100 C/C	8# @ 150 C/C	10
4	C4	300 X 450			8 NOS-25#	10# @ 100 C/C	10# @ 150 C/C	08
5	C5	300 X 600			10 NOS-25#	10# @ 100 C/C	10# @ 150 C/C	04

NOTES	<p>1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE THE EXECUTION OF WORK.</p> <p>2. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED & FIGURED DIMENSIONS SHALL BE FOLLOWED.</p> <p>3. USE CONCRETE - M25 (DESIGN/M25) FOR ALL RCC WORKS.</p> <p>4. MINIMUM CEMENT CONTENT SHALL NOT BE LESS THAN 300 KG/M3 FOR M25 CONCRETE.</p> <p>5. MINIMUM YIELD STRENGTH OF REIN BAR IS 500 N/CM² (MINIMUM IS 1780 N/CM² TO BE USED).</p> <p>6. NO ADMIXTURE'S SHALL BE ADDED WITHOUT PERMISSION OF CONSULTANT.</p> <p>7. CLEAR COVER TO REINFORCEMENT FOR FOOTING - 50MM, COLUMN - 40MM, R.C. SLAB - 25MM AND BEAM - 25MM.</p> <p>8. DEVELOPMENT LENGTH OF BAR IS $E_s \times d \times d / 20$.</p> <p>9. FOR ALL OTHER RCC GENERAL NOTES: REFER SHEET NO 1.</p> <p>10. FOLLOW DUCTILE DETAILING AS PER IS 10260 (REFER SHEET NO A).</p> <p>11. STRUCTURE IS DESIGNED FOR G+2 FLOORS ONLY.</p> <p>12. THE SAFE LOAD BEARING CAPACITY OF SOIL IS 300 NUSG/M² AT 2.5M DEPTHS PER ISO. (G-1).</p>
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ARCHITECTS

 **NANDA & ASSOCIATES**
— ARCHITECTS —

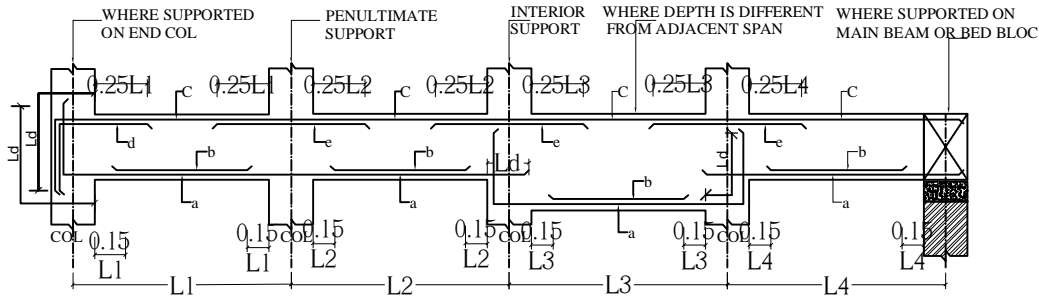
NO. 36, SARASWATHI ILLAM, JANAKIRAM COLONY MAIN RD.
JANAKIRAM COLONY., ARUMBAKKAM, CHENNAI - 600 106.
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 GANAPATHY NAGAR, NAGALKENI,
 CHROMEPET, CHENNAI 600 044.
 nalla_sakthi@gmail.com, 9444020706

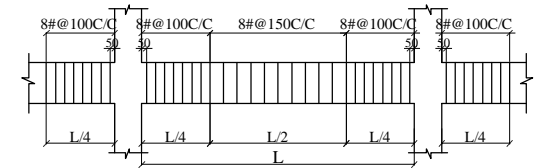
PROJECT:	PROPOSED ACADEMIC AND HOSTEL BUILDING FOR INDSETI AT VELLORE
TITLE:	FOUNDATION LAYOUT & SECTION DETAILS

DRAWN : CARUN	DATE : 23/12/2018
CHECKED : P.NALLATHAMBI	SHEET NO: ARCH-TR -41
APPROVED : P.NALLATHAMBI	REV NO :
SCALE : 1:100	
PROJECT NUMBER : SCPL/85-01/2018-19	

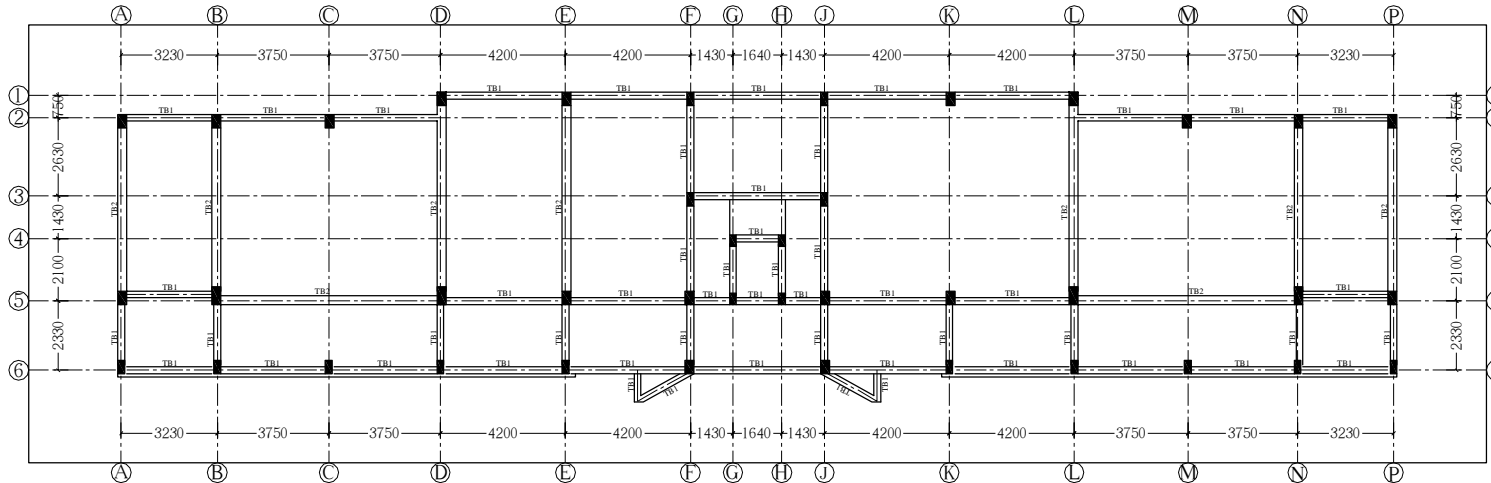


TYPICAL SECTION OF BEAM
IF BAR DIA ARE DIFFERENT THE LARGER OF THE TWO PROVIDED SHALL BE ADOPTED
a = BOTTOM REINF CONTINUOUS
b = BOTTOM REINF CURTAILED
c = TOP REINF CONTINUOUS
d, e = EXTRA REINF AT SUPPORT

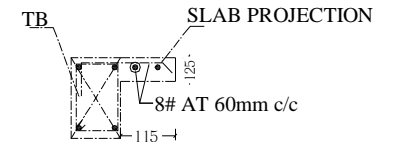
SCHEDULE OF RCC BEAM DETAILS													
SL No	BEAM DESIGNATION	SIZE		SPAN 'L'	MAIN REINFORCEMENT						STIRRUPS		REMARKS
		BOTTOM BARS STRAIGHT	BOTTOM BARS EXTRA AT CENTRE		TOP BARS STRAIGHT	TOP BARS EXTRA AT DIS CONT/[END] SUPPORT	TOP BARS EXTRA AT CONT [penultimate] SUPPORT	TOP BARS EXTRA AT CONT [middle] SUPPORT	NEAR SUPPORT (L/4)	MIDDLE SPAN (L/2)			
											'a'	'b'	
					N0-DIA [#]	N0-DIA [#]	N0-DIA [#]	N0-DIA [#]	N0-DIA [#]	N0-DIA [#]	DIA [#]-C/C	DIA [#]-C/C	
1	TB1	230	300		2-12	-	2-12	1-16	1-16	1-16	8# @ 100 C/C	8# @ 150 C/C	
2	TB2	300	375		2-16	-	2-12	2-16	2-16	2-16	8# @ 100 C/C	8# @ 150 C/C	



DETAIL OF BEAM SHOWING LINK SPACING



TIE BEAM LAYOUT AT +0.0M LVL



**SLAB PROJECTION
DETAILS
SECTION A-A**

NOTES

- CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE THE EXECUTION OF WORK.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED & FIGURED DIMENSIONS SHALL BE FOLLOWED.
- USE CONCRETE - M25 (DESIGN M20) FOR ALL RCC WORKS.
- MINIMUM CEMENT CONTENT SHALL NOT BE LESS THAN 340 KG/CUM FOR M25 CONCRETE.
- HIGH YIELD STRENGTH DEFORMED BARS Fe500D CONFIRMING IS 1786-1985 TO BE USED
- NO ADMIXTURES SHALL BE ADDED WITHOUT PERMISSION OF CONSULTANT
- CLEAR COVER TO REINFORCEMENT FOR FOOTING: 50MM, COLUMN 40MM, R.C.C WALL AND BEAM 30MM, SLAB 25MM.
- DEVELOPMENT LENGTH OF BAR (Ld AS 56) x DIA OF BAR.
- FOR ALL OTHER RCC GENERAL NOTES REFER SHEET NO A1
- FOLLOW DUCTILE DETAILING AS PER IS 1920 (REFER SHEET NO A)
- STRUCTURE IS DESIGNED FOR (G+2) FLOORS ONLY
- THE SAFE LOAD BEARING CAPACITY OF SOIL IS 300 KN/SqM AT 2.5M DEPTH AS PER SOIL REPORT.

ARCHITECTS

NANDA & ASSOCIATES
ARCHITECTS
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nalla.sakthi@gmail.com, 9444020706

PROJECT :

PROPOSED ACADEMIC AND HOSTEL
BUILDING FOR INDSETI AT VELLORE

TITLE :

TIE BEAM LAYOUT & SECTION DETAILS AT +0.0M LVL

DRAWN : C.ARUN

DATE : 23/12/2018

CHECKED : P.NALLATHAMBI

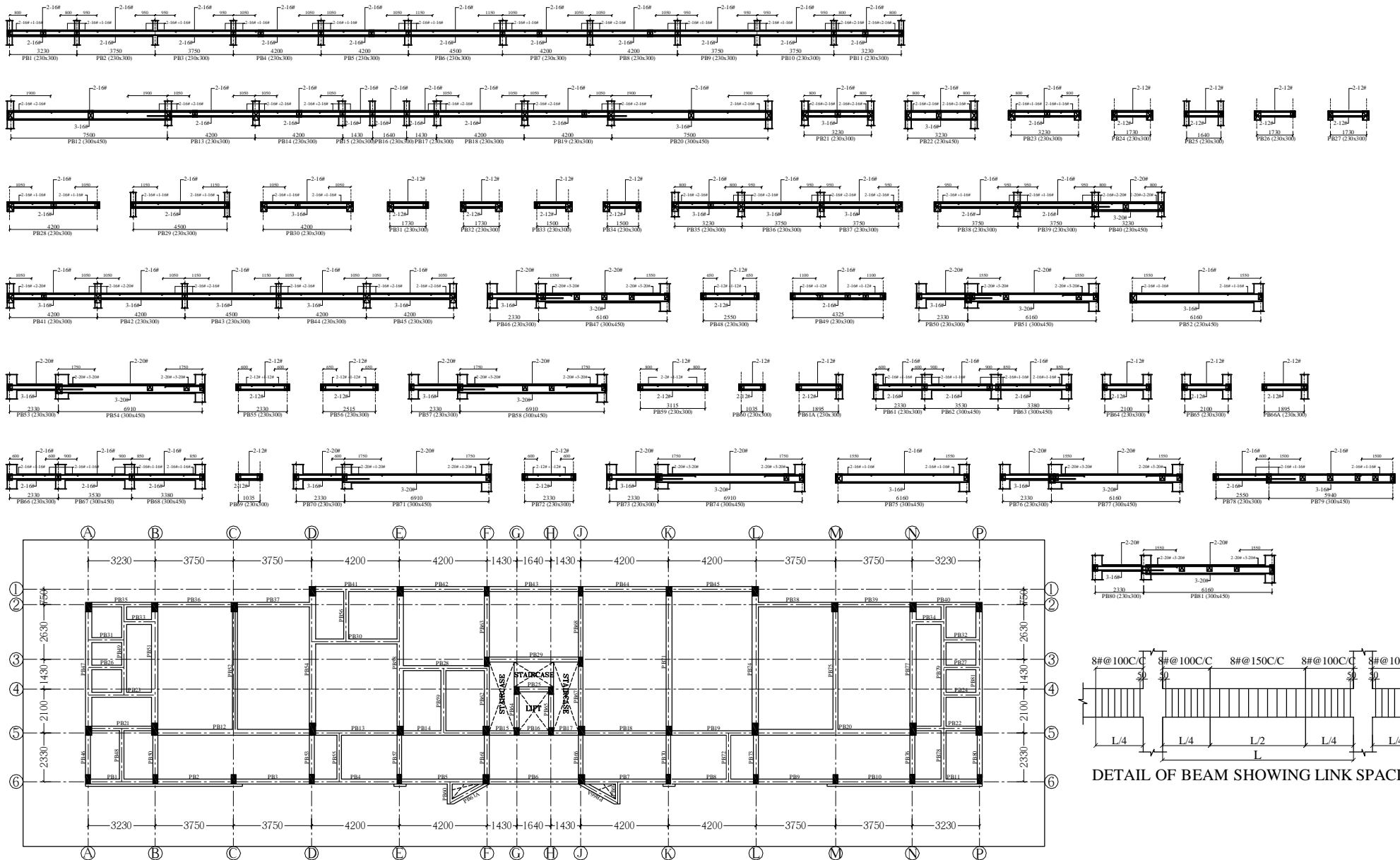
SHEET NO: ARCH - TR - 42

APPROVED : P.NALLATHAMBI

REV NO :

SCALE : 1:100

PROJECT NUMBER : SCPL/85-01/2018-19



PLINTH BEAM LAYOUT AT +0.75M LVL

NOTES

- CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE THE EXECUTION OF WORK.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED & FIGURED DIMENSIONS SHALL BE FOLLOWED.
- USE CONCRETE - M25 (DESIGN MIX) FOR ALL RCC WORKS.
- MINIMUM CEMENT CONTENT SHALL NOT BE LESS THAN 340 KG/M³ FOR M25 CONCRETE.
- HIGH YIELD STRENGTH DEFORMED BARS Fe500 CONFIRMING IS 1786-1985 TO BE USED.
- NO ADMIXTURES SHALL BE ADDED WITHOUT PERMISSION OF CONSULTANT.
- CLEAR COVER TO REINFORCEMENT FOR FOOTING: 50MM, COLUMN 40MM, R.C.C WALL AND BEAM 30MM, SLAB 25MM.
- DEVELOPMENT LENGTH OF BARS AS PER IS 456A OR IS 456.
- FOR ALL OTHER RCC GENERAL NOTES REFER SHEET NO A1.
- FOLLOW DUCTILE DETAILING AS PER IS 19020 (REFER SHEET NO A).
- STRUCTURE IS DESIGNED FOR (G+2) FLOORS ONLY.
- THE SAFE LOAD BEARING CAPACITY OF SOIL IS 300 kN/m² AT 2.5M DEPTH AS PER SOIL REPORT.

ARCHITECTS

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PROJECT

PROPOSED ACADEMIC AND HOSTEL
BUILDING FOR INDESETI AT VELLORE

TITLE

PLINTH BEAM LAYOUT & SECTION DETAILS AT +0.75M LVL

DRAWN : CARUN

CHECKED : P.NALLATHAMBI

APPROVED : P.NALLATHAMBI

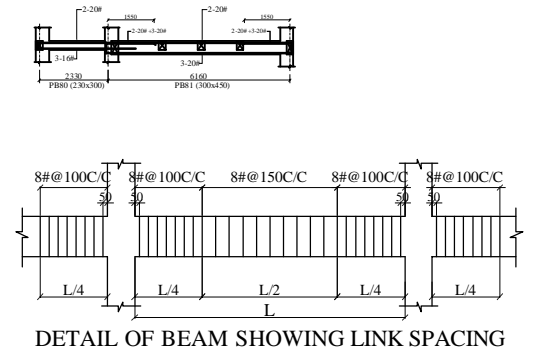
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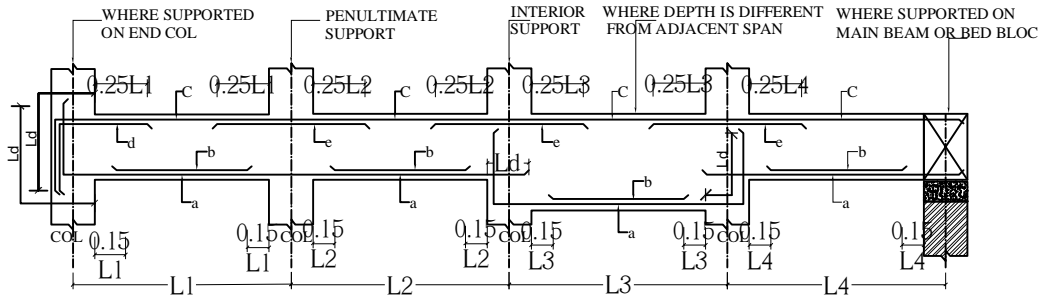
PROJECT NUMBER : SCPL/85-01/2018-19

DATE : 23/12/2018

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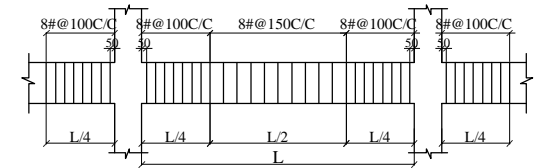
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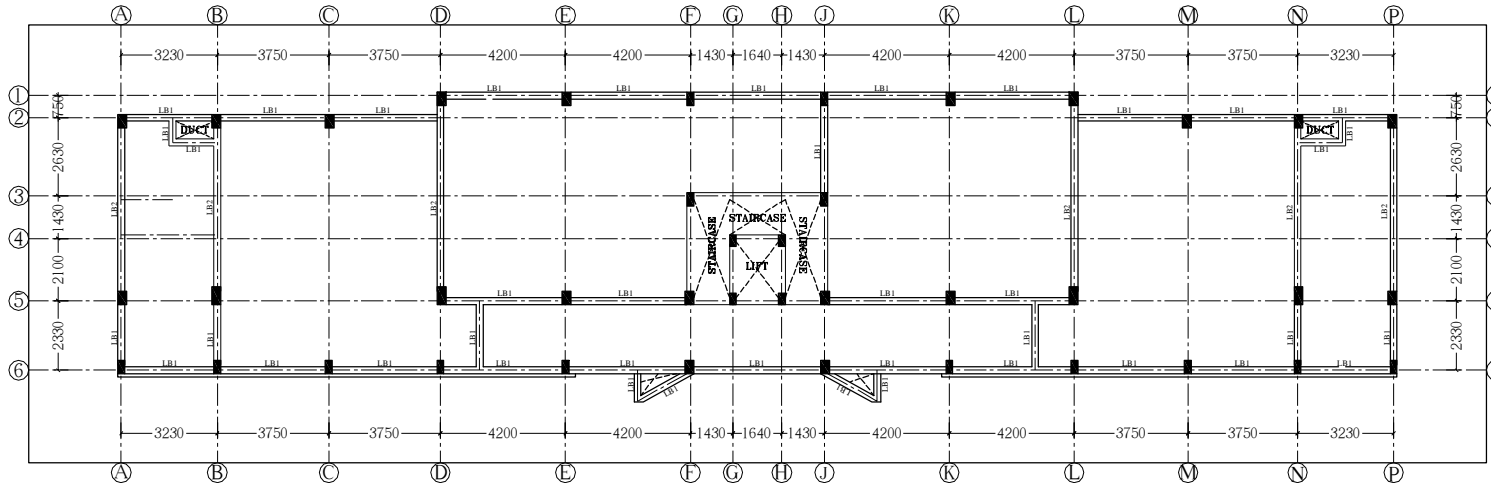


TYPICAL SECTION OF BEAM
IF BAR DIA ARE DIFFERENT THE LARGER OF THE TWO PROVIDED SHALL BE ADOPTED
a = BOTTOM REINF CONTINUOUS
b = BOTTOM REINF CURTAILED
c = TOP REINF CONTINUOUS
d, e = EXTRA REINF AT SUPPORT

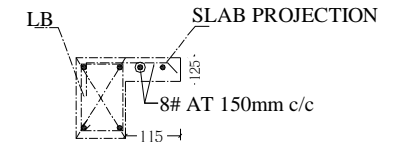
SCHEDULE OF RCC BEAM DETAILS													
SL No	BEAM DESIGNATION	SIZE		SPAN 'L'	MAIN REINFORCEMENT						STIRRUPS		REMARKS
		WIDTH	DEPTH		BOTTOM BARS STRAIGHT	BOTTOM BARS EXTRA AT CENTRE	TOP BARS STRAIGHT	TOP BARS EXTRA AT DIS CONT/END SUPPORT	TOP BARS EXTRA AT CONT (penultimate) SUPPORT	TOP BARS EXTRA AT CONT SUPPORT	NEAR SUPPORT(L/4)	MIDDLE SPAN(L/2)	
					‘a’	‘b’	‘c’	‘d’	‘e’	‘e’			
					NO-DIA [#]	NO-DIA [#]	NO-DIA [#]	NO-DIA [#]	NO-DIA [#]	NO-DIA [#]	DIA [#]-C/C	DIA [#]-C/C	
1	LB1	230	300		2-12	-	2-12	1-16	1-16	1-16	8# @ 100 C/C	8# @ 150 C/C	
2	LB2	230	375		2-16	-	2-12	2-16	2-16	2-16	8# @ 100 C/C	8# @ 150 C/C	



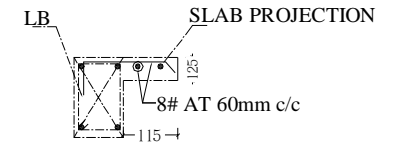
DETAIL OF BEAM SHOWING LINK SPACING



GROUND FLOOR LINTEL BEAM LAYOUT AT +3.15M LVL



SLAB PROJECTION DETAILS SECTION A-A



SLAB PROJECTION DETAILS SECTION A-A

NOTES

- CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE THE EXECUTION OF WORK.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED & FIGURED DIMENSIONS SHALL BE FOLLOWED.
- USE CONCRETE - M25 (DESIGN MIX) FOR ALL RCC WORKS.
- MINIMUM CEMENT CONTENT SHALL NOT BE LESS THAN 340 KG/CUM FOR M25 CONCRETE.
- HIGH YIELD STRENGTH DEFORMED BARS Fe500d CONFIRMING IS 1786-1985 TO BE USED
- NO ADMIXTURES SHALL BE ADDED WITHOUT PERMISSION OF CONSULTANT
- CLEAR COVER TO REINFORCEMENT FOR FOOTING: 50MM, COLUMN 40MM, R.C.C WALL AND BEAM 30MM, SLAB 25MM.
- DEVELOPMENT LENGTH OF BAR (Ld) AS 50 x DIA OF BAR.
- FOR ALL OTHER RCC GENERAL NOTES REFER SHEET NO A1
- FOLLOW DUCTILE DETAILING AS PER IS 1920 (REFER SHEET NO A)
- STRUCTURE IS DESIGNED FOR (G+2) FLOORS ONLY
- THE SAFE LOAD BEARING CAPACITY OF SOIL IS 300 kN/SqM AT 2.5M DEPTH AS PER SOIL REPORT.

ARCHITECTS

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PROJECT

PROPOSED ACADEMIC AND HOSTEL
BUILDING FOR INDSETI AT VELLORE

TITLE

GROUND FLOOR LINTEL BEAM LAYOUT
& SECTION DETAILS AT +3.15M LVL

DRAWN : CARUN

DATE : 23/12/2018

CHECKED : PNALLATHAMBI

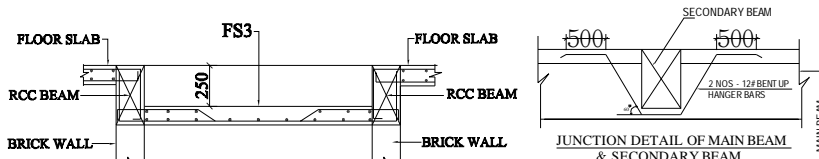
SHEET NO: ARCH-TR-44

APPROVED : P.NALLATHAMBI

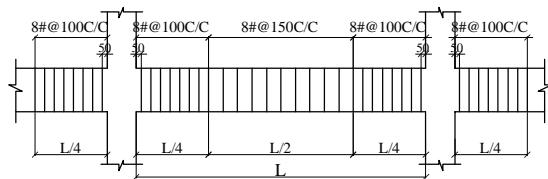
REV NO :

SCALE : 1:100

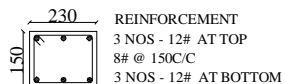
PROJECT NUMBER : SCPL/85-01/2018-19



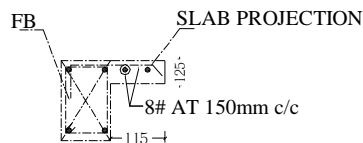
DETAIL OF SUNKEN SLAB




DETAIL OF BEAM SHOWING LINK SPACING

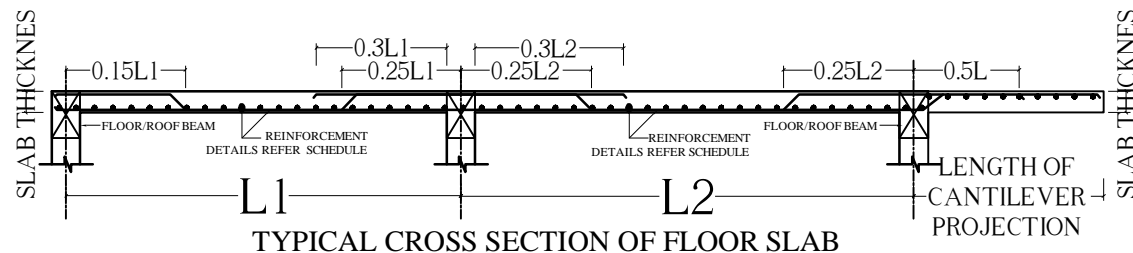


HIDDEN BEAM (HB)

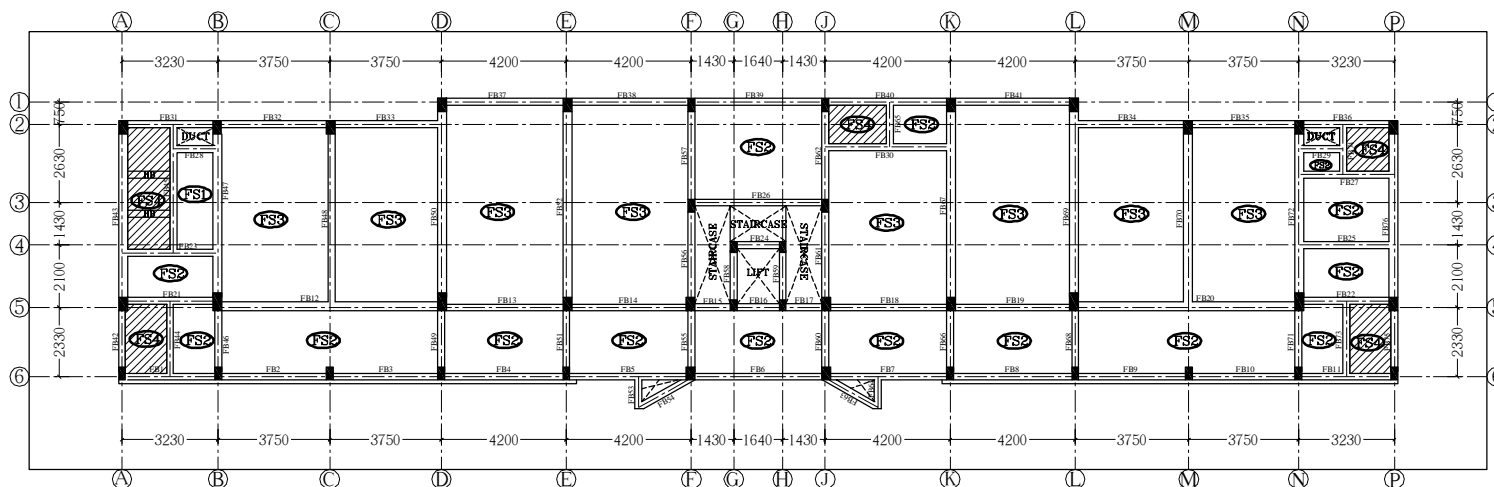


SLAB PROJECTION
DETAILS
SECTION A-A

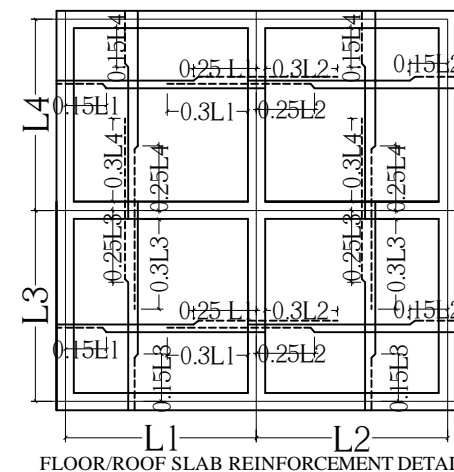
SCHEDULE OF RCC SLABS											
SL NO	NAME OF SLAB	THICKNESS IN MM	MAIN BARS				EXTRA BARS OVER END SUPPORT				REMARKS
			SHORT SPAN		LONG SPAN		SHORT SPAN		LONG SPAN		
			DIA	SPACING	DIA	SPACING	DIA	SPACING	DIA	SPACING	
1	FS1	150	8#	125 C/C	8#	175 C/C	8#	250 C/C	8#	350 C/C	
2	FS2	150	8#	150 C/C	8#	150 C/C	8#	250 C/C	8#	300 C/C	
3	FS3	150	8#	125 C/C	8#	150 C/C	8#	250 C/C	8#	300 C/C	
4	FS4	150	8#	150 C/C	8#	150 C/C	10#	300 C/C	10#	300 C/C	 230MM SUNKEN DEPTH



TYPICAL CROSS SECTION OF FLOOR SLAB



FIRST FLOOR BEAM LAYOUT AT +4.20M LVL



FLOOR/ROOF SLAB REINFORCEMENT DETAIL

NOTES

- CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE THE EXECUTION OF WORK.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED & FIGURED DIMENSIONS SHALL BE FOLLOWED.
- USE CONCRETE - M25 (DESIGN MIX) FOR ALL RCC WORKS.
- MINIMUM CEMENT CONTENT SHALL NOT BE LESS THAN 340 KG/CUM FOR M25 CONCRETE.
- HIGH YIELD STRENGTH DEFORMED BARS 500D CONFIRMING IS 1786-1985 TO BE USED.
- NO ADMIXTURES SHALL BE ADDED WITHOUT PERMISSION OF CONSULTANT.
- CLEAR COVER TO REINFORCEMENT FOR FOOTING: 50MM, COLUMN 40MM, R.C.C WALL AND BEAM 30MM, SLAB 25MM.
- DEVELOPMENT LENGTH OF BAR AS IS 56 X DIA OF BAR.
- FOR ALL OTHER RCC GENERAL NOTES REFER SHEET NO A1.
- FOLLOW DUCTILE DETAILING AS PER IS 1920 (REFER SHEET NO A).
- STRUCTURE IS DESIGNED FOR (G+2) FLOORS ONLY.
- THE SAFE LOAD BEARING CAPACITY OF SOIL IS 300 KN/SqM AT 2.5M DEPTH AS PER SOIL REPORT.

ARCHITECTS

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PROJECT

PROPOSED ACADEMIC AND HOSTEL
BUILDING FOR INDETI AT VELLORE

TITLE

FIRST FLOOR BEAM LAYOUT AT +4.20M LVL

DRAWN : CARUN

CHECKED : P.NALLATHAMBI

APPROVED : P.NALLATHAMBI

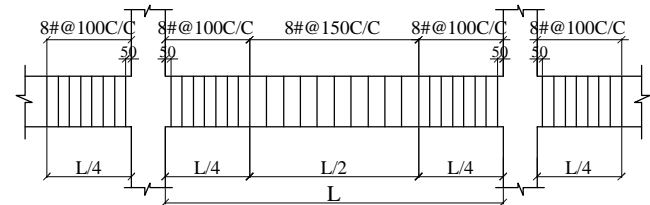
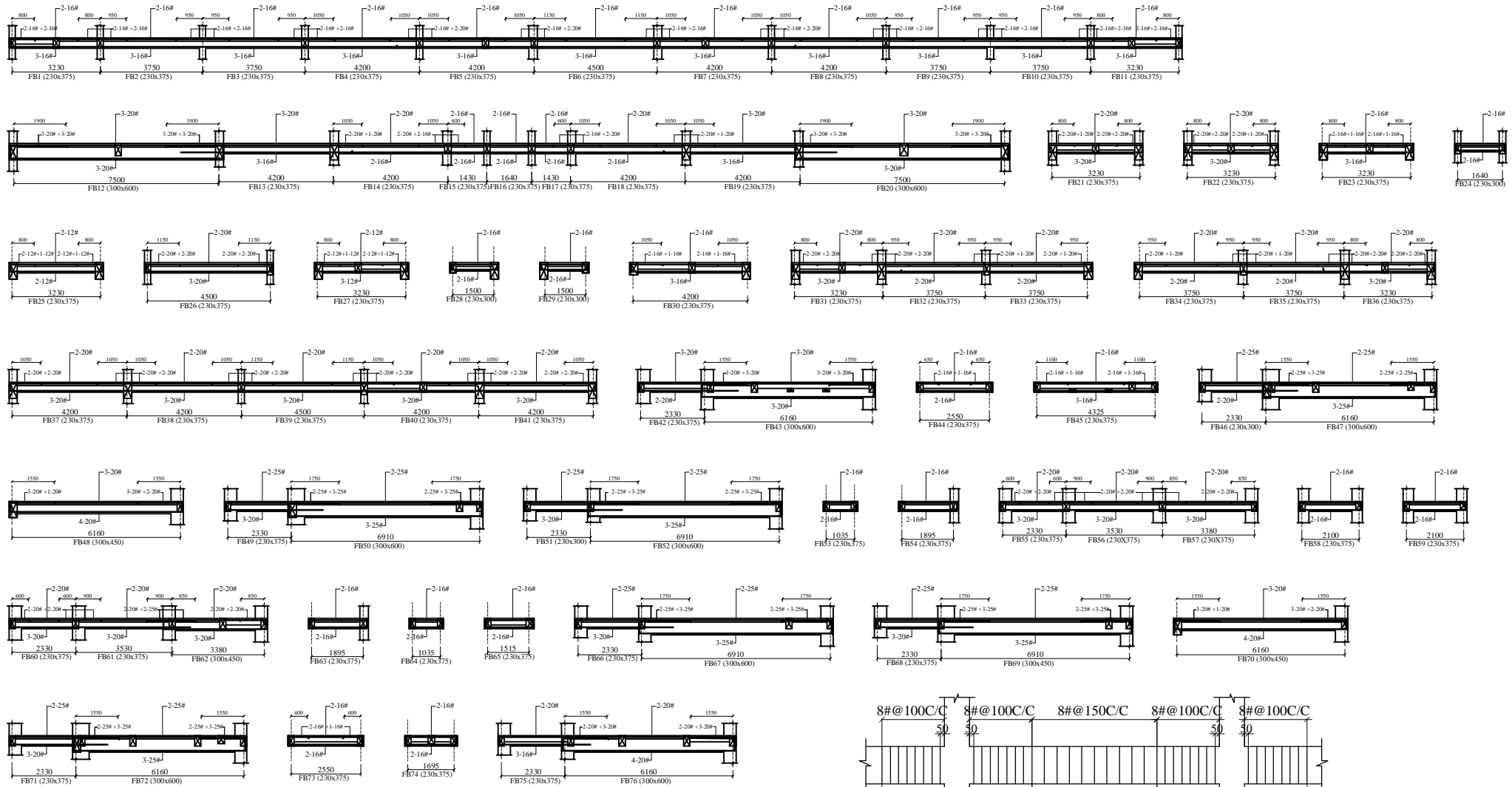
SCALE : 1:100

PROJECT NUMBER : SCPL/85-01/2018-19

DATE : 23/12/2018

SHEET NO: ARCH-TR-45

REV NO :



DETAIL OF BEAM SHOWING LINK SPACING

NOTES

- CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE THE EXECUTION OF WORK.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED & FIGURED DIMENSIONS SHALL BE FOLLOWED.
- USE CONCRETE - M25 (DESIGNING) FOR ALL RCC WORKS.
- MINIMUM CEMENT CONTENT SHALL NOT BE LESS THAN 340 KG/CUM FOR M25 CONCRETE.
- HIGH YIELD STRENGTH DEFORMED BARS IS 500D CONFIRMING IS 1786-1985 TO BE USED
- NO ADMIXTURES SHALL BE ADDED WITHOUT PERMISSION OF CONSULTANT
- CLEAR COVER TO REINFORCEMENT FOR FOOTING: 50MM, COLUMN 40MM, R.C.C WALL AND BEAM 30MM, SLAB 20MM.
- DEVELOPMENT LENGTH OF BAR (L_d) AS PER IS 456 OR IS 8000.
- FOR ALL OTHER RCC GENERAL NOTES REFER SHEET NO A1
- FOLLOW DUCTILE DETAILING AS PER IS 1920 (REFER SHEET NO A)
- STRUCTURE IS DESIGNED FOR (G+2) FLOORS ONLY
- THE SAFE LOAD BEARING CAPACITY OF SOIL IS 300 kN/SqM AT 2.5M DEPTH AS PER SOIL REPORT.

ARCHITECTS

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JANAKIRAM COLONY., ARUMBAKKAM, CHENNAI - 600 106.
TELEPHONE 044-23637420, E-mail: nandaarchitects@gmail.com

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CHROMEPET, CHENNAI 600 044.
nalla.sakthi@gmail.com, 9440420706

PROJECT

PROPOSED ACADEMIC AND HOSTEL
BUILDING FOR INDETI AT VELLORE

TITLE

FIRST FLOOR BEAM SECTION DETAILS AT +4.20M LVL

DRAWN : CARUN

CHECKED : P.NALLATHAMBI

APPROVED : P.NALLATHAMBI

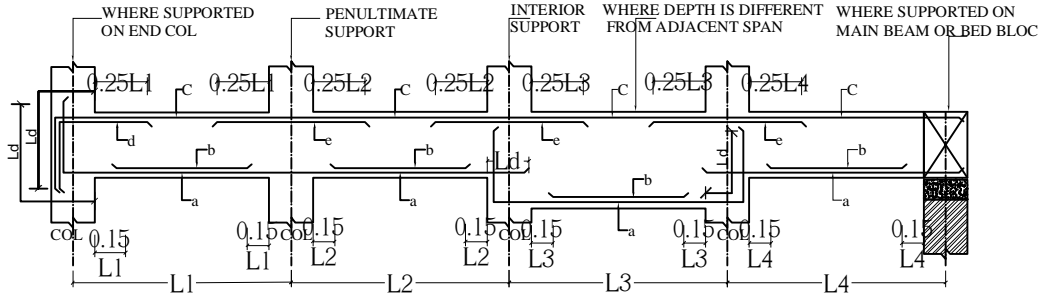
SCALE : 1:100

PROJECT NUMBER : SCPL/85-01/2018-19

DATE : 23/12/2018

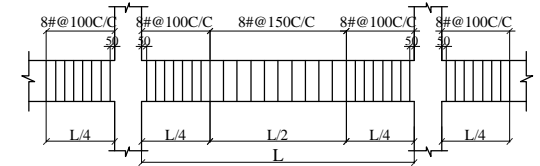
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REV NO :

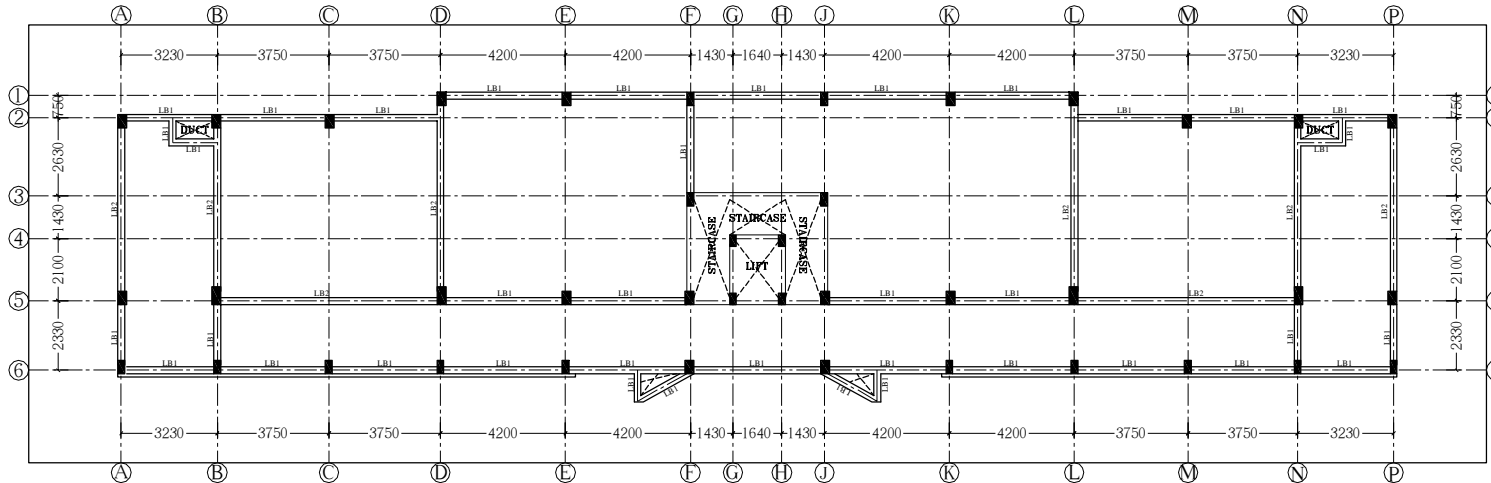


TYPICAL SECTION OF BEAM
IF BAR DIA ARE DIFFERENT THE LARGER OF THE TWO PROVIDED SHALL BE ADOPTED
a = BOTTOM REINF CONTINUOUS
b = BOTTOM REINF CURTAILED
c = TOP REINF CONTINUOUS
d, e = EXTRA REINF AT SUPPORT

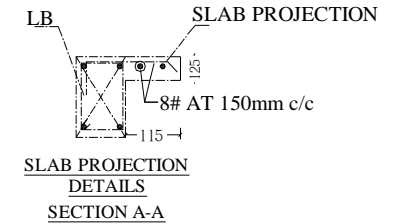
SCHEDULE OF RCC BEAM DETAILS													
SL No	BEAM DESIGNATION	SIZE		SPAN 'L'	MAIN REINFORCEMENT						STIRRUPS		REMARKS
		BOTTOM BARS STRAIGHT	BOTTOM BARS EXTRA AT CENTRE		TOP BARS STRAIGHT	TOP BARS EXTRA AT DIS CONT/[END] SUPPORT	TOP BARS EXTRA AT CONT [penultimate] SUPPORT	TOP BARS EXTRA AT CONT [middle] SUPPORT	NEAR SUPPORT (L/4)	MIDDLE SPAN (L/2)			
		'a'	'b'		'c'	'd'	'e'	'e'					
					N0-DIA [#]	N0-DIA [#]	N0-DIA [#]	N0-DIA [#]	N0-DIA [#]	N0-DIA [#]	DIA [#]-C/C	DIA [#]-C/C	
1	LB1	230	300		2-12	-	2-12	1-16	1-16	1-16	8# @ 100 C/C	8# @ 150 C/C	
2	LB2	230	375		2-16	-	2-12	2-16	2-16	2-16	8# @ 100 C/C	8# @ 150 C/C	



DETAIL OF BEAM SHOWING LINK SPACING



FIRST FLOOR LINTEL BEAM LAYOUT AT +6.60M LVL



NOTES

- CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE THE EXECUTION OF WORK.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED & FIGURED DIMENSIONS SHALL BE FOLLOWED.
- USE CONCRETE - M25 (DESIGN MIX) FOR ALL RCC WORKS.
- MINIMUM CEMENT CONTENT SHALL NOT BE LESS THAN 340 KG/CUM FOR M25 CONCRETE.
- HIGH YIELD STRENGTH DEFORMED BARS Fe500 CONFIRMING IS 1786-1985 TO BE USED
- NO ADMIXTURES SHALL BE ADDED WITHOUT PERMISSION OF CONSULTANT
- CLEAR COVER TO REINFORCEMENT FOR FOOTING: 50MM, COLUMN 40MM, R.C.C WALL AND BEAM 30MM, SLAB 25MM.
- DEVELOPMENT LENGTH OF BAR (Ld AS 56) x DIA OF BAR.
- FOR ALL OTHER RCC GENERAL NOTES REFER SHEET NO A1
- FOLLOW DUCTILE DETAILING AS PER IS 1920 (REFER SHEET NO A)
- STRUCTURE IS DESIGNED FOR (G+2) FLOORS ONLY
- THE SAFE LOAD BEARING CAPACITY OF SOIL IS 300 kN/SqM AT 2.5M DEPTH AS PER SOIL REPORT.

ARCHITECTS

NANDA & ASSOCIATES ARCHITECTS
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TELEPHONE:044-23637420, E-mail:nandaarchitects@gmail.com

STRUCTURAL CONSULTANTS

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nalla.sakthi@gmail.com, 9444020706

PROJECT :

PROPOSED ACADEMIC AND HOSTEL BUILDING FOR INDSETI AT VELLORE

TITLE :

FIRST FLOOR LINTEL BEAM LAYOUT & SECTION DETAILS AT +6.60M LVL

DRAWN : C.ARUN

DATE : 23/12/2018

CHECKED : P.NALLATHAMBI

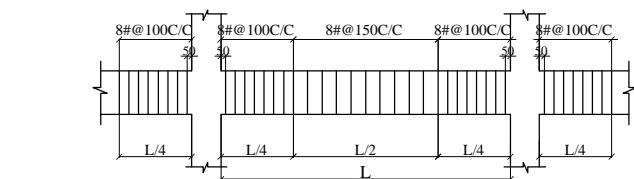
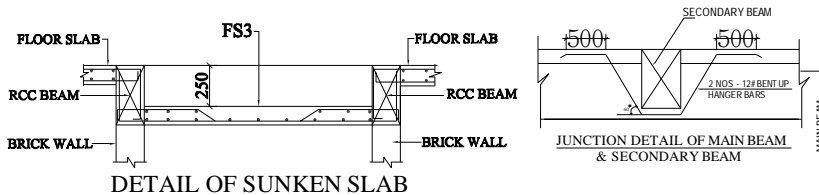
SHEET NO: ARCH - TR - 47

APPROVED : P.NALLATHAMBI

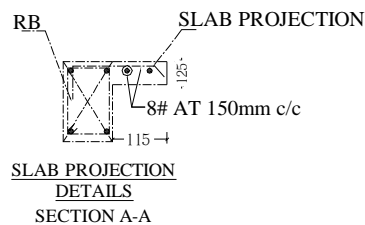
REV NO :

SCALE : 1:100

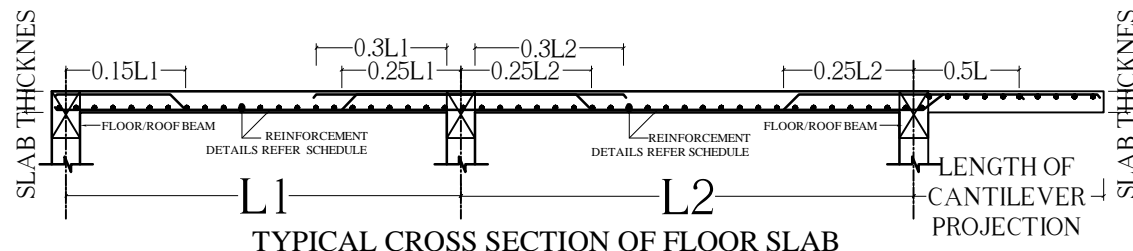
PROJECT NUMBER : SCPL/85-01/2018-19



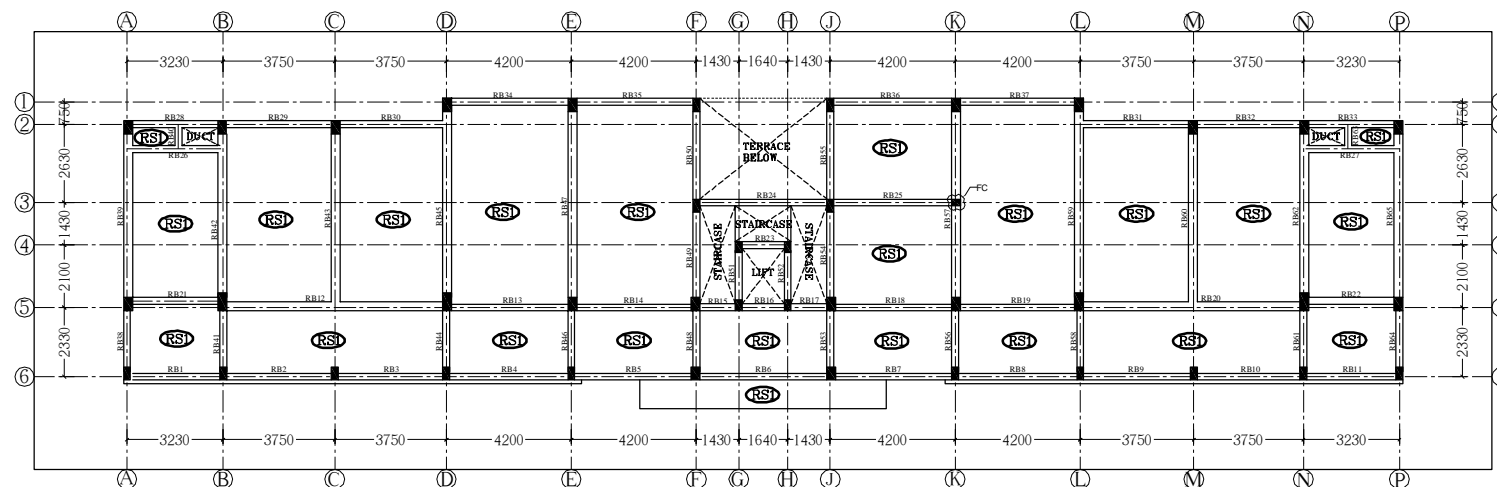
DETAIL OF BEAM SHOWING LINK SPACING



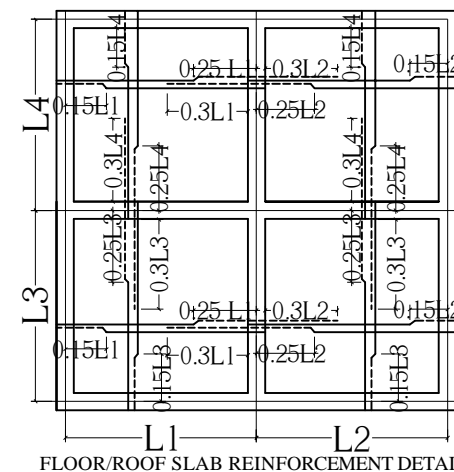
SCHEDULE OF RCC SLABS											
SL NO	NAME OF SLAB	THICKNESS IN MM	MAIN BARS				EXTRA BARS OVER END SUPPORT				REMARKS
			SHORT SPAN		LONG SPAN		SHORT SPAN		LONG SPAN		
			DIA	SPACING	DIA	SPACING	DIA	SPACING	DIA	SPACING	
1	RS1	150	8#	125 C/C	8#	150 C/C	8#	250 C/C	8#	300 C/C	



TYPICAL CROSS SECTION OF FLOOR SLAB



ROOF BEAM LAYOUT AT +7.650M LVL



FLOOR/ROOF SLAB REINFORCEMENT DETAIL

NOTES

- CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE THE EXECUTION OF WORK.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED & FIGURED DIMENSIONS SHALL BE FOLLOWED.
- USE CONCRETE - M25 (DESIGNING) FOR ALL RCC WORKS.
- MINIMUM CEMENT CONTENT SHALL NOT BE LESS THAN 340 KG/CUM FOR M25 CONCRETE.
- HIGH YIELD STRENGTH DEFORMED BARS Fe500 CONFIRMING IS 1786-1985 TO BE USED.
- NO ADMIXTURES SHALL BE ADDED WITHOUT PERMISSION OF CONSULTANT.
- CLEAR COVER TO REINFORCEMENT FOR FOOTING: 50MM, COLUMN 40MM, R.C.C WALL AND BEAM 30MM, SLAB 20MM.
- DEVELOPMENT LENGTH OF BARS (Ld) AS PER IS 456 (DA OF BAR).
- FOR ALL OTHER RCC GENERAL NOTES REFER SHEET NO A1.
- FOLLOW DUCTILE DETAILING AS PER IS 1920 (REFER SHEET NO A).
- STRUCTURE IS DESIGNED FOR (G+2) FLOORS ONLY.
- THE SAFE LOAD BEARING CAPACITY OF SOIL IS 300 kN/SqM AT 2.5M DEPTH AS PER SOIL REPORT.

ARCHITECTS

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PROJECT

PROPOSED ACADEMIC AND HOSTEL
BUILDING FOR INDSETI AT VELLORE

TITLE

ROOF FLOOR BEAM LAYOUT AT +7.65M LVL

DRAWN : CARUN

CHECKED : P.NALLATHAMBI

APPROVED : P.NALLATHAMBI

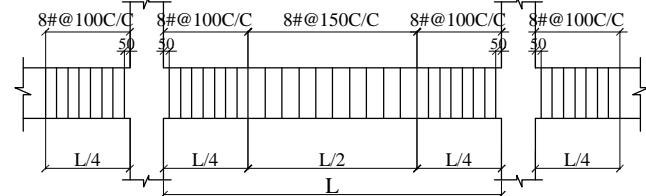
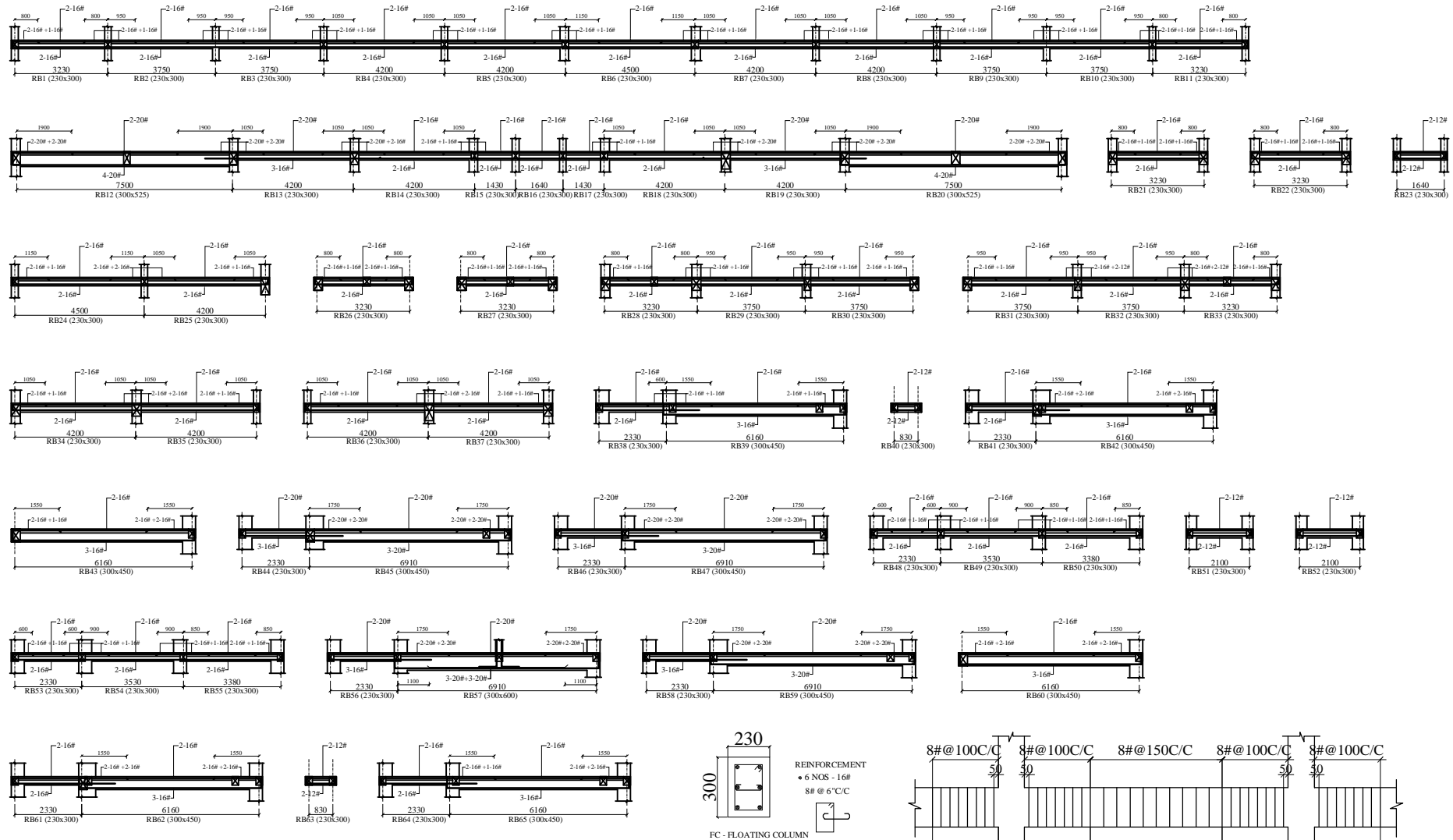
SCALE : 1:100

PROJECT NUMBER : SCPL/85-01/2018-19

DATE : 23/12/2018

SHEET NO: ARCH-TR-48

REV NO :



DETAIL OF BEAM SHOWING LINK SPACING

NOTES

- CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE THE EXECUTION OF WORK.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED & FIGURED DIMENSIONS SHALL BE FOLLOWED.
- USE CONCRETE - M25 (DESIGN AND FOR ALL RCC WORKS).
- MINIMUM CEMENT CONTENT SHALL NOT BE LESS THAN 340 KG/M³ FOR M25 CONCRETE.
- HIGH YIELD STRENGTH DEFORMED BARS Fe500 CONFIRMING IS 1786-1985 TO BE USED.
- NO ADMIXTURES SHALL BE ADDED WITHOUT PERMISSION OF CONSULTANT.
- CLEAR COVER TO REINFORCEMENT FOR FOOTING: 50MM, COLUMN 40MM, R.C.C WALL AND BEAM 30MM, SLAB 25MM.
- DEVELOPMENT LENGTH OF BARS AS IS 50 x DIA OF BAR.
- FOR ALL OTHER RCC GENERAL NOTES REFER SHEET NO A1.
- FOLLOW DUCTILE DETAILING AS PER IS 1920 (REFER SHEET NO A).
- STRUCTURE IS DESIGNED FOR (G+2) FLOORS ONLY.
- THE SAFE LOAD BEARING CAPACITY OF SOIL IS 300 kN/SqM AT 2.5M DEPTH AS PER SOIL REPORT.

ARCHITECTS

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PROJECT

PROPOSED ACADEMIC AND HOSTEL
BUILDING FOR INDETI AT VELLORE

TITLE

ROOF BEAM SECTION DETAILS AT +7.65M LVL

DRAWN : CARUN

DATE : 23/12/2018

CHECKED : PNALLATHAMBI

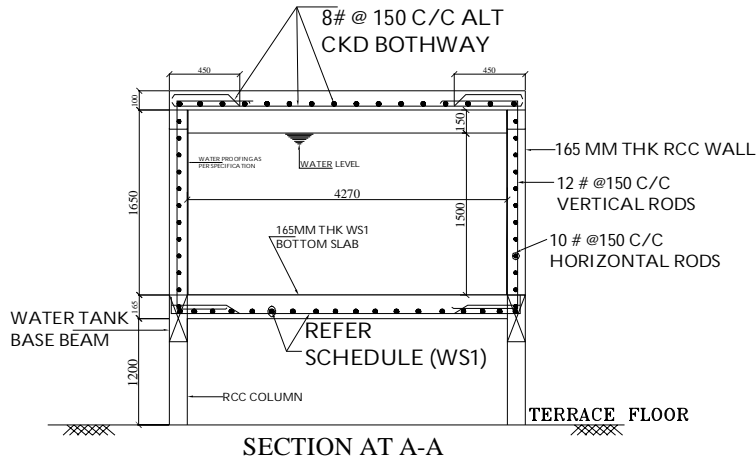
SHEET NO: ARCH- TR - 49

APPROVED : PNALLATHAMBI

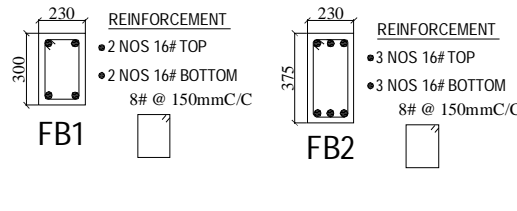
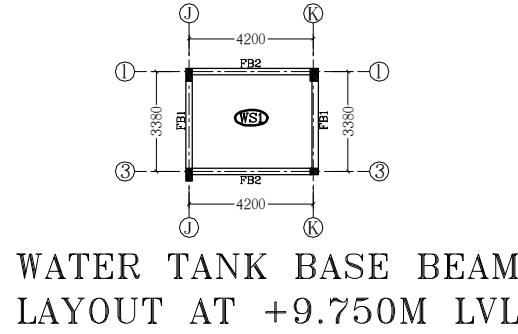
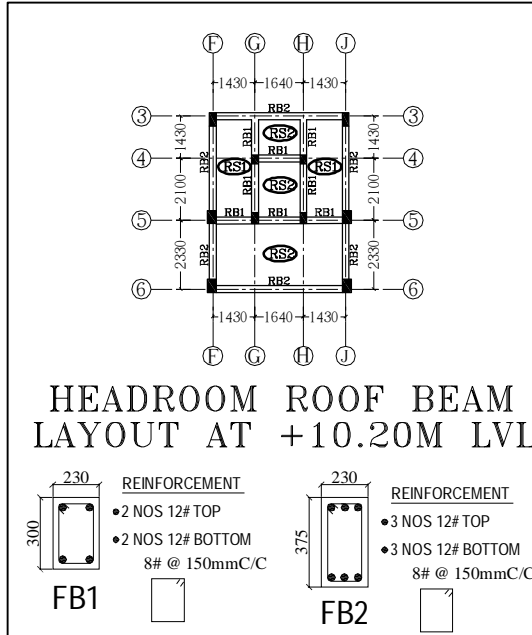
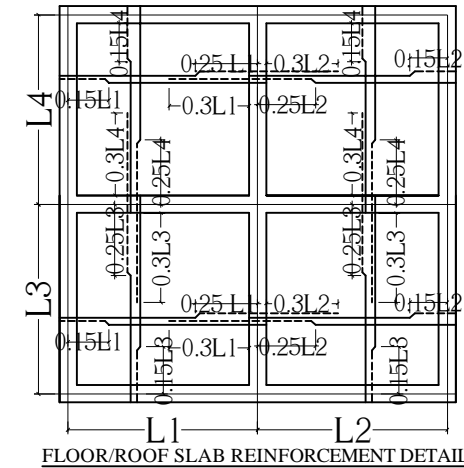
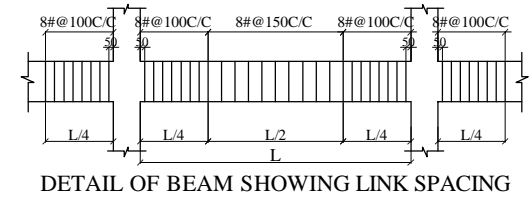
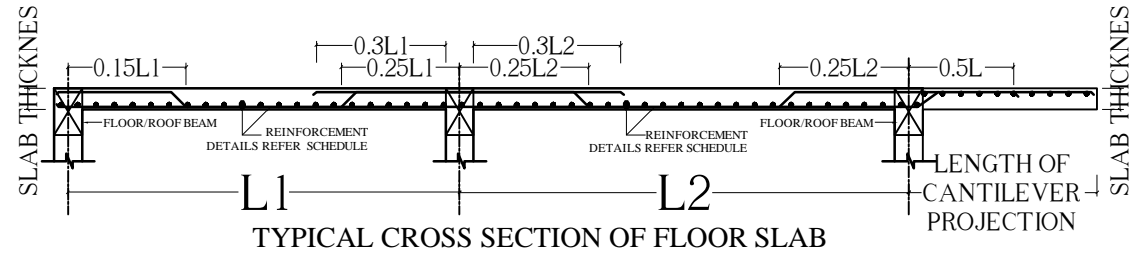
REV NO :

SCALE : 1:100

PROJECT NUMBER : SCPL/85-01/2018-19



SCHEDULE OF RCC SLABS											
SL NO	NAME OF SLAB	THICKNESS IN MM	MAIN BARS				EXTRA BARS OVER END SUPPORT				REMARKS
			SHORT SPAN		LONG SPAN		SHORT SPAN		LONG SPAN		
			DIA	SPACING	DIA	SPACING	DIA	SPACING	DIA	SPACING	
1	RS1	125	8#	150 C/C	8#	175 C/C	8#	300 C/C	8#	350 C/C	
2	RS2	150	8#	150 C/C	8#	150 C/C	8#	300 C/C	8#	300 C/C	
3	WS1	165	12#	150 C/C	12#	150 C/C	12#	300 C/C	12#	300 C/C	



- NOTES**
- CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE THE EXECUTION OF WORK.
 - ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED & FIGURED DIMENSIONS SHALL BE FOLLOWED.
 - USE CONCRETE - M25 (DESIGNING) FOR ALL RCC WORKS.
 - MINIMUM CEMENT CONTENT SHALL NOT BE LESS THAN 340 KG/CUM FOR M25 CONCRETE.
 - HIGH YIELD STRENGTH DEFORMED BARS Fe500 CONFIRMING IS 1786-1985 TO BE USED.
 - NO ADMIXTURES SHALL BE ADDED WITHOUT PERMISSION OF CONSULTANT.
 - CLEAR COVER TO REINFORCEMENT FOR FOOTING: 50MM, COLUMN 40MM, R.C.C WALL AND BEAM 30MM, SLAB 25MM.
 - DEVELOPMENT LENGTH OF BAR (Ld) AS 50 x DIA OF BAR.
 - FOR ALL OTHER RCC GENERAL NOTES REFER SHEET NO A1.
 - FOLLOW DUCTILE DETAILING AS PER IS 1920 (REFER SHEET NO A).
 - STRUCTURE IS DESIGNED FOR (G+2) FLOORS ONLY.
 - THE SAFE LOAD BEARING CAPACITY OF SOIL IS 300 KN/SqM AT 2.5M DEPTH AS PER SOIL REPORT.

ARCHITECTS

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ARCHITECTS

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PROJECT: PROPOSED ACADEMIC AND HOSTEL BUILDING FOR INDSETI AT VELLORE

TITLE: HEADROOM, WATER TANK BEAM LAYOUT & SECTION DETAILS

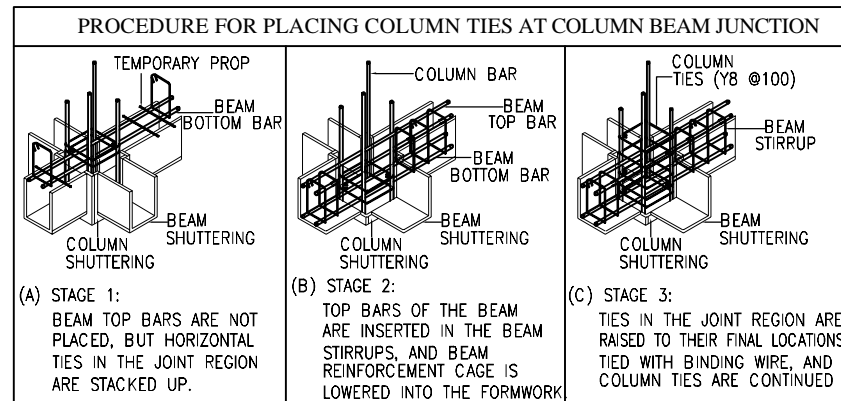
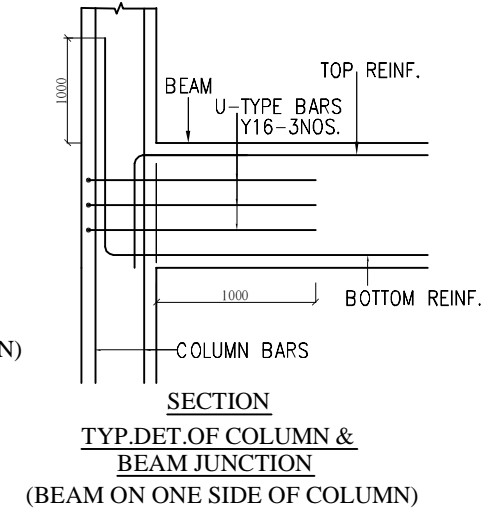
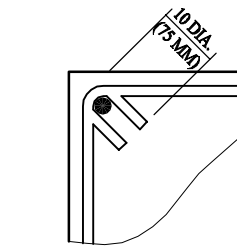
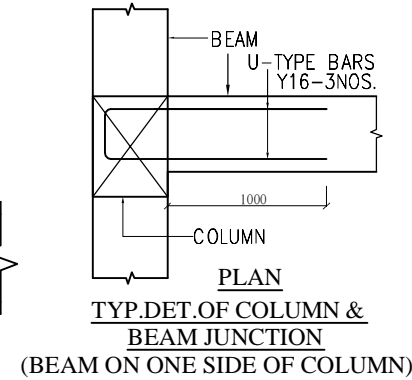
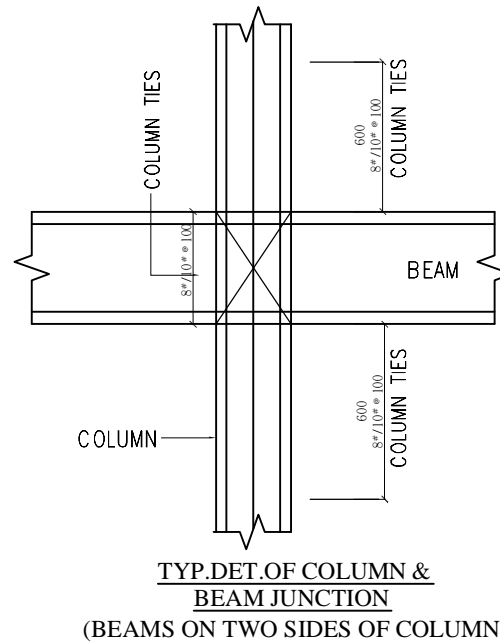
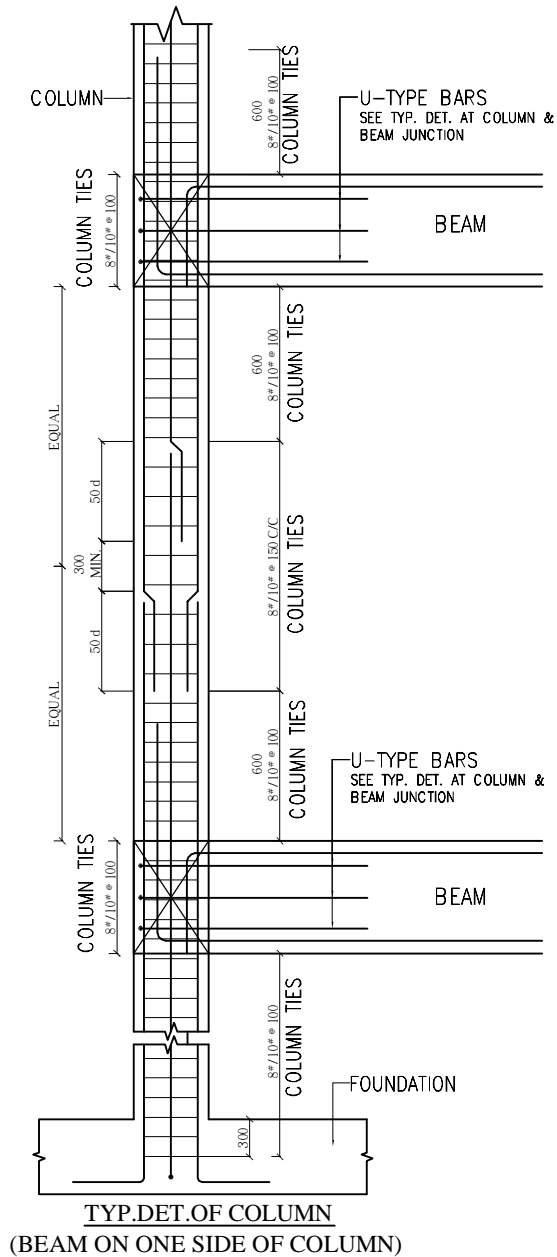
DRAWN: :CARUN **DATE:** :23/12/2018

CHECKED: :PNALLATHAMBI **SHEET NO:** ARCH - TR - 50

APPROVED: :P.NALLATHAMBI **REV NO:** :

SCALE: :1:100

PROJECT NUMBER: : SCPL/85-01/2018-19



NOTES

- CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE THE EXECUTION OF WORK.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED & FIGURED DIMENSIONS SHALL BE FOLLOWED.
- USE CONCRETE - M25 (DESIGNING) FOR ALL RCC WORKS.
- MINIMUM CEMENT CONTENT SHALL NOT BE LESS THAN 340 KG/CUM FOR M25 CONCRETE.
- HIGH YIELD STRENGTH DEFORMED BARS $F_y 500$ CONFIRMING IS 1786-1985 TO BE USED.
- NO ADMIXTURES SHALL BE ADDED WITHOUT PERMISSION OF CONSULTANT.
- CLEAR COVER TO REINFORCEMENT FOR FOOTING: 50MM, COLUMN 40MM, R.C.C WALL AND BEAM 30MM, SLAB 25MM.
- DEVELOPMENT LENGTH OF BAR (L_{AD}) AS 50 X DIA OF BAR.
- FOR ALL OTHER RCC GENERAL NOTES REFER SHEET NO A1.
- FOLLOW DUCTILE DETAILING AS PER IS 1920 (REFER SHEET NO A)
- STRUCTURE IS DESIGNED FOR (G+2) FLOORS ONLY.
- THE SAFE LOAD BEARING CAPACITY OF SOIL IS 300 kN/sqM AT 2.5M DEPTH AS PER SOIL REPORT.

ARCHITECTS

NANDA & ASSOCIATES
ARCHITECTS

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PROJECT

PROPOSED ACADEMIC AND HOSTEL
BUILDING FOR INDSETI AT VELLORE

TITLE

TYPICAL DUCTILE DETAILING FOR EARTHQUAKE RESISTANCE

DRAWN : C.ARUN

DATE : 23/12/2018

CHECKED : P.NALLATHAMBI

SHEET NO: ARCH - TR - 51

APPROVED : P.NALLATHAMBI

REV NO :

SCALE : 1:100

PROJECT NUMBER : SCPL/85-01/2018-19

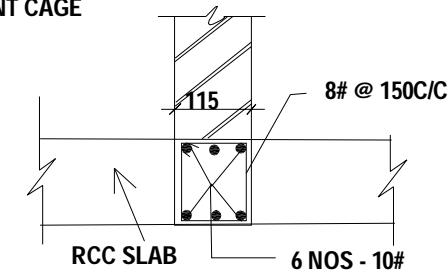
RCC NOTES :-

- CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
- FIGURED DIMENSIONS SHALL BE FOLLOWED.
- ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
- THE SAFE LOAD BEARING CAPACITY OF SOIL IS 300kN/Sq.M AT 2.5M DEPTH BELOW EXISTING GROUND LEVEL AS PER SOIL REPORT.
- LOOSE POCKETS OF SOIL IF ENCOUNTERED SHALL BE COMPLETELY REMOVED AND BACK FILLED WITH MORRUM.
- ALL REINFORCEMENT SHALL BE TMT BARS OF Fe -500D GRADE AND ABOVE CONFORMING TO RELEVANT IS CODES.
- MIX FOR CONCRETE FOR ALL RCC WORKS SHALL BE M-25(DESIGN MIX) AS PER IS:456-2000. MINIMUM CEMENT CONTENT SHALL NOT E LESS THAN 340 KG/CU.M
- THE STRUCTURE HAS BEEN DESIGNED FOR MODERATE EXPOSURE & 2 HRS FIRE-RATING AS PER IS 456 - 2000
- ALL TOP BARS OF BEAMS TERMINATING AT INTERMEDIATE SPAN SHALL BE CARRIED INTO THE ADJACENT SPAN FOR A LENGTH OF 0.3L OF THE ADJACENT SPAN OR L_d WHICH EVER IS MORE.
- TOP OF TIE BEAM ON ALL EXTERNAL WALLS SHALL BE AT GL. AND FOR ALL INTERNAL WALLS SHALL BE 750MM BELOW FFL.
- IRRESPECTIVE OF WHAT IS SHOWN ALL TOP BARS OF BEAMS SHALL BE TAKEN $L_d + 10db$ INTO COLUMN AT DISCONTINUE END AS PER IS 13920 :1994 (REFER SHEET NO. A)
- THE LEAN CONC SHALL BE LAID IN CONTINUOUS IF THE CLEAR GAP BETWEEN THE TWO ADJACENT FOOTINGS IS 250 OR LESS .
- 230 MM THK BLOCK WALLS SHALL REST DIRECTLY ON PLINTH BEAMS BELOW.
- NOMINAL COVER TO REINFORCEMENT SHALL BE AS UNDER:
 - SLAB :- 25 mm
 - BEAM & RCC WALL :- 30 mm
 - COLUMN :- 40 mm
 - FOOTINGS :- 50 mm

- IN ALL MEMBERS WHERE GRADE OF CONCRETE MIX USED IS M-25 THE DEVELOPMENT LENGTH/LAP LENGTH FOR TOR STEEL REINFORCEMENT CONFORMING TO IS-1786 SHALL BE

LAP LENGTH/DEVELOPMENT LENGTH		
GRADE OF CONCRETE	BARS IN TENSION AND COL BARS	BARS IN COMPRESSION EXCEPT IN COL BARS
M - 25	50 DIA	40 DIA

- RCC SLABS SUPPORTING HALF BRICK WALLS DIRECTLY RESTING ON THEM SHALL BE PROVIDED WITH A HIDDEN BEAM AS SHOWN SKETCH BELOW.
- STIFFNER RINGS OF 16 MM DIAMETER AT EVERY 1.5 M CENTRE-TO-CENTRE SHALL BE PROVIDED ALONG LENGTH OF THE CAGE FOR PROVIDING RIGIDITY TO REINFORCEMENT CAGE



- THE STRUCTURE IS DESIGNED FOR (G+ 2) FLOORS ONLY.
- THE STRUCTURE IS DESIGNED FOR EARTHQUAKE LOAD OF SEISMIC ZONE III.
- THE STRUCTURE IS DESIGNED TO WITHSTAND WIND VELOCITY OF 50m/sec.

NOTES

- CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE THE EXECUTION OF WORK.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED & FIGURED DIMENSIONS SHALL BE FOLLOWED.
- USE CONCRETE - M25 (DESIGN MIX) FOR ALL RCC WORKS.
- MINIMUM CEMENT CONTENT SHALL NOT BE LESS THAN 340 KG/CU.M FOR M25 CONCRETE.
- HIGH YIELD STRENGTH DEFORMED BARS Fe500D CONFIRMING IS 1786-1985 TO BE USED
- NO ADMIXTURES SHALL BE ADDED WITHOUT PERMISSION OF CONSULTANT
- CLEAR COVER TO REINFORCEMENT FOR FOOTING : 50MM, COLUMN 40MM, R.C.C WALL AND BEAM 30MM, SLAB 25MM.
- DEVELOPMENT LENGTH OF BARS AS 15d x DIA OF BAR.
- FOR ALL OTHER RCC GENERAL NOTES REFER SHEET NO.A1
- FOLLOW DUCTILE DETAILING AS PER IS 13920 (REFER SHEET NO. A)
- STRUCTURE IS DESIGNED FOR (G+2) FLOORS ONLY
- THE SAFE LOAD BEARING CAPACITY OF SOIL IS 300 kN/Sq.M AT 2.5M DEPTH AS PER SOIL REPORT.

ARCHITECTS

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PROJECT :

PROPOSED ACADEMIC AND HOSTEL
BUILDING FOR INDSETI AT VELLORE

TITLE :

RCC GENERAL NOTES

DRAWN : C.ARUN

DATE : 23/12/2018

CHECKED : P.NALLATHAMBI

SHEET NO: ARCH - TR - 52

APPROVED : P.NALLATHAMBI

REV NO :

SCALE : 1:100

PROJECT NUMBER : SCPL/85-01/2018-19